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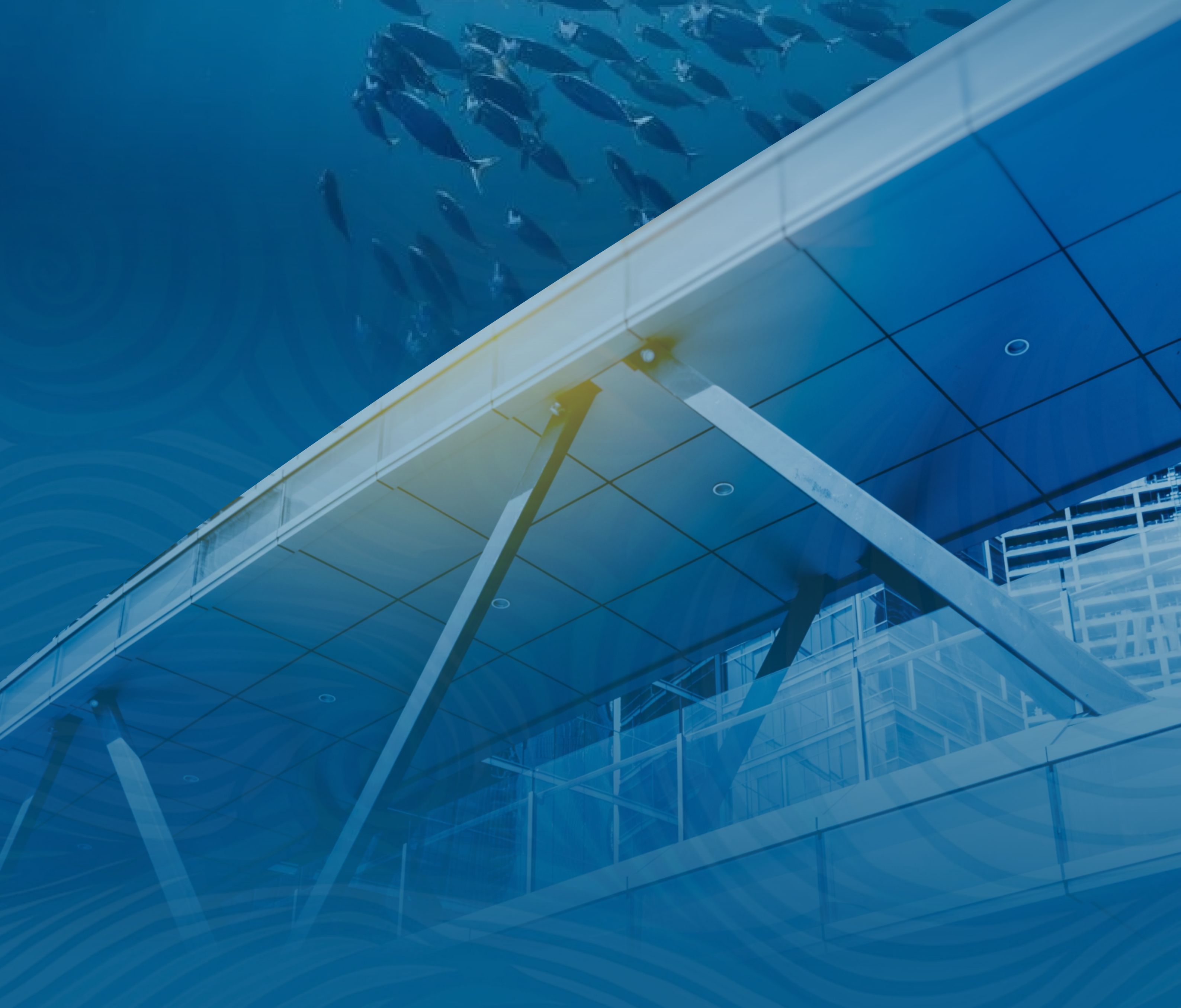
THE 3RD INTERNATIONAL

CONFERENCE ON ECONOMICS, BUSINESS AND MANAGEMENT RESEARCH (ICEBMR)

Vol 3, 2024

“Navigating the Blue Economy: Sustainable Development Goals and Trends in Economics, Business, Management, and Information Technology”"



FACULTY OF ECONOMICS,
SANATA DHARMA UNIVERSITY

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“Navigating the Blue Economy: Sustainable Development Goals and Trends in Economics, Business, Management, and Information Technology”

May 25, 2024

Faculty of Economics
Sanata Dharma University
Yogyakarta

THE 3RD INTERNATIONAL CONFERENCE ON ECONOMICS, BUSINESS, AND MANAGEMENT RESEARCH (ICEBMR) “Navigating the Blue Economy: Sustainable Development Goals and Trends in Economics, Business, Management, and Information Technology”

KEYNOTE SPEAKER
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PREFACE

Welcome to the 3rd International Conference on Economics, Business, and Management Research (ICEBMR) 2024. We are thrilled to present a compilation of pioneering research and insightful discussions under the theme "Navigating the Blue Economy: Sustainable Development Goals and Trends in Economics, Business, Management, and Information Technology". As we navigate the complexities of sustainable development, we are reminded of Sylvia Earle's words: "The ocean is the cornerstone of Earth's life support system. It shapes climate and weather. It holds most of life on Earth. The ocean provides a living for countless people, and it's the engine of our economy". This is a powerful statement that underscores the critical role of the blue economy in our global ecosystem and economic stability for sustainable development and the well-being of present and future generations.

The 3rd ICEBMR serves as a vital platform for academics, industry professionals, and policymakers to exchange ideas, foster collaborations, and develop forward-thinking solutions that align with the Sustainable Development Goals (SDGs). This year's online conference breaks geographical barriers, bringing together a diverse and interdisciplinary group of participants committed to advancing knowledge and practice in the blue economy. Our sessions cover essential topics such as marine resource management, sustainable business models, economic policies for ocean conservation, and the integration of advanced information technology to support these initiatives.

We extend our heartfelt gratitude to the reviewers for their invaluable contributions and to the authors for their exceptional research. We were honoured to feature keynote addresses from distinguished experts who have made significant strides in economics, business, management, **entrepreneurship,** and information technology. Their insights provide a broader understanding of the challenges and opportunities in achieving sustainable development through the blue economy. Special thanks are due to our host institution, Sanata Dharma University, for providing the platform and resources that facilitated an enriching and seamless online conference experience. We hope the knowledge shared and the connections forged at the 3rd ICEBMR will inspire ongoing research and innovative practices, contributing to a sustainable and prosperous future. Thank you for your participation and engagement. We eagerly anticipate your involvement in future conferences.

T. Handono Eko Prabowo, MBA, Ph.D.
Organizing Committee

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OUR COMMON OCEAN: HARMONIC PLAYGROUND OR CHAOTIC BATTLEFIELD

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ABSTRACT

This research explored the concept of the Blue Economy and its potential for sustainable development of ocean resources. It examined four key ideas: the Ignatian principle of "Tantum Quantum" (proper use, not abuse), stakeholder analysis, multidisciplinary approaches, and multiple intelligences theory. The research argued for a shift from shareholder-focused to stakeholder-inclusive models in managing ocean resources. It emphasized the importance of considering all affected parties, including non-human stakeholders like marine life. The multidisciplinary nature of ocean studies was highlighted, calling for collaboration across fields such as marine biology, economics, and ethics. The theory of multiple intelligences was applied to value diverse forms of knowledge, including traditional maritime skills. Major challenges facing the Blue Economy were discussed, including overfishing, pollution, and lack of governance in international waters. Recommendations included supporting fisher cooperatives in developing countries, improving export facilities, increasing plastic recycling, promoting coastal tourism, and recognizing the value of workers in the maritime sector. The research advocated for a balanced approach that promotes economic development while ensuring the long-term sustainability and health of ocean ecosystems.
Keywords: *blue economy, ocean, natural capital*

1. Introduction

This conference is actually a preliminary for the 28th *World Forum of the Association of Jesuit Business School* in Sydney, Australia in July, 2024. The theme of that conference is the *Fourth Apostolic Preference of the Society of Jesus*, namely "Our Common Home". Hence, we have entitled our Keynote Speech as "Our Common Ocean: Harmonic Playground or Chaotic Battleground".

More than two thirds of our planet is ocean. Yet ironically, we know more about the surface of the Moon and Mars than we do about the depths of the ocean. Oceans have provided food, income, energy and transport for millennia. The ocean economy supports the livelihoods of almost half of the earth's population. Economic activities include capture of fish, aquaculture, coastal tourism, marine construction and transport. Huge profits stand to be made for Pharmaceutical, Chemical and Cosmetic companies. The *Blue Economy* is predicted to double from $1.5 trillion in 2010 to $3 trillion in 2030. This represents a massive opportunity for mutual benefit for all the stakeholders involved. However, we are currently faced with serious challenges to the sustainability of the oceans caused by overexploitation, extraction, pollution, loss of biodiversity and climate change.

The *Blue Economy* is a new term for an ancient experience. Basically, it is a way of applying a central principle used by St. Ignatius of Loyola – the founder of the Jesuits – in his small book entitled *The Spiritual Exercises* of *St. Ignatius* written over 500 years ago. His basic principle is called *Tantum Quantum* in Latin. It is best translated as "Use, not Abuse". He believed that Almighty God had endowed humans with many things when He created the universe. It is up to humankind to properly use them. Hence, the *Blue Economy* aims to reset inclusive and long-lasting economy growth by harnessing sustainable marine resources to support development and civilization while at the same time preserving and protecting marine resources.

The question is "How do we do that?" Using a reflective methodology that is used in *Ignatian Pedagogy,* we want to combine two activities: *Reflection* and *Action* which is now called *Refraction.* St. Francis de Sales in the 17th century criticized economists. He said "they love to study poverty but the problem is that poor people cannot eat books". The paralysis of analysis can lock us into the mentality that only likes to talk about the problem, but not to think much about the solution.

Our methodology will combine descriptive as well as exploratory research. It rests on the fact that ideas are very important in human experience and history. From the field of economics alone, ideas like freedom, justice, capitalism, socialism, opportunity cost and the *Law of the Commons* are but a few examples. Hence, we want to focus on just four ideas:

a. *Tantum Quantum* which basically adopts a positive attitude by emphasizing the proper use rather than abuse of our marine resources. Recent examples include the use of technology such as the Internet, Facebook, Social Media and now Artificial Intelligence [AI]. Initially the source of such optimism, they have also been used by the criminal element. Cybersecurity is now big business. Reflective thinking can help us decide how to use the tools of modern management to face the current challenges to the sustainability of the ocean.
b. *Stakeholder Analysis rather than Shareholder or Stockholder Analysis*. The latter theory has prevailed in economic circles and produced some unintended and undesirable consequences. Examples are: an overemphasis on production and consumption that has produced serious social costs, especially climate change and pollution. St. Ignatius would call this "*PLUS*" [emphasis on quantity of consumption and production] rather than "*MAGIS"* [emphasis on quality of life]. Many people today prefer to measure the health of a society using the *Happiness Index* rather than the standard *Gross Domestic Product [GDP]*. Stakeholder Analysis opens our eyes to the importance of all parties affected by policy decisions, not just the welfare of owners alone. This concept was developed in the field of *Business Ethics*. It is now a very valuable tool of analysis, especially since some of the stakeholders do not have a voice. In the case of the oceans, they are the fish who live there.
c. *Multi-Disciplinary Approach vs Narrow Specialization*. In the field of tourism, Jafari-Jafari has created his marvelous interdisciplinary wheel. It shows us how the insights of many different academic disciplines can be applied to the field of *Tourism and Hospitality Studies*. Tourism can be used properly or abused. The oceans depend on cooperation between many academic fields, especially geology, geodesy, geophysics and geography.
d. *Multiple Intelligence Vs IQ* [which only measures Verbal and Mathematical Skills]. Howard Gardener have given us the concept of *multiple intelligence*s beyond these two narrow categories. He started with seven. An appropriate example for oceans is the idea of spatial intelligence. How did sailors in the vast South Pacific ever navigate thousands of nautical miles without the help of electricity, radio communication or GPS? They were geniuses in the field of spatial intelligence. An elite attitude that puts too much emphasis on mental skills alone is not enough. We must take advantage of the skills possessed by millions of little people. They are "street smart" and without a lot of formal education. They study in the *School of Hard Knocks.*

Another key concept is paradigm. In his best-selling books starting with *The Seven Habits of Highly Effective People* [1989], Steve Covey begins with this concept. A paradigm is our way of looking at the world, our blueprint of how the world works. The *International*

Association of Jesuit Business School has produced a concept called the *Inspirational Paradigm of Jesuit Business Education*. It challenges the popular emphasis on greed, ambition, aggression, consumption, etc. that neglects sustainability and ethical considerations.

Perhaps the best example of a change of paradigm is Christopher Colombus. In 1492, the majority of people thought and believed that the world was flat. Based on empirical experience, it made a lot of sense. However, he cleverly convinced one of the major global and naval power at the time – Spain – to test his hypothesis that the world is instead round. He set out looking for the Spice Islands in present day Indonesia but ended up in the Caribbean. His success set off the colonial wars between the then existing naval powers of Spain, Portugal, England and The Netherlands. This has produced the colonial system that has left many developing countries feeling inferior to their European counterparts. Indonesia was called the *Dutch East Indies* for over 350 years. We are now trying to instill a sense of self-esteem and self-confidence needed in our young people to develop modern Indonesia after 78 years of Independence.

Another example of a paradigm shift is vividly illustrated in the Oscar winning film *Oppenheimer*. It portrays the intensive work of the most brilliant minds in the area of physics in the early 1940s. They worked night and day with a team of assistants to produce the atomic bomb. This new invention was designed to destroy millions of people in one swoop. The fear of a nuclear war is the heritage of this great scientific endeavor. On the other hand, we recently witnessed the opposite effect in the work of dedicated scientists who worked together to come up with the Covid-19 vaccine that saved, not destroyed, millions of lives around the world. They were able to enjoy the benefits of the Internet and global communication technology. Normally, it takes 10 years for the approval of a new vaccine by the Federal Drug Administration [FDA] in the USA. Thanks to the pragmatic loosening of some regulations, the vaccine was available in just seven months. While this effort involved the dedicated work of scientists in biotechnology and government officials, the key player was the international pharmaceutical industry. Through their expertise in manufacturing and marketing, they were able to deliver the vaccine globally as quickly as possible. Yet today only 7% of Africans have been vaccinated and there is still controversy over patent rights.

This conference wants to challenge our international network of Jesuit Business Schools to work together in a similar way to resolve the challenges facing the ocean. We need to question the popular views of business and economics. We need to change the mentality that prioritizes consumerism, a blind faith in progress and technology for its own sake and the belief in the efficiency of the "invisible hand" of Adam Smith. This idea produced the belief that a free market system based on perfect competition would automatically solve all of society's problems. The new emphasis is on

a. Cooperation instead of unhealthy competition.
b. Quality of life instead of quantity of consumption and production.
c. Service Management instead of Industrial Management based on blind efficiency.
d. The *Happiness Index* instead of *Gross National Product* [GDP].

In essence it is based on *Catholic Social Teaching* that tells us *virtus stat in medio* = all things in moderation. We search for "satisficing behavior", not just "consumer satisfaction" alone. This moderation searches for a healthy balance in the work - life dimension of modern life. Business and Government leaders can play a decisive role in reversing the negative paradigm. We need to prioritize *Wealth Creation* [positive] more than mere *Poverty Reduction* [negative]. Think of the impact of global companies like Microsoft, Boeing, Amazon and Starbucks that all originated in just one city = Seattle, Washington. They have all created enormous wealth, income and employment for millions of people. They created new forms of work based on the healthy development of technology. Let us now use our talent base to work together on the ocean.

We sincerely hope this conference will help you reexamine your own paradigms. Which ones are correct while others are wrong? Which ones will produce results that are good while others produce bad ones. Our conference takes place in the former *Dutch East Indies* with a population of some 270 million people. It enjoys the comparative advantage of a demographic dividend in the form of young people on the verge of their most productive years in the global market. Let us not waste this golden opportunity. Geographically, Indonesia is a vast country. It is the largest archipelago in the world = 17, 500 islands called the "Pearl of the Orient". It occupies one eight of the Equator. It stretches from east to west in an area wider than the continental USA or from London to Kabul. There are some 6 million small scale fishers. They used over 600,00 fishing vessels in 2014. They are a key stakeholder but have a weak voice in the dialogue. The ocean in Indonesia is four times the land area. Yet the level of development of marine resources is only 25% of its potential. Let us get to work and use our talents and energy to help them and other fishers around the world.

Personally, I am reminded of a peak experience in my own life. As a Freshman or First Year student at Boston College, the world was experiencing the exciting independence movements in many colonial countries. The world stage was occupied by great and courageous leaders like Sukarno in Indonesia, Julius Nyerere in Tanzania, Tito in Yugoslavia and Gandhi in India. In January 1961, in his *Inaugural Address* as the new American President, John F. Kennedy, the first Catholic President of America, posed a stimulating question for our reflection. "Ask not what your country can do for you. Instead ask what you can do for your country". Let us rephrase the question today: "Ask not what the ocean can do for you, but rather what you can do to save the ocean".

2. Natural Capital and The Ocean

Logically speaking, the natural world is humankind's greatest asset. In the "Natural Capital" paradigm of environmental economics, components of the biosphere are treated as assets to be valued. For example. the lobster fishing supply chain in the American state of Maine contributes some US$ 1 billion to the state's economy. It also employs as many as 12,000 people who work in it. The Blue or Marine Economy represents a value of US$ 1.5 trillion a year. Our planet is dominated by oceans rather than land. There is twice as much water on earth as land. Scientists know less about the high seas than about the Moon and Mars. Recently researchers found several thousand new underwater mountains [seamounts] by measuring the effects of gravity on the earth's surface. Although they cover less than 1/1000 of the world's sea floors, coral reefs support a quarter of known marine species. Marine biologists think that oceans might host more than 2 million species of marine animals, of which they have so far catalogued only one tenth. Scientists have mapped nearly all of the Martian surface but less than one quarter of the seabed. Mesopelagic is a layer of the ocean, a few hundred meters below the surface. It is home to animals in abundance as well as 10 billion tons of animals. Cropping a mere 1% of this each year would double the land catch of the ocean's fisheries.

The South China Sea contains about one tenth of the global fish catch. China is the biggest fisher and the biggest subsidizer of fishing. The fate of the oceans threatens the livelihood of tens of millions of fishers in Indonesia, West Africa, the Pacific Islands and coastal states. Of the 25 most prolific fishing countries, 17 are developing countries. Peru's natural resources have given the country one of the world's largest or greatest fisheries – the third biggest after China and Indonesia. Peru exports US$ 3 billion a year and has created 700,000 jobs for fishers.

Oceans provide three billion people with about one fifth of protein consumed. The world currently consumes more fish per person that ever before – about 20 kilogram per person a year. Half of all fish we eat come from aquaculture or fish farming. Fishing and aquaculture provide a livelihood for 1 out of every 10 people. Of the three ways of obtaining food [arable land, animal agriculture and fishing] fishing alone has remained vital to human civilization. One problem is that the fishers have always been secretive by nature. Moreover, the oceans store more than 90% of the heat trapped on earth by greenhouse gas emissions.

Unfortunately, humans have wrongly tended to believe that the oceans are inexhaustible. For Christians, God intended the products of the sea and land for human use. There is now concern about overfishing, pollution and global warming. Pollution [notably fertilizer run off] damages a lot of marine ecosystems. Carbon dioxide accumulated has raised the average sea surface temperatures by 0.7 Celsius. Fish are being plundered from the ocean at an alarming rate. Some 50 million fishers operate in small boats and are not included in global statistics. Three quarters of all industrial fishing vessels and one quarter of transport and energy maritime vessels have been left out of previous tallies of human activity at sea. Oceans now contain more plastic than fish by weight. Almost 90% of stocks are fished either at the sustainable or beyond sustainable limits.

Despite their size, the oceans are relatively under researched. In many rich countries, fishing is not a big enough industry to make such research a national priority. Investors currently have little information on how their choices of investment affects marine life. In 2017 *Global Fishing Watch* followed 60,000 vessels = 50-60% of the world's catch. The IMO requires ships over 300 tons to have an Automatic Identification System [AIS] = radio transmitter which tells anyone in the vicinity of the boat's position.

One of our conference objectives is to consider future research project. Our choices should depend on the feasibility of the recommendations that come out of that research. More specially, how are they related to the Strategic Development Objectives of the UN? Our research should have an action dimension to it. Our methodology will be basically reflective. It will be more exploratory and descriptive than empirical, explanatory or predictive. What is the *status questione* = the state of the question? Until recently, the oceans have not received the attention they deserve, especially from the general public. Hence, our emphasis will be on the basic questions of who, what, where, when and how related to the oceans. It relies on more popular media sources rather than formal, academic or scientific sources.

Like the Chinese proverb, our research journey must begin with the first step. Our intellectual curiosity has been stimulated by the oceans. We expect to discover the vast amount of multi-disciplinary research already done on the oceans. In fact, the topic is not new. Humankind has millennials of experience with the oceans. What is needed is not Artificial Intelligence [AI] but Authentic Wisdom [AW]. Empirical and digital science does not have a monopoly on truth and understanding. For example, good literature can teach us a lot about the oceans as the paper by Professor Novita Dewi and Dr. Firma will show.

Fortunately, our modern age gives us new tools for a more scientific, formal and intellectual approach to the topic. New concepts can be applied to old phenomena as the philosophy of phenomenology teaches us. Respect should be given to people who have dedicated their lives to research on the oceans. Pope Francis in his Netflix series on *Stories of Our Generation* has included a New Zealand pioneer in ocean research. The four Apostolic Preferences from the 36th General Congregation of the Society of Jesus can easily be applied to the Blue Economy. UAP#1 focuses on the need for reflection and discernment. Wisdom is needed to complement the findings of science and technology. UAP#2 involves walking with the poor. Many lower income people depend on the oceans for their employment, income and food. UAP#3 emphasizes walking with youth who will inherit the consequences of trying to make the oceans sustainable. They can be a great source of employment for young people. Finally, UAP#4 means that the theme of our Common Home should also include the oceans.

Our reflections will follow the five phases of the Ignatian examen of Consciousness [LT3F = Light, Thanks, Feelings, Focus, Future] [Hamm, 1994]. They include praying for light, reviewing the day in thanksgiving, reviewing the feelings that surface in the replay of the day, choose one of those feelings (positive or negative) and pray from it and finally looking forward toward tomorrow. According to Lowney (2003, 2005, 2009 and 2013), this daily exercise is one of the keys to the *Heroic Leadership of the Jesuits* over the centuries. It helped them develop the proper mindset, namely, the abilities to innovate, to remain flexible and adapt constantly, to set ambitious goals, to think globally, to move quickly and to take risks.

Four unique values created leadership substance: self-awareness, ingenuity, love and heroism. Jesuits equipped their recruits to succeed by molding them into leaders who:

a. Understood their strengths, weaknesses, values and worldview.
b. Confidently innovated and adapted to embrace a changing world.
c. Engaged others with a positive, loving attitude.
d. Energized themselves and others through heroic ambitions.

The Jesuits offer a leadership model that flows against the tide of most contemporary leadership models. The stereotype of top down, immediate, all transforming leadership is not the solution. It is the problem. Downey (2003) explains that Jesuit leadership qualities include:

a. Always teaching and learning (*Magis*)
b. Mold brilliant and eminent "men and women for and with others'
c. Persevere
d. Energize themselves by the sheer ambition of their heroic goals.
e. Innovate by approaching their challenges in ways their predecessors never imagined
f. Devote themselves to excellence
g. Remain open to new ideas, even in old age
h. Honor the truth above their egos
i. Influence others by their example.

Downey (2003) declares that an introspective journey builds the foundation for success. Everyone has the capacity to cultivate these leadership skills by committing to the personal introspective investment that will develop them. Hence, he stressed the vital importance of the habit of self-reflection. This principle is the basis of the new paradigm of Ignatian Pedagogy in education [Go and Atienza, 2019] According to Downey (2003), the more senior one's role within an organization, the less critical to success are intellectual and technical skills compared to emotional intelligence. EQ includes self-awareness, self-regulation, motivation, empathy and social skills. No company values self-awareness so profoundly as the Jesuits. The examen of consciousness creates an ongoing feedback loop. A basic principle is that we are all leaders and our whole lives are filled with leadership opportunities. While the Jesuits survived and flourished for over 500 years, a mere 16 of the 100 largest USA companies of the year 1900 survived to celebrate long enough to celebrate a centennial.

According to American President Truman, leadership is the art of persuading people to do what they should have done in the first place. This is wise advice of the Blue Economy. Unfortunately, Machiavelli's *Prince* is still the primer for would be leaders who end up without an ethical perspective. For Machiavellian Theory X managers, the challenge is making humans work. For Ignatian Theory Y leaders, the challenge is making them want to work. (Downey, 2003). Self-awareness is never a finished product. No depth of self-awareness would save a person from every misjudgment, nor is that a realistic goal of self-reflection. We need to reflect on mistakes, learn from them and move on. We have made a lot of mistakes in the Blue Economy. According to Downey (2003), *Magis* driven heroes bring energy, imagination, ambition and motivation to their work. The results take care of themselves. Self-awareness is no one time project. A challenge that confronts every successful company is to keep reinventing themselves instead of resting on their laurels.

3. Four Key Concepts for Approaching the Blue Economy

3.1 Tantum Quantum

Basically, the Ignatian *Principle and Foundation* or *Tantum Quantum Principle* applies to the oceans. Focus must be on the proper use and not the abuse of this God given treasure. Positively speaking there are many opportunities such as new products [particularly new medicines], creating meaningful jobs and creating wealth in general. Negatively speaking we need to stop the abuses of the oceans. An ounce of prevention is worth a pound of cure. Unfortunately, the oceans are both a playground and a battleground.

Go and Atienze (2019) offer a fresh understanding of Ignatian Pedagogy. It is true learning that requires learning by doing, reflecting and refracting. Refraction is a combination of reflection and action. In order to experience, reflect and act, learners need to take the three roles of inquirer, meaning maker and creator. The inquirers have a sense of the wonder and curiosity about the world around them. They are keenly observant, constantly asking questions, experimenters and self navigating to find answers to those questions. Meaning makers are learners who construct knowledge and cultivate it and then reflect on their experience. They seek patterns, connections and different perspectives. The problem is the tendency resulting for technology and its "copy and paste" culture to become mere "hunters and gatherers" in the digital forest. The creator aspects occur when learners create something using what they have learned. They learn more self-expression, work in teams and solve problems. They apply what they have learned beyond exams and use it even in novel and uncertain situations. In a reflection driven context, students need to be encouraged and guided by their teachers to make "meaning" which results from their exercise of reflection. An action oriented approach means that the purpose of learning is for students to make an actual difference in the world. They apply what they learn beyond the test. They make decisions and solve problems in the real world. There is a transfer of learning. They make a difference in the lives of others and in one's own way transform the world. It is like a Venn diagram of three overlapping parts: experience, reflection and action. The teacher has three roles in refractive learning: designer, facilitator and coach. In refractive learning, there are three possible types of reflection: conceptual reflection, metacognitive reflection and personal reflection. On the basic level of reflection, students answer four questions:

a. What have I learned?
b. How are the concepts and facts related to one another?
c. How do they fit together?
d. How are they related to what I have learned in other topics and subject areas?

Because real world situations tend to be novel, complex and ambiguous, the application of learning requires deliberate and thoughtful attention to purpose and strategy. Excellence of one's learning is best seen in one's action where action refers to long term and real world application of what one has learned.

This keynote speech will focus on three topics related to the Blue Economy: stakeholder analysis, multi-disciplinary analysis and research and the theory of multi-intelligences. It will be related to the *Inspirational Paradigm* developed by the IAJBS. We need a new paradigm for the Blue Economy. Hence the title involves harmony or chaos. The stakes are high. We need to use SWOT [strengths, weaknesses, opportunities and threats] analysis as well as SOAR [strengths, opportunities, aspirations and results] analysis in the context of sustainability. The tools of business such as Human Resource Management, Artificial Intelligence, Marketing, Operations Management and Strategic Management can easily be applied to issues related to the oceans. Our focus should be more on the future while learning from past and present experience. We do not want to waste all our efforts on just describing the problem. We should be seeking feasible, realistic and authentic solutions. Action Plans at the personal, company and government level are needed. There is a hope that this conference will not be a NATO one. No Action, Talk Only.

In view of the expectations that all participants in our conference bring to the event, apologies are in order if the paper is not empirical or hypothesis based, too abstract or theoretical or too broad or not specific enough. Using the Ignatian pedagological methodology we want to be more reflective and ethical in our approach in the hope that these reflections will lead to more responsive behavior than supports the sustainability of the oceans.

3.2 Stakeholder Analysis and the Blue Economy

Who owns the oceans? Who will be or are the winners and the losers? There are some non-human stakeholders that have to be considered even if they are silent. Examples are the various species of fish and the coral reefs. Business today is arguably the most dominant institution in the world. As a set of organizations created by humans, business is clearly a part of society but a distinct entity separated from the rest of society by clear boundaries. The key stakeholders are business people and entrepreneurs who are the key to success in an environment without government controls. Their integrity is very crucial. Corporations serve a broad public purpose, namely, to create value for society. They must partner with a wide range of individuals and groups in society to advance collaborative goals. Stakeholders' interest must be taken into consideration when making business decisions. [Lawrence and Weber, 2011].

This is where the insights of Business Ethics are helpful because there are no external moral controls. Examples are the shipping, tourism and mining sectors. In terms of national jurisdictions, some 90% of the fish catch is from *Exclusive Economic Zones* [EEZs] that countries are entitled to claim out to as far as 200 nautical miles [370 kilometers]. Illegal, unreported and unregulated [IUU] fishing highlights the woeful state of governance on the waters that cover of two thirds of our planet. IUU fishing generates profits of US$ 36 billion a year and could account for between 20% and 50% of the global fish catch.

There are two central questions about the relationship between business and society. What is the purpose of the modern corporation? To whom, or what, should the firm be responsible? According to the *Ownership Theory of the Firm*, the firm is seen as the property of its owners. Hence, the purpose of the firm is to maximize its long-term market value. Owners are paramount and take center stage in decision making. By contrast, the *Stakeholder Theory of the Firm* emphasizes that corporations serve a broader public purpose: to create value for society. According to Lawrance and Weber (2011), there are three core arguments to support the theory.

a. Descriptive – the stakeholder view is simply a more realistic description of how companies really work. As a practical matter, managers direct their energies toward all stakeholders, not just owners.
b. Instrumental – Stakeholder management is more effective as a corporate strategy. Companies that behave responsibly toward multiple stakeholder groups perform better financially, over the long run, than those that do not.
c. Normative – Stakeholder management is simply the right thing to do. The privileges of great power and control of the vast resources of corporations carry with them a duty toward all those affected by a corporation's actions. All stakeholders, not just owners, contribute something of value to the corporation.

Stakeholders are defined as persons and groups that affect, or are affected by, an organization's decisions, policies and operations. Stakeholders include such diverse groups as customers, employees, stockholders, the media, Governments, professional and trade associations, social and environmental activists and Non-Governmental Organizations [NGOs]. Business organizations are embedded in networks involving many participants. Each of these participants has a relationship with the firm, based on ongoing interactions. Strong relationships between a corporation and its stakeholders are an asset that adds value. On the negative side, some companies disregard stakeholders' interest. Such attitudes often prove costly to the company. According to Lawrance and Weber (2011), stakeholders can broadly be divided into two groups:

a. Market Stakeholders – those that engage in economic transactions with the company as it carries out its primary purpose of providing society with goods and services. Each relationship is based on a unique transaction or two way exchange.
b. Non-Market Stakeholders – people and groups who – although they do not engage in direct economic exchange with the firm – are nevertheless affected by or can affect its actions.

Non-market stakeholders are not necessarily less important than others, simply because they do not engage in direct economic exchange with a business. Interactions with such groups can be crucial to a firm's success or failure.

An important part of a modern manager's job is to identify relevant stakeholders and to understand both their interests and the power they may assert on these interests. According to Lawrence and Weber [2011], there are four key questions to be answered.

a. Who are the relevant stakeholders? Not all stakeholders will be relevant in every management situation. Besides identifying, we should also understand the nature of their interests, power, legitimacy and links with one another.
b. What are the interests of each stakeholder? They are essentially the nature of each group's stake. What are their concerns? What do they want from their relationship with the firm?
c. What is the power of each stakeholder? This means the ability to use resources to make an event happen or to secure a desired outcome. There are four types of stakeholder power:
    1) Voting Power = the stakeholder has a legitimate right to cast a vote. Voting rights are proportionate to the percentage of the company's stock they own.
    2) Economic Power = Customers [buy products or services], suppliers [fill orders] and retailers may have economic power. It often depends on how well organized a stakeholder group is.
    3) Political Power – Governments exercise political power through legislation, regulations or lawsuits. Other stakeholders use their power indirectly by urging Government to use its power by passing new laws or enacting regulations.
    4) Legal Power – Stakeholders have legal power when they bring suit against a company for damages, based on harm caused by the firm.

According to Lawarence and Weber (2011), in practice managers pay the most attention to stakeholders possessing greater:

a. Salience – they stand out from a background and are most important. Salient stakeholders have power, legitimacy and urgency.
b. Legitimacy – the extent to which a stakeholder's actions are seen as proper and appropriate by a broader society.
c. Urgency – the time sensitivity of a stakeholder's claim and the extent to which it demands immediate action.

Generally speaking, the more of these three attributes a stakeholder possesses, the greater the stakeholder's salience and the more likely that managers will notice and respond. It also helps managers see how stakeholders coalitions are likely to form and what actions are likely. Building positive and mutually beneficial relationships across organizational boundaries is a growing part of management's role.

Today it must be acknowledged that the external environment of business is dynamic and every changing. Most companies operate in a swirl of social, ethical, global, political, ecological and technological change that produces both opportunities and threats. According to Lawrence and Weber (2011), there are six dynamic forces shaping powerfully business and society.

a. Changing social expectations – Business should be more responsible.
b. Growing emphasis on ethical reasoning and action. There is a need for guidelines about that is right or wrong, fair or unfair and correct or wrong.
c. Globalization – We live in an increasingly integrated world economy, characterized by the unceasing movement of goods, services and capital across national borders.
d. Evolving Government regulations and business response. The role of Government has changed dramatically in many nations in recent decades.
e. Dynamic natural environment – All interactions between business and society occur within a finite natural ecosystem.
f. Exploration of new technologies and innovation. Technology is one of the most dramatic and powerful forces affecting business and society.

These powerful and dynamic forces establish the context in which businesses interact with their many market and non market stakeholders. Since the relationship between business and society is continuously changing in new and often unpredictable ways, management must try to meet reasonable expectations of stakeholders and society in general. A successful business will meet all of its economic, social and environmental objectives. Hence, the purpose of the firm is not simply to make a profit, but also to create value for all its stakeholders.

Paine (2023) emphasizes that stakeholder capitalism can take many forms but few leaders distinguish among them. The challenge is the failure of corporate leaders to establish a shared understanding of which form they are embracing. This leads to confusion and controversy. The solution is to reduce the risk of such misalignment. Leaders should be clear about which version of stakeholderism they are espousing and what it will take to deliver on that commitment. Paine (2023) describes the four main types:

a. *Instrumental Stakeholderism* which tries to maximize long term shareholder value. It rests of the hypothesis that the interests of all stakeholders can actually help maximize returns to shareholders. Thus, the interests of different stakeholders are interdependent. The problem is predicting which course of action will most likely maximize long term stakeholder value. The longer the time frame, the more speculative the exercise.
b. *Classic Stakeholderism* which respects stakeholders' legitimate claims. Some shareholders' interests should even be addressed when they do not contribute to shareholder value. The legitimate concerns of constituencies other than shareholders also must receive appropriate attention as expressed in the *Business Roundtable of 1981*. The problem is that determining which interests must be respected is not always easy. There are also difficulties in resolving conflicts between stakeholders' claims. Moreover, there is a lack of a single decision rule for resolving trade-offs.
c. *Beneficial Stakeholderism* emphasizes improving outcomes for stakeholders. It lies in measuring the improvement of stakeholders' well-being. Thus, the company's directors "balance" or "consider" the interests of its various stakeholders when setting policies and making decisions. In the case of safari tourism, this means considering the well-being of the silent stakeholders = the animals themselves. In the case of oceans, it is the millions of fish there. The main problem is facing the trade-offs among different interests.
d. *Structural Stakeholderism* which tries to increase stakeholder power. This calls for giving new shareholders voting or other powers in the governance process. For instance, employees are the stakeholder group most often given Board Representation. It is based on the hypothesis that corporate boards should comprise representatives of various stakeholder groups.

3.3 Multidisciplinary Approach to the Blue Economy

In the field of tourism, Jafari-Jafari has created his marvelous interdisciplinary wheel. It shows us how the insights of many different academic disciplines can be applied to the field of *Tourism and Hospitality Studies*. Tourism can be used properly or abused. Similarly, the oceans depend on cooperation between many academic fields, especially geology, geodesy, geophysics and geography.

Examples of practical needs related to the ocean include the fishing and seaweed industry, navigation and marine transport, marine biology, marine zoology and mapping the oceans. Examples of business areas include sea food production and processing, coastal and marine tourism, direct foreign investment as well as governance of the high seas.

Business Ethics and *Corporate Social Responsibility* [CSR] issues includes overfishing, the environmental impact of economic activities on the oceans [especially deep sea mining], waste disposal in the ocean [especially plastics], welfare of fishers [especially migrant workers], human trafficking of fishers from developing countries, protecting marine biological diversity, marine cybersecurity governance, regulating sea exports and deep sea mining. Hence, the wheel of Jafar-Jafari could be modified for Blue Economy studies.

3.4 Multiple Intelligences and the Blue Economy

The *Theory of Multiple Intelligence* of Howard Gardener can easily be applied to the Blue Economy. It is a sharp contrast to the current fad about Artificial Intelligence which does not have any "social skills". Many stakeholders have intelligences not measured by the normal IQ test that only measures verbal and mathematical/ scientific skills. The best example is spatial intelligence. Fishers and navigators in the South Pacific have for centuries traveled thousands of kilometer without the use of the tools of modern technology such as radio contact or the GPS guidance system. Traditionally long-distance voyages relied on sea swells, clouds, the flight of birds and the star compass in Oceania [Micronesia (North West), Melanesia (West) and Polynesia (East)].

These multiple intelligences should be included in efforts to solve problems related to the oceans. There have been developments like *Emotional Intelligence* [EQ], *Adversity Quotient* [AQ}, *Social Intelligence* [ScQ] and even *Spiritual Intelligence*. It is important to avoid an intellectual "ethnocentricity" of scientists and academicians. There is a need to listen to "little people" in developing countries whose lives depend on the Blue Economy. For example, the oceans may contain elements used in the cure of many diseases as we have seen in the case of herbal, traditional medicines. Hence we should not so much study the oceans as learn from them.

"Soft skills" [empathy, emotional, social and spiritual intelligence] rather than technical skills are the keys to success in some companies operating in the Blue Economy. The *Great Resignation* proved that enterprises cannot merely hire hands or brains. The whole person comes to work with body, mind, heart and soul. For example, hospitality workers are more *Emotional Workers* than *Knowledge Workers*. Some work requires people with a great deal of knowledge and the ability to work under pressure and exude some authority. People no longer are willing to accept low paying jobs without any meaning for them.

The work of Howard Gardner in the area of *Multiple Intelligence Theory* [MIT] adopts an "alternative view" based on a pluralistic view of the mind. It recognizes many different facets of cognition besides the traditional measure of verbal and mathematical skills of the Intelligence Quotient [IQ]. Western society has embraced the formal testing mode to an excessive degree. There needs to be more emphasis on assessment rather than testing as well as the uses of multiple measures. The "assessment view" values the development of productive and reflective skills cultivated in long term projects. The IQ test has been regarded as psychology's biggest success - a genuinely useful scientific tool. The IQ test normally taken by an 11 year old serves as a reliable predictor of their later performance in school. IQ tests predict with considerable accuracy but they are an indifferent predictor of performance in a profession after formal schooling.

Human cognitive competence is better described in terms of a set of abilities, talents and mental skills called multiple intelligences. MIT pluralizes the traditional concept of intelligence. Each intelligence must have an identifiable core operation or set of operations. All of the original seven intelligences are equally valid. The mind is a multi-faceted, multi-component instrument that cannot in any legitimate way be captured in a single paper and pencil style instrument. Cultures profit from differences in intellectual proclivities found within their population. Everyone should receive an education that maximizes his or her own intellectual potential. Howard Gardener initially listed seven intelligences: linguistic; logical-mathematical [scientific ability]; spatial [mental model of spatial world]; musical; bodily kinesthetic; interpersonal and intrapersonal.

4. Major Challenges Facing the Blue Economy

The major problem facing the oceans is that there is no government supervision of the high seas. However, there have been some international agreements about the High Seas but ultimately there are unenforceable. As a result, a kind of “Wild West” mentality that is based on the idea that “might make right” is becoming more common. A good example is the controversy in the South China Sea between China and the Philippines over fishing rights. This situation cries out for some ethical and legal guidelines. There is a need to fortify the influence and power of legitimate international institutions like the World Court in the Hague, the World Trade Organization and International Maritime Institutions.

The famous economic principle of the *Law of the Commons* certainly applies to the oceans. The lessons have not been learned. Overfishing is a tragedy of the commons = individuals and countries motivated by short term self interest overconsume limited resources. It is an example of market failure according to Adam Smith. The sea’s resources need to be looked after better by countries, consumers, companies and fishers. They all have a stake in the sustainability of the ocean. Belatedly, governments, multi-lateral institutions, conservation groups and even fishing interests are now recognizing the scale of illegal fishing and resolving to tackle it. A major concern is the rise of nationalism and self interest that is destructive of the environment.

More specifically, issues such as illegal fishing, maritime transport as well as ecological and environmental problems resulting from the pollution of the oceans. More controversial issues include the fight for sources of new drugs for pharmaceutical companies, mining the oceans for scarce raw materials as well as the protection of millions of discovered and undiscovered species living in the ocean.

There are also plans to site nuclear power plants in the ocean rather than on land – either floating on the surface or moored beneath. Marine contractors have made big leaps in productivity in recent years from dredging and land reclamation to offshore construction of oil platforms. Costs have dropped even as the speed and quality have increased as ships work in deeper, colder waters. Underwater robots have supplanted divers.

Another important issue is the military security and the ocean. Unfortunately, the nuclear arms race and nuclear submarines have militarized the oceans. Interestingly, the decline of the great colonial naval powers of England, The Netherlanda, Spain and Portugal have been succeeded by the rise of the US, Russian and Chinese navies

5. Recommendations

Some practical recommendations include the following:

a. Rich donors should contribute to fisher cooperatives in developing countries [funds, expertise and even volunteer tourism].
b. There should be improvements in the export facilities for the fishing industry in developing countries. Moreover, they should try to add value to the final export product. Social entrepreneurs in importing countries can help improve the whole process.
c. There should be a major effort to increase the recycling of plastics to stop the pollution of the oceans and the disruption for fish. This should involve constructive cooperation between environmental activists and the major petroleum companies that have a vested interest in the continuing production of plastics.
d. Consumers should be encouraged to take a coastal vacation or a cruise ship vacation to support the Blue Economy directly. This especially helps fishermen, maritime workers, truck drivers and all involved in the global supply chain that supports cruise ship tourism.
e. In general, a greater effort must be made to appreciate more the "little people" involved in the Blue Economy and how they are "street wise". The pandemic taught us the new term of "essential workers" like doctors, nurses, transport workers, garbage collectors, etc. Workers involved in the Blue Economy can also be called "essential workers". Hence, we need to abandon elitist thinking and value manual workers more.

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CHINA ACTION IN WATERS AROUND NATUNA, A CHALLENGE TO INDONESIA'S BLUE ECONOMY SOVEREIGNTY

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ABSTRACT

Southeast Asia nations have experienced several confrontations with China in waters around "South China Sea". In 2020, Indonesia lodged a protest to the United Nations regarding China's action of placing dozens of Chinese fishing vessels with coast guard on waters near Natuna Island. China claimed the location as its sovereignty using a traditional "Nine Dash Line" argument. Indonesia then countered with placing warships and F-16 fighter to patrol the region. This article analyses the event using politico-historical approach to understand the characteristic of China's behavior. China had developed into modern country with strong confident nature. Its strong economic development compared to those of the Southeast Asia nations allegedly played role in policing the action. China's Belt and Road Initiatives (BRI) project which collaborated with around 120 countries made it stronger in its global influence. With this superiority, China could be thinking that Southeast Asia nations will weaken its stance if facing a conflict with the country. However, in the incident in the waters around Natuna in 2020, Indonesia took a "no compromise" stance – different from that of other neighbouring Southeast Asian country had taken - clearly marked the balancing strategy. This action can be said as a sturdy effort to secure Indonesia's Blue Economy plan.
Keywords*: Natuna Island, South China Sea, China, Indonesia, Hedging strategy.*

1. Introduction

Early 2020 after Indonesian Joko Widodo (Jokowi)'s second term presidency, tension between China and Indonesia raised up. China was reported to place its coast guards along with their fishermen ships around Natuna island, South China Sea. Indonesia claimed it's illegal and a mean challenge to its sovereignty. Jokowi's first term Minister of Maritime Affairs and Fisheries, Susi Pudjiastuty, had punished many illegal vessels illegally entered Indonesian waters. This provocation is a kind like repeating the 2016 incident when Kway Fey motor boat entered the exclusive economic zone (EEZ) of Indonesian sea in March 19, 2016. For the latest action, Indonesia lodged a protest using the United Nations Convention on the Law of the Sea (UNCLOS) 1982, which gives Indonesia exclusive right to utilize the resources located in the location. The Law governs international sea affairs i.e. the territorial sea, the contiguous zone, the exclusive economic zone, and the continental shelf (Caruana, 2023). China should respect that since it has also been UNCLOS participant since 1996. In response, Indonesia placed its military fleet.

Chinese action recently has troubled Southeast Asian countries like Vietnam, the Philippines, Malaysia and Brunei Darussalam on Spratly and Paracel islands. Those Southeast Asian countries were also basing their claims on UNCLOS 1982 while China used the traditional Nine Dash Lines arguments. Why China repeated the provocative action to her neighborhood countries? This article tries to explain the background of this behavior historically. While this seems to criticize China, it should be read in a friendly spirit. As the progress in the following years had showed a closer collaboration between two countries as witnessed by Indonesia's first High-Speed Rail Project (The Whoosh) and the ongoing IKN giant project, the moving of the Indonesian capital city from Jakarta in Java Island to East Kalimantan which had invited many Chinese investors in the construction.

The organization of the article is as follows. Next section will be Literature review focusing on the short review on international relation, continued with research method and research findings. The ‘findings’ will consist of historical perspective to understand Mainland China’s culture, a discussion on characteristic which plays important role to the action and eventually on the dispute with Indonesia in Natuna Waters. The article will close with a conclusion.

2. Literature Review

In the study of international relation, two concepts of alignment politics most widely studied are alliance and the balance of power (Walt,1987; Claude Jr,1989; Snyder, 1997; Paul et al. 2004; Nexon 2009). Meanwhile, a certain alignment or behavior of a certain country towards another has been discussed using a milestone work of Kenneth Waltz’s 1979 book and by works of other scholars related topics in 1980’s and 1990 (Kuik 2016: 1). It shifted from the early Cold War era to post-cold war era. During the cold war, much of the literature concentrated on alliance and the opposite choices of neutralism, neutrality and non-alignment (Martin, 1962; Lyon, 1968). The post-cold war era, the discourse of alignment focused on two extreme polarization: the ‘balancing versus bandwagoning’ and several ranges in between namely the “hedging” strategy (Soong 2021). Several literatures have expanded the analysis of alignment behavior into several categories such as engagement, binding, buck-passing, soft balancing and, hedging and limited-alignment. The hedging is necessarily a ‘middle’ position situated between two polar of the balancing–bandwagoning spectrum (see Figure 1 of Kuik 2016). Kuik developed the range of hedging by the degrees of rejection and acceptance. The two extreme behaviors were modified into “full-fledged balancing” as the highest degree of power rejection and at the other side is the “full-scale bandwagoning” representing a full power acceptance.

Further Kuik developed the other attributes of hedging that is not only a middle position, but also an opposite position. There are two other sets of mutually counteracting policies: the ‘returns-maximizing’ and ‘risk-contingency’ options (Kuik 2016: 505). The first option is chosen to maximize economic, diplomatic and political benefits from a positive relationship with a rising power when all is well, whereas second option is designed to minimize and mitigate risks if things go awry.

Theoretically speaking only strong states may lead or determine the direction of the bandwagon in the relationship between two countries. In the relationship between China and Southeast Asian countries, China can be assumed to be stronger at least in two key aspect: population and the economy. Even though it is difficult to get the exact information about China’s military power, one may assume that with its economy today China can build its military power better than during the past years. Based on above fact, China has potential to lead the direction of the relationship with Southeast Asian countries.

In relation with the collaboration between China and ASEAN countries during the OBOR and BRI scheme, Jenn-Jaw Soong created a further model (Soong 2021) developing the scheme from the spectrum between balancing and bandwagoning. In the special issue of Chinese Economy journal, scholars from the ASEAN countries analyses this relationship. This effort is worthy noted since its special characteristics: the relationships was seen from the viewpoint of Southeast Asian. Until the second decades of the 21st century, Southeast Asian tend to be pragmatic in the relation (e.g. see Pelkmans, 2019). Southeast Asian after releasing the ASEAN Economic Community in 2003 had become the third largest economy after the EU and the US, in term of population.

There was a range of hedging strategy of the Southeast Asian in response to China’s BRI project. Chosen from the representative countries it shows picture of Southeast Asian views toward the giant’s offer: The Philippines under the Duterte administration had adopted a positive attitude towards China and tended to bandwagon. However, due to China’s behavior in the South China Sea, the Filipino was cautious towards the collaboration (Chao 2021). Malaysia under Najib and Mahathir 2.0. admininstration showed a supportive stance towards China’s offer (Chin 2021). Vietnam’s response towards China’s initiatives was not easy to understand. (Vu et al. 2021) mentions that Vietnam’s strategies towards China’s BRI are a mixture of contradictory policies between support (bandwagoning strategy) or denials (balancing strategies). Thailand also in this point not yet showed a clear long term strategy towards China. Even though it has signed project in transportation network, public in Thailand still cautious toward China due to the country’s past images. They feared that China’s BRI was a kind of plan to dominate Thailand (Punyaratabandhu & Swaspitchayaskun, 2021). Myanmar showed a strong relationship with China especially with the initiation of three big projects. However, in the middle of collaboration, some of them were corrected unilaterally by Myanmar showing somewhat ‘balancing’ (Soong & Aung, 2021). However, it is quite difficult to determine Myanmar stance toward China to this end.

Indonesia as mentioned in the beginning, while maintaining close collaboration with China, the country showed a clear balancing strategy as evidenced by its sturdy position during the Natuna Waters incident early in 2020. Mursitama & Ying (2021) posited that Indonesia had implemented a “hedging strategy with a sense of balance rather than joining in with China via bandwagoning”. However, Indonesia was keeping its international policy to be ‘friendly with all country’ as expressed with its term “*bebas aktif*”, collaboration in projects with China keep going up to present days (see Anwar, 2024, and Iksan and Soong, 2022).

3. Research Methods

This study is historical in analyzing certain event (Torou et al. 2010) using an approach of Archival Research (Briere 2021: p.9). This kind of research studies the variety of repositories including manuscripts, letters, photographs, images and sound materials, artwork, books, diaries, artefact and so on. This study uses both primary sources: sources created by persons directly involved in the events, reflecting their point of view (Briere 2021: p.10) and mostly secondary sources, sources not based on a direct observation of an event or on evidence directly associated with the subject, thus relying on pre-existing primary sources (Briere 2021: p.10).

In historical research, verification of sources is important. Two types of verification were used in this study, namely checking the authenticity and the credibility (Kuntowijoyo, 2013: 77-78). Authenticity is the utmost important particularly in determining the primary source to be used in the research. The authenticity of the secondary source can be determined for example by checking the publisher or parties which released the documents. Next step is to determine the credibility of the documents (or sources). Determining the credibility may involve various activities such as cross-checking all aspects of the information presented in the document (or expressed by research sources), for example: the places, event in the picture (photograph), the actor mentioned in the document, etc. Sources in this study were mostly secondary and had been passing through the process of verification for their authenticity and credibility.

The sources of this study have been chosen based on sound academic consideration. For the history of China, seminal book written by June Teufel Dreyer, “China’s Political System – Modernization and Tradition” was chosen. The book was one of text book in the China Political System Course in the Graduate Program of Political Economy NCKU conducted by Professor Chin-fu Hung, a respectable China analyst from Taiwan. References about politics were recommended by ASEAN specialist from the same institution, Professor Jenn-jaw Soong, while news about the event (incident) in Natuna in 2020 were taken from reputable sources such as The Diplomat, The World Politics Review and University of Indonesia web page.

4. Research Findings and Discussion

4.1 Research Findings

4.1.1 Mainland China's Culture: A Historical background

China has a long history of civilization. Emperors and dynasties have pictured China for thousands of years. When the western came to China in 19th century for trading, the culture was mixed. Hence, intrusion of western tradition and culture was rejected. The Opium War (1839-1842) signalled a strong confident for China to stand on her own feet. However, in practice China used both of its own tradition with western culture particularly in technology, for example in military technique. Dreyer (2019) in her book "China's Political System – Modernization and Tradition" mentioned six major events that picture China's history. The first is imperial government that ruled China since around 2000 BC (see Dreyer 2019: p. 27). The long history of imperialism by various dynasties had shaped China's culture. Bringing a high degree of culture, particularly the Chinese letter and other technology undoubtedly had given the people basic underlying confidence almost towards everything.

The second major event was the overthrowing of the Qing dynasty in China which can be divided into 2 parts: first is that by the Nationalist and second is that by the Communist. The new generation at the end of 19 century, however, emerged with confidence by rejecting their own Confucianism tradition. For "the sake" of Modernization of China, Dr Sun Yat Sen introduced an idea of Three Principle of the people: People's Nationalism, People's Democracy and People's livelihood. The imperialism in China was ended in 1911 and Sun Yat Sen was said to play important role in this collapse. Later the KMT took control over China but the government was run by Sun's successor, Chiang-Kai Sek (because Sun died in 1925). Sun founded a Chinese Nationalist Party: The Kuomintang (KMT) - but had never seen the advancement. His successor play role in leading the party: Chiang Kai-shek. He lead the nation and almost successful in uniting many elements in the country. It seems that the ideology: Confucianism was in acceptance among the people. However, with the ideology, China remain poor and weak (eg toward the western and Japan). In a view decade, the KMT government fall resulted from a combination of internal weaknesses, war with Japan and the insurgency of communist (see Dreyer 2019: 2).

A new history emerged in China after it held basic level election in 1953 which gave the "unpredicted victory" to the China's Communist Party (CCP). The Constitution was then being ratified in 1954. Anomaly of implementing the democratic government based on their own argument happened in China. There were two parallel hierarchies in the Country: the party and the Government with interlocking memberships (Dreyer 2019: 80). There is an overlap leadership position (and this is the very different dynamics from the western concept) aiming to the superiority of the ruling party. In choosing the personnel to certain position, a democratic centralism was practiced: individuals are chosen rather than elected in free competition.

Ideology indoctrination was to be implemented to the common people. It drew average individual into party process e.g. by founding many mass organizations such as a communist youth league, a trade union federation, a women organization, and a medical association. To reach the participation on personal level there were study group managed by the *dunwei* (work unit) in urban areas and broken down into *xiaozu* (the small groups of 8-15 people). However, after several years running, due to the boredom of the people, much fake participation was generally to occur.

In Mao's era, China was declared as a Democratic Dictatorship with four classes: workers, peasants, petty bourgeoisie (tradesmen, peddlers, small shops owners), and national bourgeoisie (adoption of parliamentary forms during China's bourgeoisie-democratic phase during the revolution). During the time, it suppressed the "lackeys of imperialism" which are landlords, bureaucratic capitalist and KMT reactionaries (Dreyer 2019:77). During these early years of administration, he launched several mass campaigns to build enthusiasm among the people. At the same time, it declared the National Language which was the Common Mandarin to be used in official documents (see Dreyer 2019: 4).

4.1.2 The Great Leap Forward (1958-1961)

The third major event was Great Leap Forward was the effort of Mao to modernize China using the local advantage of the abundance of work power (human resources, because of high number of population) and certain traditional techniques. The Great Leap Forward's message is radically egalitarian (Dreyer 2019: 4). It tried to implement Marx's teaching of communism "from each according to his ability, to each according to his need". The movement was preceded by Mao's speech in February 1957 as a second effort to encourage freedom of speech which brought consequences such as external periodicals entered the country and let the citizen become open minded and become bolder to the government. Several events believed to be impacted by this attempt such as students in Beida University China criticized the government with posters. In Tianjin, engineers stated that the party had promised China with a revolution but actually no more than a change of dynasty. Other critics came from a journalist who mentioned that the party had been estranged from the masses and the members were "flatterers, sycophants and yes-man" (Dreyer 2019: 86-87). From intellectuals, a professor mentioned the CCP leaders were somewhat as people with petty bureaucratic mind. The professor further stated that Marx and Lenin would be unhappy to realize that their doctrine was applied so rigidly by CCP leaders in China. From countryside, the peasants complained about the cooperatives and demand their land back. In urban areas, workers complained about the wage system and stated it was irrational. Some other people even opined that they had been better off under KMT government and in further region; some ethnic minorities advocated splitting off from China.

The Great Leap Forward was made in an attempt to implement communism in a way compatible with Chinese condition. The Chinese copy the implementation of Marx theory from Russia. At the same time Russia sent a number of advisers to China to help increase the economics and ethnology. However, PRC leader was aware that the condition of China was different from Russia, called for a reinterpretation to China's context. In attempting this, Mao wanted to reduce differences between the city and countryside. By this way, Mao tended to enhance the equality among the people. He contended that the county's problem could not be solved just by upgrading the cooperatives and the villages, but also by growing the bureaucracy. Mao had a very much concern with the urban-rural gap since he was a product of rural upbringing. That's why he emphasized equality during his leaderships. Mao contented that it should not be a dichotomy between the ideologically pure (the communist) and the technocrats (the bourgeois). He exerted that China needed people who were both "red and expert" (Dreyer 2019: 88).

During the Great Leap Forward, several initiatives were conducted. In infrastructure sector, there were initiative to collaborate the cooperatives in China in building the dam and other water control work. The idea of the project was to rely on local people and resources to help the country. The communes (combining several cooperatives) was started in 1958 later made large scale changes in term of economic, politic and sociology. In industry sector, Mao put a very confidence slogan to enhance the production such as (to) "overtake England in steel industry in 15 years" and "More, better, faster and cheaper". There was also "the walk on two legs" slogan used as a new way of production: combining heavy industry which was capital intensive and labor intensive for traditional industry (for example in textile and medicine industry). In the education sector: there was a *xiaxiang* or "sent down" program. It was a program of sending young scholars to villages to educate peasants while let them learn agricultural techniques to enhance production for the country. In agricultural sector there were new agricultural techniques applied such as: the double-wheeled, double-bladed plow, a closer and deeper seed planting (Dreyer 2019: 91).

The evaluation made by the party published in "The Red Flag" journal November 1958 concluded that they had not yet reached communism thus need to modify the practice of "from each according to his ability, to each according to his work". It was reported that most people reacted to the formula by not working hard, some other by passively resisting, engaged in active sabotage by destroying property and killing their animals rather than collected them to the state (Dreyer 2019: 91). The result was not as intended and was disastrous for Chinese society. People were not being motivated to work hard and many were found to work as minimum as possible to get as much as possible.

4.1.3 The Cultural Revolution

The fourth major event was happened around 1966. Mao unleashed the revolution to purge the country of Soviet, other western countries and traditional influences. It wanted to purify the country of both foreign and decadent old influences (Dreyer 2019: 4). It started with Upheaval Phase (1966-1969) attacking young party's official of Shanghai Yao Wenyuan and to two historian-playwright, Wu Han and Deng Tuo. It marked the beginning of the Cultural Revolution in November 1965. At that time cult of Mao became escalating and everything contra-Mao was perceived as negative. During Cultural Revolution, both western and traditional Chinese became suspect for its bourgeois/ feudal content. It was reported that books other than the works of Mao disappeared from bookstores.

In August 1966 Mao called out the Red Guards, young people from five pure classes which are: workers, poor and lower middle peasants, soldiers, party officials and revolutionary martyrs to enforce revolutionary purity by attacking the "four old": old ideas, culture, habits and customs (Dreyer 2019: 97). The guard also ransacked museum and religious institution and destroying their contents. At elite level there was a power shift from party organization to a group called "The cultural Revolution Small Group" with Yao Wenyuan, other Shanghai radicals and Mao's wife Jiang Qing as prominent members. The Cultural Revolution was militantly egalitarian: anyone who had had authority over anyone else could be accused of being a corrupt power holder. Many people were tortured or driven to suicide. Unexpectedly, among the victim was Deng Xiaoping at that time served as party secretary general.

In February 1967 Premier Zhou Enlai convinced Mao to opt for a moderate policy. A new body called revolutionary committee was ordered but there were many disputes and rivalry among the elite groups. The effect of Cultural Revolution to China's culture was devastating. Among these consequences included: Long serving leaders were being replaced with new leaders whose experience were limited; the relationships of authority were destroyed or weakened; the party and ministries ceased to function; the role of military had been greatly enhanced; the production declined and there were drastic effect on educational system; both foreign and traditional influences in culture were dropped sharply; and a large number of lives and careers damaged.

4.1.4 The modernization by Deng Xiaoping

In December 1978 Deng introduced Four Modernization Program which considered as the fifth major event. It aimed to bring the PRC to be ranked among the more developed countries by 2000. The focus of the modernization was truly economic advancement, by which had enormous sociopolitical effect. Deng abandoned Mao's emphasis on class struggle and social revolution for creating prosperity. The definition of socialism was seemed to be shifted. In the era of Deng it was acceptable to the people to be rich as long as it was the result of hard work, not by inheriting wealth. Even though there is still a note of the statement: "... but it is not necessary all people to be rich at the same time" but it was acceptable for some people to be richer before others (Dreyer 2019: 107).

During Deng's administration the "iron rice bowl" come to end. There was no guarantee for all people to get the job, only those who perform will. The "redness" was no longer more important than expertise. The class label as capitalist and landlord which was hereditary were removed. Deng also announced the "open door" to the advanced countries in the world to modernize China. In politics, Deng offer a more democratic elections, including reviving the Chinese People's Political Consultative Conference (CPPCC) as a united front that had disappeared during the Cultural Revolution.

Deng tended to select the best of the west and east tradition and mixed them together. The Open Door policy enabled student to study abroad (mainly to the west) to get knowledge that later would be implanted in country after they are back. Deng's policy was more market oriented and the prosperity was the aim. Deng seems to be more liberalist. This give more confident to China's government as well as to the people. Dreyer (2019) asserted, however, the leader mentioned that Western concept such as separation of powers, the theory of check and balances and human right were not appropriate to China. This shape the culture on how China interacts with other country in future years.

4.1.5 The Tiananment Incident in 1989

The sixth major event was the Tiananment Incident in 1989. Since 1987 demonstrations had been escalating in Beijing by the student demanding the greater democratization and the return of the "four freedom" clause in the constitution that had been deleted in 1980. By then the leftist group got a 'proof' that granting freedom to people would lead to chaos and disruption. The group started a campaign against the bourgeois liberalism. In the executive level, Deng sounded the restoration of party's tradition of democratic centralism. April 1987 the tide turned to reformist: Deng told foreign visitor that the leftist tendency in the party was jeopardizing the Chinese economic reforms. Zhao Ziyang an elite of the party delivered speech with liberal overtones (Dreyer 2019: 118). In November 1987, the Thirteen Party Congress confirmed Zhao as general secretary and first vice chair of the CMC. Deng, together with Li Xiannian and Cheng Yun resigned from the politburo due to the advanced age and enter the Central Advisory Commision. The new standing committee of the Politburo had a 3-2 leftist edge in the politburo.

The Seventh National People's Congress in March-April 1988 appointed two elderly leftist with military background: Yang Shangkun and Wang Zhen as president and vice president of the PRC and Li Peng as premier. At that time there was a high inflation rate 18.5 % official figure but analyst estimated up to 50%, the worst since 1949 in China. At the Thirteenth Central Committee's Third Plenum in September 1988 it was decided that price reform (as had been proposed by Zhao) were postponed indefinitely. Other solution seemed to be favored by leftist: cutting back on capital construction, recentralize the decision making, and rectify the ideology (Dreyer 2019: 119). Zhao's activities in the economy diminished while leftist like Li Peng became more active. Deng worried about the consequences of his own reform program. Anti-Deng attitude became publicly common. Intellectual called for greater freedom and release of political prisoners. In one occasion, students spoke openly during the commemoration the seventieth anniversary of the May fourth movements in 1919.

In April 26, 1989 the the Renmin Ribao published editorial prohibiting the protest which were counterrevolutionary, and stated that troops would be sent in to quell the "chaotic disturbances" (Dreyer 2019: 120). The students who generally considered themselves as patriotic remonstrator were insulted with the editorial and held a march of 100,000 students into Tiananmen Square. They were supported by 1 million Beijing citizen who many marched with them. Party and government leader were not pleased. Leaders were criticized by name including Li Peng and Deng Xiaoping. Zhao Ziyang attempted to intermediate the protestors and the party's hardliners but rejected by the politburo.

On the other location, Li Peng chaired a meeting of several thousand party, government and military officials announcing the implementation of Article 89 of the country's constitution and declared a martial law in most of Beijing. Zhao was the only standing committee of politburo not present in the platform which was nationally televised. It signed that Zhao's place was occupied by PRC president and party CMC general secretary Yang Shangkun. Sunday, June 4, troops attacked the demonstrator. Government reported 300 people were killed but foreign and dissident Chinese estimated more (Dreyer 2019: 6). The message for the Chinese Communist Party was clear: the people were dissatisfied with Deng's plan to build socialism a la Chinese Characteristic. After the demonstration eased, China government made a number of adjustments to economic policy in an attempt to deal with people's grievances.

4.1.6 General overview on the major events had pictured Chinese Culture

Communist ideology appealed many people in the country as a solution of their problem. Even though it is western idea, Mao Zedong had discussed and made explanations on it thoroughly (see Foreign Language Press, 1961) so he convinced the people that the ideology will be successfully implemented in China. Mao was hardly struggling to adopt the ideology. During his early years in office, Mao seemed to embrace all countries' components including its "enemy", the KMT as the implementation of Mao's creative adaptation towards Marx called "On the New Democracy". Different from that during the KMT era which the form of parliament was an alliance between KMT and CCP, in Mao's era it was composed of several different classes.

The series of campaign held functioned as gathering many Chinese components which were tend to loyal more to clan, village and province than to the nation. It was a clever strategy of Mao to build a sense of nationalism by explicitly mentioned its external threat. The term of "unity and patriotism" was the concrete form to the society as Sun Yat Sen described it as "a sheet of loose sand" (Dreyer 2019: 78). The fourth campaign was seen by new observers as the internal problem that the party could't solve. The series of campaign meant to purify the party as well as its organ from non-communist true believers.

The implementation of Marx in the production seemed to over emphasized on the man/ women as a means of production, and less considering them as a human being e.g. people ate at mess hall for the sake of saving time from cooking and reduce the waste; married workers lived in dormitories segregated by sex (See Dreyer 2019: p.91). The approach taken by the Chinese government was sometimes too strict that tend to breach (break) the human rights. The motivation was not to build from inside (the people) but from outside (the government, rule). It would not motivate the people to do the program sincerely.

Regarding to the Cultural Revolution, western analysts tended to comment it negatively, however, there is at least scholar regards it as somewhat positively. It was understood that during the campaign the Red Guards were taking over the public space in China, creating a sense of chaos. Baum (1971:3) acknowledged an anarchy but not totally anarchy. Commenting on Mao's action in putting down many Chinese Communist Party (CCP) personnel alleged as his "enemies", Baum mentioned that it was not liquidating those persons but should be seen as a kind of 'educating' those cadre in order to improve his/ her understanding on his teaching. It could be true, since, after some time they were 'liberated' and restored to favor on a probationary basis (Baum 1971: 3).

Mao passed away in 1976 and his successor Deng Xiaoping abandoned his emphasis on class struggle and social revolution for creating prosperity. The difference from the previous leader is that the first tend to select the best of west and east tradition, while the latter implemented an Open Door policy to the west. In short, the leadership orientation of Mao was in favor of equality while Deng in prosperity. Deng implemented the policy that was more market oriented. By this practice, the prosperity did come to reality. Business people and farmers gained advantage for they can set the price (to keep up with cost production). Deng seems to be more liberalist. However the 1989 demonstration was a sign that many people in PRC dissatisfied with his policy. After the demonstration there were adjustment to accommodate what people wanted. Surprisingly the leader said that Western concept such as separation of powers, the theory of check and balances and human right were not appropriate to China.

Tiananment incidents raised attention to public because there is a change in China. People, especially the student became more brave to criticize the government. The government, on the other hand exhibited its power by sending troops and repressed the people. The movement made by the students considered failed because they forget the major supporter of the government, the peasants, to join the action. The significant of the incident lies in its symbolism. The failure of the Tiananment demonstrators to achieve their goals weighed heavily on the survivors and their sympathizers. The existence of factionalism among the demonstrators also play role: the peasants were not approached to join the protest movement

4.2 Discussion

4.2.1 The Confidence Stance of China

All China's actions are actually reflecting a confident stance. Since its early history, many events have been reflecting this stance. This paper will focus on the history after Mao's period. Disagreement with Stalin, Mao identified himself as philosopher and a poet (Beja 2018: 232) and claimed his political ideas as the correct interpretation of Marxist philosophy. It was a confident claim. People could ask about this credential, for example about his degree in philosophy, or the effectiveness of his strategy in applying the Marxism considering unsatisfactory result of his agricultural project during the mass campaign: e.g. many discrepancies occurred after the Pre Great Leap Forward stage (Dreyer 2019: 4). A close friend in the party, Liu Shaoqi did not get satisfactory explanation when asking this, but detainment.

Mao Zedong in other occasion "teach a lesson" to artist and intellectuals (writers) mentioning that they should fight petty bourgeois ideology, go to the grassroots and learn from the workers and peasants to study official interpretation of Marxism-Leninism. It is a little bit 'strange' since he talked to intellectuals who had devoutly learnt theories and undoubtedly know more about politics but they should learn Marxism from the peasant. During the Great Leap Forward in 1958-1961 Mao Zedong confidently use a new approach of using its ideology to build huge projects. The slogan of doing the project "by the people", the workers were like batteries of ants building the project. With the facts that not all of the workers were skilled to do the construction works, it seemed that he was neglecting technical standard. It resulted with early damage of the building because it was poorly built by unskilled people which then caused flood in some areas (Dreyer 2019: 93). People can say that the new ideology was still in experimental phase. Dreyer (2019: 93) commented that "survival, rather than ideological orthodoxy...was the imperative of the time".

This confident stance resonance to his inner circle, the family. During the Cultural Revolution 1966 the leader prohibited traditional music performance and let western culture performance intruded. At that time, the traditional Chinese opera allowed to perform after being "reworked" using western style musical instrument: the piano. At a certain occasion when asked about this, Madame Mao commented, "We have liberated the piano". It was quite confident statement since we all know that the piano comes from western.

In the 21st century era, Dickson (2016) asserted that the international financial crisis in 2007 had made China leaders more confident seeing the country's ability to survive from hardships and recession. Since that time on, China was less willing to accommodate Western advice on economic policy, to be more assertive in foreign policy and more repressive in maintaining domestic order and stability.

4.2.2 A Repressive Culture?

After tension and stress resulted from 1955 campaign, Mao launched “The Hundred Flowers” campaign to ease the tension of the China’s people (Dreyer 2019: 86). In his speech in May 1956 he mentioned “let a hundred flowers bloom; let a hundred schools of thought contend”. Certain actions were conducted to everyone perceived as counterrevolutionaries or the anti-communist group. Dreyer (2019: 79) noted that during the campaigns there were more than 800,000 executions (other sources mentioned more than 10 million). In 1951, the government launched The *Sanfan* campaign or fighting the “three antis”: anti-corruption, anti-waste, and anti-bureaucracy. This campaign was targeting the cadres identified as opportunist particularly those who joined the party with a motivation of profiting themselves rather than sincerely believed in party’s goal. Another campaign was The *Wufan* in 1952. Again, it was fighting the five antis: bribery, tax evasion, fraud, theft of government property, and theft of state economic secrets. It was particularly targeting the bourgeoisie as the result from the *Sanfan* campaign because during the previous campaign it had been revealed that the corruption dealt with economic matters tying to them (Dreyer 2019: 79).

During the Hundreds Flower Campaign, another action demonstrated by the government. After the leader speech in February 1957 titled “On the correct handling of Contradictions among the People”, cadres encouraged everyone to speak out, insisting that words could not be considered as criminal to support this urging. At first people were not enthusiastic but later a number of intellectuals begin to criticize. Most of the critics were targeting the absence of the freedom of thought, the freedom of expression, and the freedom of publication. Also participating were students and artists. In June 1957, Mao wrote in editorial of People’s Daily accusing a “handful of counter-revolutionary rightist” of having used the freedom granted by the party to launch attack on socialism. The campaign then uncovered the rightist which labeling about 500,000 people as “rightist” and were subject to criticism session in their work units and denounced in the official press. Others were sent to labor camp, to jail or to the countryside to be “re-educated by the poor and the lower poor peasant”. The most devastating effect was that their children were also discriminated for two decades, were barred from entering universities or from good jobs in the cities.

A local analyst Hu Feng wrote long letter to the leader, about 300,000 words of opinion and was also published in the supplement of “Literary Gazette” (*Wenyi bao*) in 1954. The writing was actually a refutation of the talks at the Yan-an forum. It then was strongly rebuked by Mao himself in People’s Daily editorial at which he was labeled as “counter-revolutionaries”. Beja (2018) asserted that the latent objective of the campaign was actually to get rid of Mao’s political rival including Liu Shaoqi. It was also targeted other intellectuals and writers such as journalist Deng Tuo, playwright Wu Han and writer Liao Mosha. It was also extended to most professors, educators, teachers and writers who were accused to stick to the bourgeois world outlook. Using his charisma, Mao called university and high school students to organize themselves into Red Guards and launch movement to criticize their teacher, school administrator or other intellectuals. Cultural Revolution was directed against intellectuals who threat the hegemony of Mao Zedong’s power. As an effect, universities were closed in 1966 which partially reopened in 1972. The students were selected based on their knowledge of the ruling ideology. By an order for writers and artist to follow the “literary theory” imposed by the high leader or in the name of “serving the people”, it discouraged freedom of speech and freedom of thinking.

In Deng's era hard treatment to intellectuals took a different way. The government treated this group like a 'rubber' tight and loose. When they are needed, they will be heard (the party relaxed the control), but when they say loud things, for example criticizing the party, they would be repressed. Actually, as a victim of Cultural Revolution, Deng extended a friendly hand to the intellectuals and thinkers who had been the main target of the campaign. This "Bourgeois liberalization" in 1980, however, is climaxed with" June Fourth Massacre" or Tiananment Incident, a tragic repression towards university students.

During the leadership of Jiang Zemin and Hu Jintao intellectuals who questioned party's leaderships also became target, often followed by long jail sentences. Since 1976 the party has never allowed everything include ideological controversies to distract the focus toward economic development. Noted that during Hu Jintao and Wen Jiaobao, references to Mao had become rather rare.

The era of Xi Jinping since the late 2012 has been "orchestrating the return to Maoism" (Beja 2018: 245). There has been limited freedom of expression of the intelligentsia. Xi, repeating Mao emphasizes the importance of ideology. Control over public sphere through various "central leading group" where he chairs becomes common. There is a "Historical nihilism" by attacking any ideas (usually those expressed in articles) that criticize the party's through academic reflection. The repressive actions were the closed down of a contemporary history journal Yanhuang Chunqiu (founded by liberal party's elders) in 2016. Sad to learn that it practically disabled people from reflecting to their humanistic tragedy of the Cultural Revolution which they should have had commemorated its 50th years anniversary in 2016. A very popular intellectual website "Consensus" (*Gongshi wang*) was also closed down.

Minorities such as the Uighur also have a limited space. Dissatisfaction of imbalance development with other region (the east), triggered many uprising in Xinjiang Province. Serious social eruption since February 1996 has been occurring since Deng's era. Three bombs exploded simultaneously in Urumqi in the day of the Deng's speech February 25. The "strike hard campaign" was launched in 1997 firstly intended to fight corruption and crime but the campaign actually restrict religious practice leading to 190 execution of Uyghur (Amnesty International 1999). Intellectuals such as Rebiya Kadeer, Uyghur's businesswoman was arrested of "revealing state's secret" in August 11, 1999. Other scholars, Ilham Tohti, a China Minzu University economist was detained as "separatist" for his class lectures and websites. The government seems to take "hard action" to all things contra with their line. They make little distinction between separatist, terrorist, and civil right activist – whether they are Uyghurs, Tibetans, Taiwanese or Falun Gong Buddhist (Gladney 2018: 321).

China analyst, Dickson (2016) asserted that repression had been inherent in the Chinese Communist Party (CCP) since early 1940 (Mao's Yan'an). It is considered served as a "toolkit" to assert the party c.q the government' policy demonstrated by the way the government maintained the Tiananment incident. The government also saw any peaceful protest as "turmoil". Dickson noted that there is no large-scale social movement since 1989.

4.2.3 Encounters with Indonesia in Natuna Waters

China has made several confrontations with Indonesia and other Southeast Asian in what is so called the "South China Sea". In Indonesia territory, Chinese fishing vessels accompanied with coast guard escort were present in waters around Natuna Island at the end of 2019, chasing away local-traditional fishermen (Grossman, 2020). It was surely blocked the blue economy of the country. Indonesian then summoned China's ambassador to lodge a protest on December 30, 2019. It was then followed by placing warships and F-16 fighter jets to patrol the region **(**Grossman, 2020). At first Beijing refused to back down. Jakarta responded by mobilizing its local vessels to keep staying there and continue fishing activities competed with Chinese fishermen. Two days later, the President of Indonesia, Joko Widodo (Jokowi) visited Natuna

Islands and declared there would be “no compromise” on “our nation’s territorial sovereignty” **(**Grossman, 2020). Tensions subsided and Chinese ships had been pushed further out to the edge of Indonesia’s exclusive economic zone. The action - different from that of other neighbouring Southeast Asian country - clearly showed a balancing strategy. This action can be said as a sturdy effort to secure Indonesia’s blue economy plan.

China’s action in the waters around Natuna Island is a typical assertive characteristic of the government. Confident stance was clearly demonstrated. China’s stronger economic basis compared to Indonesia allegedly played role in policing the action. It would be stronger if associated with the BRI project (see e.g. Soong 2021), where China invests on several Indonesian national projects in Java and Kalimantan. With this superior bargaining position, China was thinking that Indonesia will weaken its stance to the conflict in the waters around Natuna. However, Indonesia showed the dignity bravely by “balancing” the action. The Indonesian government encouragement to the fishermen to keep staying in the location together with the placement of warships and F-16 fighter in the Natuna waters is a clear sign that Indonesia was taking a "balancing" strategy against China’s provocation.

Considering China’s long history of its confidence stance, the actions could not be justified, however. There is an international consensus agreed by member countries of the United Nations (UN) the UNCLOS 1982. Every dispute in waters or sea should consult with the rule. The use of their own argument of “The Nine Dash Line” would meant the neglect of the UNCLOS. Another confident -unilateral taste - was demonstrated when they still used the argument of the Nine Dash Line to reject international arbitrage in Den Haag of any disputes. This stance has actually been demonstrated since Mao’s era. Mao implemented communism based on his own understanding. Application of a concept should have been considering the context. However, a thorough understanding of concept (theory) itself is paramount. A new theory should be discussed thoroughly with many people. It will be best done by inviting scholars during the process. What happened in Yan-an, -other sources mentions as Yenan (Brandt et al (1952) - during the long march showed that there were no equal or free discussion among the participants. The discussions lead by party cadres in small group with participants of young scholars from cities like Beijing. However, what happened was far from the hope of the youngsters. Party cadre implemented a hard line during the discussion and imposing their own understanding of Marxism.

The hard fist approach was demonstrated by the authorities of China since 1949. It targeted whoever perceived as “enemy” challenging the party’s ideology, including party cadre who endanger the dominance of the leader. Minorities were not excluded as target: students in Tiananment 1989, the Falun Gong, the Tibetan and Uyghurs are just example.

5. Conclusion

There are six major events that had pictured China’s history. First, the imperial government which had ruled China since around 2000 BC; second, the overthrowing of the Qing dynasty and the building of the New Era: first pictured by Sun Yat Sen (The Nationalist) and then continued by Mao Zedong which had quite different stance: The Communist. The third major event was The Great Leap Forward (1958-1961) during Mao Zedong’s administration. The fourth was The Cultural Revolution (1966), still in Mao’s era. The two last major events were under the second and more modernized regime: The modernization by Deng Xiaoping (1978) and The Tiananment Incident in (1989).

All of abovementioned events had certainly made China to possess a strong confident stance. In economic terms, development and modernization made by Deng Xiapoing during the last three decades of the 20th century found its testing ground in the beginning of the 21st century which made this stance even stronger. The international financial crisis in 2007 had proven the country’s survival ability which made its leaders to be more confident in the international sphere. Since that time on, China was less willing to accommodate Western advice on economic policy, be more assertive in foreign policy and continued its "repressive nuance" in keeping its domestic order and stability. This (repressive) nuance, if traced back historically, had been used as a "toolkit" by the Chinese Communist Party since early 1940 during Mao's Yan'an era. It had been used by the leader to assert government's policies. Since the Tiananment incident - seen by outside observer as a peaceful protest but as "turmoil" by the government - there has been no large-scale social movement since 1989.

What exercised by China by demonstrating their assertive actions in waters around Natuna Island is a reflection of a confident culture, which has been built up since the Mao's era. This confident attitude is highly contributed by their success in economy which has been growing rapidly since the Deng's era with the foundation laid by Mao's Great Leap Forward. It should be acknowledged that China has developed tremendously in the economy. What China has demonstrated was a clear reflection of this. China's argument using their "Nine Dash Line" is unilateral and is unacceptable internationally. Indonesia's strong attitude by placing military power in the disputed area and using the UNCLOS argument in the international arbitrary showed a balancing strategy. It keeps the international order and secure the country's blue economy.

Only "strong man" can lead the bandwagon and China, having been developing confident culture in the government since the fall of the Qing Dynasty, tend to combine it with hard fist in maintaining internal affairs. China was quite assertive in international relation. What demonstrated by Indonesia under Jokowi's administration in 2020 showed a confident stance. As a leader of the ASEAN countries, at least in term of the population and area, Indonesia has to present itself as a role model. What Indonesia had presented demonstrating a balancing strategy, showing a dignity and determining that Indonesia has equal right with giant China in the international relation. This paper is focusing in China's history to demonstrate the development of the process of acquiring the confidence culture. This article does not show the development of this culture in Indonesia since it is not within the coverage of this paper.

In interacting with other countries, spirit of international cooperation should be put forward with respect. The one-way approach historically applied in the past can not be implemented today when "international residents", neighboring countries have the same right to maintain and develop their blue economy in their territory.

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WHAT FACTORS INFLUENCE THE USE OF BELAJAR.USD LEARNING MANAGEMENT SYSTEMS? AN ANALYSIS OF TAM 3 BASED ON LECTURER'S VIEW

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ABSTRACT

The aim of this research is to explore the factors influenced the use of 'belajar.usd' Learning Management Systems (LMS) from the lecturer's view according to Technology Acceptance Model 3 (TAM 3). This research is a quantitative research. The data in this research were collected using questionnaire to explore the perception of the respondents.

This research use purposive sampling method. The respondents of this research were 42 lecturers in Economic Faculty, Sanata Dharma University, Yogyakarta, Indonesia. The collected data then was analyzed using Partial Least Square – Structural Equation Modeling (PLS-SEM) technique.

The conclusion of this study is the behavioral intention on using the belajar.usd Learning Management System did not affect the actual use. More detailed, the determinant of behavioral intention on using LMS is perceived ease of use. Meanwhile, both Perceived Ease of Use and Perceived Usefulness were not the determinants of the intention to use belajar.usd LMS. Perceived Ease of Use itself was determined by the Computer Anxiety, Perception of External Control, and Objective Usability.
***Keywords**: Intention, Learning Management Systems, Perceived Ease of Use, Perceived Usefulness, Technology Acceptance Model*

1. Introduction

In the middle of year 2020, the entire world was shocked by the spread of Covid-19 pandemic. This pandemic change every aspects of humans' life due to the dangerous effect of this disease to humans. The affected aspect of human's life also including education aspect. The education systems moved to the online mode because as mentioned by Bhagat & Kim, (2020), the pandemic brings some of consequences including the students who cannot attend to the school physically. The changes from in person to online mode also affect the aspect of time and supply by parents allocated to their children on online learning. As found by Bansak & Starr (2021), during the covid-19 pandemic, parent will spend more time especially when they have more children meanwhile, the worked mother will spent less time due to their limited available time for their children. This result was also supported by Varea et al., (2022) that the pandemic has resulted in new protocols that have altered the methods teachers use to instruct and interact with students and their families.

With the shifting from in person to online mode, the use of Learning Management Systems (LMS) increased. According to Ma et al., (2024), Learning Management System is defined as "a software application or web-based technology considered to implement, assess a specific learning procedure, and plan to develop new techniques". Fındık-Coşkunçay et al., (2018) also added that a Learning Management System (LMS) is a commonly utilized tool in higher education institutions for facilitating course activities in an online mode. Learning Management Systems also provide offers a secure, reliable, and adaptable platform for online education (Kraleva et al., 2019).

The increasing use of Learning Management Systems leads to the user acceptance of this technology. Some of current studies focuses on the acceptance of Learning Management System. For example, Camilleri & Camilleri (2022) explore the acceptance of LMS use for higher education students in Southern European. The acceptance of LMS also studied by Ashraf et al., (2020). They studied the continuance intention on using LMS for university students in Iran based on Expectation Confirmation Model, Technology Acceptance Model and some of external variables. Waris & Hameed (2023) also conducted a study related to the acceptance of the use of LMS from the faculty members of Pakistani universities. They use extended Technology Acceptance Model as their research model. Based on the previous literatures, this paper will use Technology Acceptance Model 3 (TAM 3) developed by Venkatesh & Bala (2008) because there is a lack of study of Learning Management Systems acceptance from the lecturer's view using Technology Acceptance Model 3.

Based on the phenomena and previous studies above, the research problem of this paper is about the acceptance factors of TAM 3 on using Learning Management Systems (LMS) from the lecturers' view. The research question of this paper is: what are the determinant factors of user acceptance based on TAM 3 on using LMS from the perspective of lecturer in Economic Faculty, Sanata Dharma University Yogyakarta? Based on the research question, this research's aim is to analyze the determinant factors of user acceptance based on TAM 3 on using LMS from the perspective of lecturer in Economic Faculty, Sanata Dharma University Yogyakarta. The scope and limitations of this research is limited to the lecturers in Economic Faculty, Sanata Dharma University Yogyakarta who are in charge of teaching and not currently undergoing further studies. The lecturers who are in charge of teaching, used belajar.usd Learning Management Systems in their classes during the Covid-19 pandemic. Other limitations is related with the TAM 3 used in this research. This research exclude the experience construct because this is a preliminary research of the acceptance of LMS usage.

2. Literature Review

2.1. Learning Management Systems

Learning Management Systems (LMS) became widely-used to facilitate the online learning, The use of LMS is increasing when the world is faced with the Covid-19 pandemic. According to Tseng (2020), higher education institutions have embraced integrated computer systems known as learning management systems in order to construct fully online virtual universities or efficient e- learning environments. Meanwhile, according to Nguyen (2021), a learning management system (LMS) is a software program or website that facilitates the delivery of courses, knowledge acquisition, and learning control. Learning Management Systems offers various support for the e- learning mode. According to Cheng & Yuen (2018), LMS gives support as a means to create and deliver the learning material, monitoring students' activities, as a means to assess the performance of the students. Not only for teachers or lecturers, LMS also provides support for the students. As mentioned by Cheng & Yuen (2018), LMS provides support for students in terms of interaction with their classmates and also with their teachers or lecturers using the discussions and video conference features.

Sanata Dharma University, one of the private university in Yogyakarta, Indonesia also provide the Learning Management Systems to engage in online learning. The LMS of Sanata Dharma University is called *belajar.usd.ac.id.* The *belajar.usd.ac.id* LMS was equipped with so many supportive features to support online learning such as: discussion panel, assignment submission panel, attendance record panel, place to uploading the learning materials, and so on.

2.2. Technology Acceptance Model

Technology Acceptance Model (TAM) is one of the most well-known model to examine the acceptance factors of use of the technology. This model was firstly developed by Davis (1989). Based on his study, Davis (1989) proposed two determinant factors of user acceptance:

perceived usefulness and perceived ease of use. Davis (1989) defines both perceived usefulness and perceived ease of use as: “the degree to which a person believes that using a particular system would enhance his or her job performance” and “the degree to which a person believes that using a particular systems would be free of effort”, respectively. Technology Acceptance Model was inspired from Theory of Reasoned Action (TRA) developed by Fishbein & Ajzen (1975). According to Davis et al., (1989), TAM uses TRA as the basis because TAM specifies the causal relationships between two fundamental beliefs—perceived utility and perceived ease of use—and users' attitudes, intentions, and actual computer adoption behavior.

Based on Theory of Reason Action and the initial work of TAM, Davis et al., (1989) developed the Technology Acceptance Model (TAM). Behavioral intention defined as a measurement of the strength of one’s intention to perform specified behavior (Fishbein & Ajzen, 1975). The Technology Acceptance Model (TAM) then experienced some developments through Technology Acceptance Model 2 (TAM2) developed by Venkatesh & Davis (2000) and also Technology Acceptance Model 3 (TAM3) developed by Venkatesh & Bala (2008). Technology Acceptance Model 2 emphasize on the identification of the determinants of perceived usefulness construct. Based on their proposed works, Venkatesh & Davis (2000) identify the determinants of perceived usefulness into: subjective norm, image, job relevance, output quality, result demonstrability, and also add the two moderating variables: experience and voluntariness. Technology Acceptance Model 3 (TAM3) extend Technology Acceptance Model 2 (TAM2) by identify the determinants of the perceived ease of use. Venkatesh & Bala (2008) identify the determinants of perceived ease of use are: computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, and objective usability.

2.3. Research Framework

Figure 1 below shows the framework of this research that was inspired from Technology Acceptance Model 3.

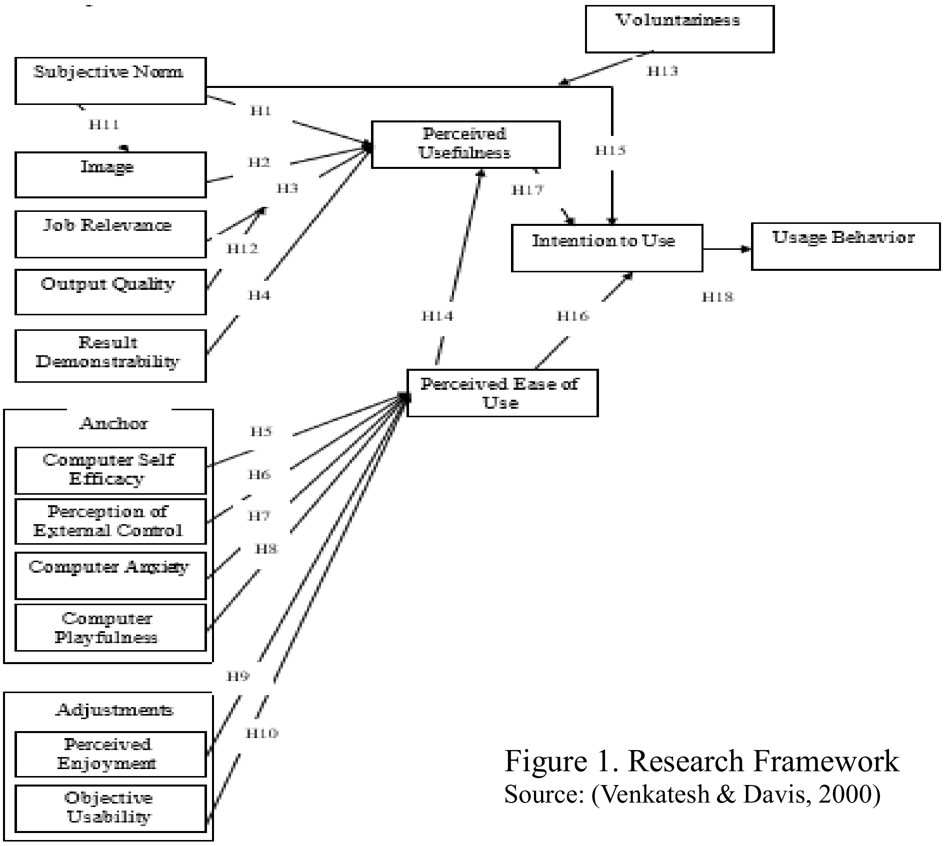

Figure 1. Research Framework
Source: (Venkatesh & Davis, 2000)

2.4. Hypothesis Development

- H1: Subjective Norm influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H2: Image influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H3: Job Relevance influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H4: Result Demonstrability influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H5: Computer Self-Efficacy influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H6: Perceptions of External Control influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H7: Computer Anxiety influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H8: Computer Playfulness influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H9: Perceived Enjoyment influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H10: Objective Usability influence Perceived Ease of Use on using *Belajar.usd* Learning Management System.
- H11: Subejctive Norms influence Image on using *Belajar.usd* Learning Management System.
- H12: Output Quality enhances the effects of Job Relevance towards Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H13: Voluntariness enhances the effects of Subjective Norms towards Behavioral Intention on using *Belajar.usd* Learning Management System.
- H14: Perceived Ease of Use influence Perceived Usefulness on using *Belajar.usd* Learning Management System.
- H15: Subjective Norms influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H16: Perceived Ease of Use influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H17: Perceived Usefulness influence Behavioral Intention on using *Belajar.usd* Learning Management System.
- H18: Behavioral Intention influence Actual Use on using *Belajar.usd* Learning Management System.

3. Research Methods

This research is quantitative empirical research. The population of this research is all of lecturers in Economic Faculty, Sanata Dharma Univeristy, Yogyakarta who are in charge of lecturing and currently not undergoing further studies. The amount of sample in this research is 42 respondents out of 43 of populations. The sampling method used in this research were purposive sampling method. The data collection procedure in this research is using 5-Likert scale questionnaire with the main reference of questionnaire is from Venkatesh & Bala (2008) with some adjustments. Guttman scale also deployed in this research for Computer Self Efficacy construct. The data collection method also include the open-ended question in order to know the suggestions from the respondents towards the each constructs in the framework.

4. Research Findings and Discussion

4.1. Descriptive Statistics

Descriptive statistics analysis was conducted using SPSS statistics software. Table 1 below shows the descriptive statistics result of the respondents in this study. From the table 1 below, the most respondents on this study were the Economic department lecturer who were 55 years old. The youngest respondents in this study where the lecturer who were in 31 years old, and the oldest is 75 years old. In the context of gender, most respondent in this study were the respondent with the value label 1 which represented male respondents. With regards to the department of the lecturer, the highest number of respondents are from bachelor of management department with the mode of 2.

Table 1. Descriptive Statistics

Statistics					
		Age	Gender	Department	Education
N	Valid	42	42	42	42
	Missing	0	0	0	0
Mean		49,43	1,48	1,95	2,29
Std. Error of Mean		1,847	,078	,152	,071
Median		52,00	1,00	2,00	2,00
Mode		55	1	2	2
Std. Deviation		11,972	,505	,987	,457
Variance		143,324	,256	,973	,209
Skewness		-,101	,099	,899	,984
Std. Error of Skewness		,365	,365	,365	,365
Kurtosis		-1,011	-2,092	-,077	-1,085
Std. Error of Kurtosis		,717	,717	,717	,717
Range		44	1	3	1
Minimum		31	1	1	2
Maximum		75	2	4	3
Sum		2076	62	82	96
Percentiles	25	36,75	1,00	1,00	2,00
	50	52,00	1,00	2,00	2,00
	75	57,00	2,00	2,00	3,00

Source: SPSS output

4.2. Hypothesis Testing

To conduct the hypothesis testing, Partial Least Square-Structural Equation Modeling (PLS-SEM) was deployed in this study. There are some steps for conducting the PLS-SEM technique. The first step is evaluation of measurement model – this step consists of: 1) assessment of the indicator reliability; 2) assessment of the internal consistency reliability; 3) assessment of convergent validity; and 4) assessment of the discriminant validity. The second step is evaluation of structural model.

4.3. Evaluation of Measurement Model

4.3.1. Assessment of the Indicator Reliability

According to Hair et al., (2017), indicator reliability is determined by the outer loadings with the common rule of standardized of outer loading is 0.708 or higher. There are some indicators that were not reliable: CANX1 (Computer Anxiety 1), CPLAY 4 (Computer Playfulness 4), CSE 1 and CSE 2 (Computer Self-Efficacy 1 and 2), PEC 4 (Perceived External Control 4), RES 4 (Result Demonstrability 4), SN 1 to SN 3 (Subjective Norm 1 to Subjective Norm 3), VOL 2 and VOL 3 (Voluntariness 2 and Voluntariness 3). The unreliable indicators were removed. After doing the removal of the unreliable indicators, all of the current indicators are reliable with the outer loadings are higher than 0.708.

4.3.2. Internal Consistency Reliability Assessment

Internal consistency reliability consists of composite reliability and Cronbach's Alpha. According to Hair et al., (2017), both Cronbach's Alpha or Composite Reliability (both were interpreted in the similar way), are acceptable for score is in between 0.60 to 0.70 for exploratory study. In other hand, the score in between 0.70 to 0.90 is satisfy for other advanced stage of study. The internal consistency reliability assessment for this study shows that based on the Cronbach's Alpha score and Composite reliability (rho_a), most of the constructs used in this study were reliable with the score is above 0.70, and there were two constructs which have score below 0.70: CPLAY (Computer Playfulness) and CSE (Computer Self-Efficacy). Meanwhile, based on the Composite Reliability (rho_c), all of the constructs in this study are reliable.

Table 2. Internal Consistency Reliability Assessment Result

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
CANX	0.895	0.943	0.933
CPLAY	0.628	0.632	0.801
CSE	0.687	0.690	0.864
IMG	0.932	1.035	0.956
INT	0.842	0.867	0.905
JOB	0.890	0.915	0.932
OUT	0.855	0.915	0.908
PE	0.941	0.948	0.962
PEC	0.898	0.909	0.936
PEOU	0.871	0.871	0.912
PU	0.929	0.930	0.950
RES	0.906	0.909	0.941
USE	1.000	1.000	1.000
SN	1.000	1.000	1.000
VOL	1.000	1.000	1.000

Source: SmartPLS 3 output

4.3.3. Convergent Validity Assessment

Convergent validity assessment uses Average Variance Extracted (AVE) as the validity criteria. According to Hair et al., (2017), the acceptable AVE score is higher than 0.50. Based on table 2 below, all of the constructs in this study were meet with the convergent validity requirement because all of the AVE score of each constructs are above 0.50.

Table 3. Convergent Validity Assessment Result

	Average variance extracted (AVE)
CANX	0.823
CPLAY	0.573
CSE	0.761
IMG	0.879
INT	0.761
JOB	0.820
OUT	0.767
PE	0.894
PEC	0.831
PEOU	0.723
PU	0.825
RES	0.842
USE	1.000
SN	1.000
VOL	1.000

Source: SmartPLS 3 output

4.3.4. Discriminant Validity Assesssment

The next criteria related to the discriminant validity is Heterotrait-Monotrait Ratio (HTMT). As mentioned by (Hair et al., 2017), HTMT is the ratio of the between-trait correlations to the within trait correlations. All of the constructs in this research were met with the HTMT ratio.

4.3.5. R-Square

R-square indicates how much dependent variable can be explained by its independent variables. Based on table 3 below, the R-square of the actual use is 0.024 or 2.4%.

Table 4. R Square

	R-square	R-square adjusted
USE	0.024	-0.001
IMG	0.029	0.004
INT	0.535	0.484
PEOU	0.827	0.797
PU	0.763	0.714

Source: SmartPLS 3 output

4.4. Evaluation of Structural Model

4.4.1. The Assessment of the Significance and the Relevance of the Structural Model Relationships

With regards to the hypothesis testing, total effects analysis was conducted in this study. Table 4 shows the total effects (direct effects and moderating effects) associated with the hypothesis relevant to this study. Hypothesis 1, related to the effect of Subjective Norm to Perceived Usefulness on using the LMS, the hypothesis was not supported with P-values of 0.091 (greater than alpha 0.05) with T-statistics value of 1.694. This result was similar with the study of Ismail et al., (2019) where there was no significant effect of Subjective Norm to Perceived Usefulness on the use of student information systems. Meanwhile, this finding was different with the findings of other studies. As mentioned by Lavidas et al., (2023), there was a positive effect from subjective norm to perceived usefulness from the faculty members' perspective in Greece on using Moodle Learning Management Systems. Our findings also different with Davoodi et al., (2020). Based on their study, they found that there was an effect of subjective norms to perceived usefulness from high school English teachers' perspective on using the technology in education. Sorkun et al., (2022) also found the positive effect of Subjective Norms to Perceived Usefulness in using e-learning program. Similar with other previous research, Al-Gahtani (2016) found that there is a significant effect of Subjective Norm to Perceived Usefulness in the accceptance of e-learning. Based on our findings, the non-significant effect of Subjective Norm to Perceived Usefulness may indicated that among the Economic lecturers, they will not be affected by their peers' suggestion to get the usefulness on using 'belajar.usd' Learning Management Systems.

The second hypothesis (H2), related to the effect of Image to Perceived Usefulness, also not supported. This finding was supported by previous research. Calisir et al., (2014) confirm that based on their research, there is no significant effect of Image to Perceived Usefulness in the context of web-based learning. Meanwhile, the study from Sorkun et al., (2022) founds that there was a positive effect from Image to Perceived Usefulness in e-learning program use. With our finding that there is no significant effect of image to perceived usefulness, it is indicates that among the respondents, they feel that image or social status on using LMS is not as important as other factors.

Table 5. Total Effects

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P-values	Hypothesis Supported
H1: SN → PU	0.221	0.234	0.130	1.694	0.091	No
H2: IMG → PU	0.046	0.036	0.064	0.716	0.474	No
H3: JOB → PU	0.552	0.564	0.160	3.456	0.001	Yes
H4: RES → PU	0.069	0.041	0.135	0.514	0.607	No
H5: CSE → PEOU	-0.049	-0.054	0.085	0.572	0.568	No
H6: PEC → PEOU	0.578	0.582	0.120	4.802	0.000	Yes
H7: CANX → PEOU	0.317	0.287	0.103	3.066	0.002	Yes
H8: CPLAY → PEOU	0.166	0.183	0.173	0.960	0.338	No
H9: PE → PEOU	0.066	0.054	0.154	0.431	0.667	No
H10: OU → PEOU	-0.203	-0.177	0.080	2.535	0.012	Yes
H11: SN → IMG	-0.143	-0.145	0.098	1.470	0.142	No
H12: Moderating effect OU to JOB → PU	-0.033	-0.031	0.149	0.219	0.827	No
H13: Moderating effect VOL to SN → INT	-0.185	-0.155	0.549	0.338	0.736	No
H14: PEOU → PU	0.172	0.182	0.120	1.434	0.152	No
H15: SN → INT	0.445	0.412	0.399	1.116	0.265	No
H16: PEOU → INT	0.389	0.402	0.135	2.893	0.004	Yes
H17: PU → INT	0.263	0.256	0.204	1.286	0.199	No
H18: INT → USE	0.152	0.148	0.155	0.980	0.327	No

Source: SmartPLS 3 output

Third hypothesis (H3), the effect of Job Relevance to Perceived Usefulness is fully supported with p-value of 0.001 (lower than alpha 0.005) and T-statistic of 3.456. This result was inline with other studies. Saroia & Gao, (2019), for example, found that there was a positive effect of Academic Relevance to Perceived Usefulness in using mobile learning management systems in Sweden. Saroia & Gao, (2019) also explain that academic relevance construct in their study was based on Job Relevance construct as proposed by Venkatesh & Davis (2000) in Technology Acceptance Model 2 (TAM2). The similar result with this study also confirmed by previous study from Almulla (2024). Based on his study to undergraduate and graduate students in King Faisal University, there was a positive effect of job relevance to perceived usefulness in mobile learning management systems use. Similar to this study and other previous studies, Al-Gahtani (2016) also identify the influence of job relevance to perceived usefulness in the context of the acceptance of e-learning.

The effect of Result Demonstrability to Perceived Usefulness in the use of learning management system as stated in fourth hypothesis (H4) was not supported. The p-value of this hypothesis was 0.607 (higher than alpha 0.05). This finding is similar with the research of Al-Gahtani (2016) where there was no significant effect of result demonstrability to perceived usefulness in the acceptance of e-learning. Our result was different with other previous studies. Ismail et al., (2019) found that result demonstrability was a determinant for perceived usefulness in the use of students information systems. Bui et al., (2022) also found that there is a positive effect of result demonstrability to perceived usefulness in the adoption of online LMS from lecturers' perspective in Vietnam. Based on our finding, the not significant influence of the result demonstrability to perceived usefulness on using *belajar.usd* learning management systems might indicate that the lecturers might not think that LMS can produce the measurable output. The fifth hypothesis (H5), related to the influence of Computer Self-Efficacy to Perceived Ease of Use was rejected. This result was different with the finding from that there was a significant effect of Computer Self-Efficacy to Perceived Ease of Use in the context of e-learning adoption. Xie et al., (2022) also found the positive effect of computer self efficacy to perceived ease of use in the acceptance of virtual training systems. Based on our finding that computer self-efficacy did not influence perceived ease of use on using the LMS by the lecturers, this result might indicate that the ability and the confidence of the lecturers on using LMS did not affect to the use of the LMS although the use of the LMS itself is free from efforts.

Other determinant of Perceived Ease of Use, that is perceptions of external control was supported in hypothesis six (H6). The p-values of this hypothesis is lower than alpha 0.05 (0.000). Based on this study, there was an effect of Perceptions of External Control to Perceived Ease of Use on using *belajar.usd* learning management systems from the perspective of Economic department lecturers. This finding is in line with the findings from other previous studies. Al-Gahtani (2016) found the significant influence of perceptions of external control to perceived ease of use for e-learning acceptance. Similar result also obtained by Unal & Uzun (2021). Based on their study, there is a positive effect of perceptions of external control to perceived ease of use among the university students on using Edmodo, one of the famous education social network site.

Seventh hypothesis (H7), the effect of Computer Anxiety to Perceived Ease of Use in using *belajar.usd* Learning Management System was supported with p-value 0.002. This findings indicate that from the perspective of Economic department lecturers, the intensity of their anxiety on using computers, will influence the easy of use on using *belajar.usd* Learning Management Systems. This findings also confirms the results from other studies in the context of e-learning and LMS acceptance. Al-Gahtani (2016) founds the positive effect of computer anxiety to perceived ease of use on the acceptance of e-learning. Sayaf et al., (2021) also found the positive and significant impact of computer anxiety to perceived ease of use on digital learning from the perspective of Saudi universities student.

Eighth hypothesis (H8), related to computer playfulness effect to the perceived ease of use, the hypothesis was not supported with p-value 0.338 (greater than 0.05 alpha). This finding was in line with the result from Al-Gahtani (2016). In his study, Al-Gahtani (2016) found that computer playfulness is not significant to be the determinant of perceived ease of use in terms of e-learning adoption. In other studies related to the use of cloud computing technology by Tırpan & Bakırtaş (2020), there is also no significant effect from computer playfulness to perceived ease of use. These not significant findings indicates that the users (or the lecturers) of the technology (LMS) feels that the playfulness on using computers will not affect to the easy of use of the LMS.

Hypothesis nine (H9) related to the influence of Perceived Enjoyment to Perceived Ease of Use on using the LMS, the hypothesis is not supported. This finding was based on the p-value of 0.667 (higher than alpha 0.05). Perceived enjoyment was defined as "the extent to which the activity of using a specific system is perceived to be enjoyable in its own right, aside from any performance consequences resulting from system use" (Venkatesh, 2000). Based ont the definition and also based on our finding, there was an indication that according to the economic department lecturers, the easy of use on using *belajar.usd* LMS was not determined by their enjoyment on using it. The not significant effect of perceived enjoyment to perceived ease of use was in line with the other studies' result. Research from Tırpan & Bakırtaş (2020) also shows the not significant effect of perceived enjoyment to perceived ease of use on using the cloud computing technologies.

The last expected determinant of Perceived ease of Use, called Objective Usability was supported. According to our research, the p-value for hypothesis 10 (the effect of objective usability to perceived ease of use on using LMS) is 0.012 (lower than alpha 0.05). This finding was different with the result from Tao et al., (2020). Their research on the acceptance of health information portal shows that there is no significant effect from objective usability to perceived ease of use. Our finding indicate that in the use of *belajar.usd LMS*, the economic department lecturers feels that the use of the LMS will be easier determined by the objective factors of the features from the LMS itself.

The eleventh hypothesis (H11), the influence of subjective norm to image on using LMS was not supported. The p-value of this hypothesis is 0.142 (greater than alpha 0.05). This finding indicates that according to the Economic department lecturers, the social norm from peers did not affect their social image when they use *belajar.usd Learning Management Systems.* This finding was different with the findings of other studies. The research of Al-Gahtani (2016) found the positive effect from Subjective Norm to Image on the adoption of e-learning. Research from Saari et al., (2022) also found the significant effect of subjectivenorm to image on the acceptance of social robot adoption.

With regards to the moderating effects that were hypothesized in this study, both of the moderation effects were not significant so the hypothesis were not supported. Hypothesis 12 is about the moderation effect of output quality in the effect of job relevance to perceived usefulness in using *belajar.usd Learning Management Systems*. The p-value of this hypothesis is 0.827 (greater than 0.05 alpha). This result indicates that in the use of *belajar.usd Learning Management System,* the output quality of the LMS did not moderate the effect of job relevance to perceived usefulness in using the LMS. Our finding was different with the finding from Al-Gahtani (2016) that the output quality positively moderates the effect of job relevance to perceived usefulness in the use of e-learning. Meanwhile, the p-value of the second moderation effect is 0.736. Similar with previous moderating effect, this result also did not confirmed with the finding from Al-Gahtani (2016).

Hypothessis fourteen (H14) related to the two main factors of Technology Acceptance Model, was not supported. The p-value of this hypothesis is 0.152 (greater than 0.05 alpha). This finding indicates that when the users were using the LMS, they feel that the ease of use of the LMS did not affect the usefulness of the LMS. This finding was different with other previous studies. Research about online learning that conducted by Esteban-Millat et al., (2018) found that there is a positive effect of perceived ease of use to perceived usefulness in online learning acceptance. Similar with Esteban-Millat et al., (2018), the study from Al-Gahtani (2016) also found the positive effect of perceived ease of use to perceived usefulness in e-learning acceptance.

The next three hypothesis is related to the determinants of intention to use the *belajar.usd Learning Management Systems*: perceived ease of use, perceived usefulness, and subjective norm. Based on the data analysis, the only determinant of the behavioral intention to use *belajar.usd Learning Management System* is only Perceived Ease of use with p-value 0.004. Meanwhile, subjective norm and perceived usefulness is not significant to the behavioral intention to use. The last hypothesis, related to the effect of behavioral intention to actual use of *belajar.usd* Learning Management System, unfortunately, the hypothesis was also not supported with p-value of 0.327.

5. Conclusion

The conclusion of this study is the behavioral intention on using the *belajar.usd Learning Management System* did not affect the actual use. More detailed, the determinant of behavioral intention on using LMS is perceived ease of use. Meanwhile, both Perceived Ease of Use and Perceived Usefulness were not the determinants of the intention to use *belajar.usd LMS.* Perceived Ease of Use itself was determined by the Computer Anxiety, Perception of External Control, and Objective Usability.

Related to the theoretical implications, this study implies that technology acceptance model still can be considered as the most valuable model to assess the use of technology. Meanwhile, for the practical implication, this study implies that learning management system still can be considered as tools in online learning. Some of the suggestions for future research are: the next research can consider to study for every department in University in order to get more respondents and to compare the results of acceptance of *belajar.usd LMS* across the departments.

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APPLYING CAPABILITY APPROACH IN THE CONTEXT OF CREDIT UNION DIGITAL TRANSFORMATION

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ABSTRACT

The digital transformation of credit unions has become an urgent matter as it becomes an important pillar to fulfill ongoing member needs and maintain organizational competitiveness. However, digital transformation influences credit union activities and may have some potential consequences for their performance and, most importantly, the well-being of credit union members, both in a positive and negative direction. A few studies have examined how digitalization affects credit unions. However, they only focus on the impact process on credit union performance, not on the change process on individual credit union member performance. This paper, utilizing Amartya Sen's capability approach, aims to address this gap by providing an alternative operational framework that translates digitalization into members' well-being within the context of credit union operations. This research contributes to the development of an effective and sustainable model of digital transformation for credit unions.

***Keywords**: digital transformation, credit union, capability approach*

1. Introduction

Credit unions are known as community-based financial organizations that focus on helping individuals suffering hardship and poverty by providing access to financial resources as well as space for promoting capabilities. As with other organizations, credit unions must adapt to the era of digitalization. Digital transformation in credit unions may not only offer prospective economic benefits but also lead to problems and, later, potentially influence credit union performance (see Amos & Kadang, 2021; Erowin, 2022; Focardi, 2021; Jerotich & Maina, 2019; Mckillop & Quinn, 2015; Origence, 2020; Roche, 2020; Saldanha et al., 2017; Wanyonyi & Ngaba, 2021).

Most of the studies mentioned above focus on the correlation and influence of digitalization on some credit union performance indicators (financial, social, and perceived member satisfaction). Not many of them focus on the process of how digitalization impacts credit union members' achievement. Only the studies (Focardi, 2021; Origence, 2020; Roche, 2020) explain how the process of digitalization has an impact on credit unions. However, the credit union implemented this change at its organizational level. The author has not yet found a study discussing how digitalization is impacting the credit union at the individual member level. Discussing this issue is important because a credit union's focus is the welfare of its members. It is critical to ensure that individual members can fully access and receive the benefits of the digital transformation when applying it to credit unions. It should be a concern that the members of the credit union have different backgrounds as well as different capabilities to utilize the technology.

This study aims to bridge the gap by developing an operational framework that elucidates how digital transformation in credit unions could impact the welfare of individual members. To do this, we use a capability approach that was first introduced by Amartya Sen in the 1980s and has been extensively employed in human development analysis (Wells, 2012). By applying the capability approach to analyze credit union digital transformation, we can gain insight into how digital features integrated into credit union business and organizational activities serve as the means to enhance the well-being of credit union members. This study will contribute to the development of an effective model of digital transformation in credit unions.

2. Literature Review

In the context of credit union operations, this paper aims to offer an alternative operational framework that translates digitalization into members' well-being. To achieve this goal, this section begins with an explanation of credit unions as a development tool, followed by a discussion of digitalization issues within the credit union context and the capability approach.

2.1. Credit union cooperatives as a development tool

Credit unions are cooperative financial organizations focused on helping members and larger local communities achieve their economic and social goals (McKillop & Wilson, 2012). Cooperatives provide an alternative approach to problem-solving by fostering the development of people's abilities in challenging situations. Cooperatives enable people to gather, generate economic, human, and social capital, and promote a more democratic and people-centered form of development so that they can act as a social structure that contributes to societal fragility reduction (Fernandes & Nunes, 2015). Each member of the cooperative has an equal right and freedom to participate in common decision-making related to the provision and expansion of their capabilities (Fernandes & Nunes, 2015). Vicari (2014) enumerates several potential capabilities that cooperative membership could enhance, including access to high-quality education, healthy nutrition, high-quality healthcare, reliable shelter and sanitation, economic freedoms, decent work, involvement in household decision-making processes, and involvement in community life. However, a bundle of conversion factors, such as physical condition, climatic condition, regulation, and power relations, influence the degree of success of a cooperative in producing those beneficial outcomes.

Credit unions offer access to essential services for small industries, farmers, and rural residents, as well as providing networks both within and outside the community (Al-Zyoud & Ordonez-Ponce, 2022). According to some research (see Kusuma & Pranatasari, 2021; Kusumajati, 2012; Sumarwan et al., 2021), credit unions provide financial intermediation services such as loans and savings, as well as non-financial services such as education related to family financial management and the facilitation of household businesses, as discussed in Kusuma et al. (2022).

There are over 87 thousand credit unions worldwide, serving 393.8 million people in 118 countries (World Council of Credit Unions, 2022). The idea behind credit unions is that all productive-age people can collectively own and control their assets, which might have a revolutionary impact on social change and the advancement of a solidarity economy that benefits individuals and the environment (Pavlovskaya et al., 2019). Credit unions have played a vital role in reducing financial exclusion by providing accessible credit, releasing people from payday lenders' control, and promoting the habit of saving money. By enabling more personal control over finances and boosting the purchasing power of their members, credit unions play a critical role in fostering individual dignity, self-esteem, and social inclusion within local communities (Power et al., 2012).

According to Tulus & Nerang (2020), Indonesian credit unions are a prime example of continuously expanding cooperatives committed to assisting economically disadvantaged members and communities, while also addressing certain strategic considerations. Since their inception in the 1970s, the membership and assets of Indonesian credit unions have continued to grow, supported by the involvement of local communities, led by the elected board of directors (monitored by an elected supervisory committee), and operated daily by the management staff with volunteer assistance (Sumarwan et al., 2021). However, the penetration rate of Indonesian credit unions is still relatively low. According to the latest WOCCU Statistical Report, 970 credit unions in Indonesia could only serve 3.3 million people, or 1.75 percent of Indonesia's total population.

2.2. Digital transformation issues in credit unions

Digital transformation in credit unions may not only offer prospective economic benefits but also lead to problems. In terms of the supply side, the use of digital technology can improve the credit union's ability to reach out to members, control their business, and improve the quality of their services. However, to fully utilize digital technology, it requires reliable technology, accommodating infrastructure, and human resources.

Some previous studies explain how digitalization affects credit union operations in developed countries. A study by Mckillop & Quinn (2015) revealed that credit unions in Ireland that have adopted web-based operations can reduce the interest spread, which indicates higher operational efficiency and benefits to members. A qualitative study by Roche (2020) focusing on six credit unions in Ireland confirmed the findings of some previous studies about the relevance of digital transformation for the credit union sector, especially in fulfilling the ongoing needs of credit union members. However, all participants express concern about of the cost of change (e.g., investment and human resource costs) and the need for collaboration. However, the issue of leadership and attitudes toward change makes the process more complex. Saldanha et al. (2017) conducted a study of 7000 credit unions across the United States and found that more digitized processes of credit union operation positively influence the performance of credit unions (e.g., net income and loans disbursed). The strategy of participating in an inter-organizational network makes the digitalization process more powerful because external actors are more powerful. Furthermore, advertising strategy has a negative impact on performance. A multiple case study conducted by Origence (2020) explains the reasons for three United States credit unions' success in digital transformation. It is reported that those credit unions do not let technology drive their future but instead focus on building a vision that drives the technology that could transform credit unions, as well as placing culture, organization, and a budgeting mindset that support digital transformation as the three most important changes. A study by Focardi (2021) reported the best practices of credit unions in the United States, namely Delta Community Credit Union. It is described that this credit union needs some years (2015–2021) to build IT transformation to achieve resiliency (through the processes of planning, implementing, preparing pivot actions, recruiting new talent, supporting specialists, as well as enhancing business and technology cultures to create an environment of trust and teamwork). The IT transformation in this credit union encourages the achievement of customer and employee satisfaction and engagement, the development of best-in-class credit union technology and operations, and a good reputation in the internal community as well as the broader financial industry community. Moreover, the transformation not only helped this credit union community survive but also grow in the difficult pandemic situation.

Some academics also discussed the digitalization of credit unions in developing countries. A study by Jerotich & Maina (2019) that involved employees in 13 credit unions (SACCOs) in Kenya found a positive relationship between the performance attributes of mobile banking (fund transfers, bill payments, and checking account balance) and sustainable operational performance (lead time, cost efficiency, and reliability). Another study in Kenya was conducted by Wanyonyi & Ngaba (2021) and focused on three credit unions. This study also confirms that the quantitative attributes of digital services (mobile banking, internet banking, credit cards, and digital funds transfer) positively influence the financial performance of credit unions in terms of capital adequacy, management efficiency, and earnings ability. It was also reported that digital services enable members to do transactions without coming to the office and facilitate two-way communication and information updates through the internet platform, while some challenges that exist are system delays, slow processing of transactions, a limit on the amount, and the potential for fraud. Amos & Kadang (2021) conducted a study of Credit Union Mekarsari in Indonesia and discovered that the quality attributes of digital payment and the operating system, namely Escete, had a positive influence on credit union member satisfaction. Another study from Indonesia conducted by Erowin (2022) in Credit Union Muara Kasih found that the perception of the members related to the quality of digital transaction services also positively influenced the decision of credit union members to borrow money from credit unions.

A lesson from some financial institutions that provide similar activities to credit unions (e.g., financial cooperatives and microfinance institutions) provides some consideration in understanding the relationship between digitalization and community-based financial institutions' performance. A study of financial cooperatives in Indonesia conducted by Rustariyuni et al. (2022) reported some benefits of using the core system. They are: (1) ease to record and process transactions and quickly produce accurate financial reports; (2) ease to process transactions and faster operations; (3) manageable data storage; (4) ease to retrieve data and information; (5) more optimal use of human resources; (6) greater financial transparency; (7) minimized error or fraudulent transactions; (8) increase in efficiency, productivity, and opportunities; and (7) the possibility to serve all members more quickly, transparently, and optimally. According to this study, the support of top management, financial capability, accessibility to the internet, performance expectations, hedonic incentive, and innovation had an impact on the sampled respondent's adoption of technology. The Alliance for Financial Inclusion (2018) reports that digital financial services provided by microfinance institutions promote greater financial inclusion in sub-Saharan Africa. Those financial services provide benefits both for clients (with a more convenient, secure, and faster transaction process) and for microfinance providers (with higher operational efficiency, a more diversified customer base, and a lower cost to expand outreach). However, the study of Kandie & Islam (2022) in a Kenyan microfinance institution found that digital microfinancial services excluded the poor and profoundly deteriorated the welfare of the clients because of the high interest rates.

2.3. Capability approach as a tool for human development analysis

Amartya Sen, an Indian economist and philosopher, initially formulated the Capability Approach during the 1980s, and later, Martha Nussbaum and a number of experts in the humanities and social sciences have made substantial advancements in this field (Robeyns & Byskov, 2023; Wells, 2012). The United Nations Development Program has actively utilized it in the realm of human development. Sen's capability approach is based on several articles where he criticizes the inadequate informational foundations of conventional economic models and evaluative accounts, specifically resourcism and utilitarianism (Robeyns & Byskov, 2023). Sen's capability approach is the focus of the discussion that follows.

The capability approach posits that individuals' ability to attain well-being is contingent upon their capacity to act and be, as well as the quality of life they are capable of effectively leading (Robeyns & Byskov, 2023). With the capability approach, the emphasis shifts from the means—the resources and public goods that individuals can access—to the ends—the things they can accomplish and be with such resources and goods. People cannot transform things and resources into real beings by themselves, which warrants this shift in emphasis.

Capability, the set of functional combinations (i.e., beings and doings) from which a person can select, could represent a person's quality of life (Sen, 2017). It symbolizes the potential to accomplish something that a person finds meaningful. People could be educated, economically free, safe in their homes, healthy, alive, and free to move around. Participating in the decision-making process, participating in communal activities, or caring for a child are all examples of actions. To accommodate it, Sen creates a capability approach that assumes the diversity of life options and the complexity of methods for achieving what people have good reason to value, and that focuses on true ends rather than just means (Belda-Miquel et al., 2020).

3. Research Methods

The paper's goal is to build an operational framework that explains how digital transformation in credit unions could improve the welfare of individual members. To achieve this goal, we use Sen's capability approach as the primary conceptual framework framework to derive our operational framework. Consideration to use this framework is the promise of the framework to analyze the process of change (in this case in the context of digitalization) not only until the provision of means (the existence of digitalization attributes) but until the ends (what people get and could explore by using the means). The author believes that the existence of means does not guarantee that people can transform themselves into real beings. Furthermore, this paper adopts the approach of Belda-Miquel et al. (2020), which expands on Sen's capability approach through a multi-level analysis of change.

We execute our research in two main steps. In the first step, this paper explains the key variables and logic of the capability approach we used as the main conceptual framework. Next, the author contextualizes the logic from the previous step within the context of credit union digitalization. This step proposes alternative proxies to analyze the causal relationship between key variables modelled in Sen's capability framework, particularly in the context of credit union digitalization.

4. Research Findings and Discussion

4.1. The component and logic of the capability approach as our reference framework

The capability approach aims to assess people's development in terms of their opportunities, abilities, and choices for utilizing resources to achieve success or create new functions (Fernandes & Nunes, 2015). According to Robeyns and Sen, as explained in Fahmi & Savira (2021), the components of the capability approach are available resources (means), conversion factors, capability sets, and achieved functioning.

The available resources are the resources available in a social context. Conversion factors are personal factors or the socio-spatial environment (external factors) that determine a person's ability to convert resources into valuable functioning. People do not always have easy access to available resources because of personal factors, social factors, and environmental factors. Personal factors refer to characteristics that affect a person's physiological and psychological state, such as age, educational background, and personal experience. Social factors include: with one another in their communities. Environmental factors include public amenities and infrastructure, weather conditions, and geographic attributes. A capability set combines achievable tasks and effective methods to achieve the intended goal. A capability set reflects a personal freedom that relies on a person's competence to see an opportunity and take a risk. Achieved functioning is a condition where the available resources have been converted and the person can select their desired objective in accordance with her or his valuation.

4.2. The operational framework of capability approach in the context of credit union digital transformation

The capability approach's first key element is resources (means). In the context of credit union digitalization, this could be interpreted as all digitalized credit union services that are oriented directly to the members. It consists of loan and savings services, bill payments, education, or any credit union service that elaborates on digital features. Personal factors such as age, educational background, and social communities, as well as environmental factors like geographical location, weather conditions, and infrastructure provision, can hinder or accelerate members' access to digitalized credit union services.

In the credit union's digital transformation case, the knowledge, ability, and preference for using the digital features of its services represent the capability set. It reflects the common members' freedom to choose whether or not to use the digital technology embedded in the credit union's services. Their assessment of whether the technology would help them attain their objectives determines whether or not the use of digital technology is appropriate. If they see it as a worthwhile resource, they will strive to develop the skills to use digital technology, and vice versa if they do not.

In the context of credit union digital transformation, functions are achieved when members see the chance of digitalization and are willing to take the risk of using the available resources (namely, the digital technology built into credit union operations) to help them with their wants, activities, and work. In other words, achieved functioning in the context of credit union digitalization refers to an individual taking real actions based on their knowledge and ability to use digital technology and independently calculating potential outcomes and risks.

Effective functioning entails utilizing digitalized credit union services to make savings and loan management decisions, pay their regular bills efficiently, and promote their business, among other things. Later, these functions lead to the outcomes of digital transformation, including an increase in savings, a decrease in reliance on consumption loans, more efficient billing, and business expansion, all of which reflect the improved well-being of credit union members using digital services. Figure 1 below illustrates the capability approach's operational framework. It shows how digital transformation works, from the means (offering digitalized credit union services) to the end result (members' well-being changing because they use digitalized credit union services).

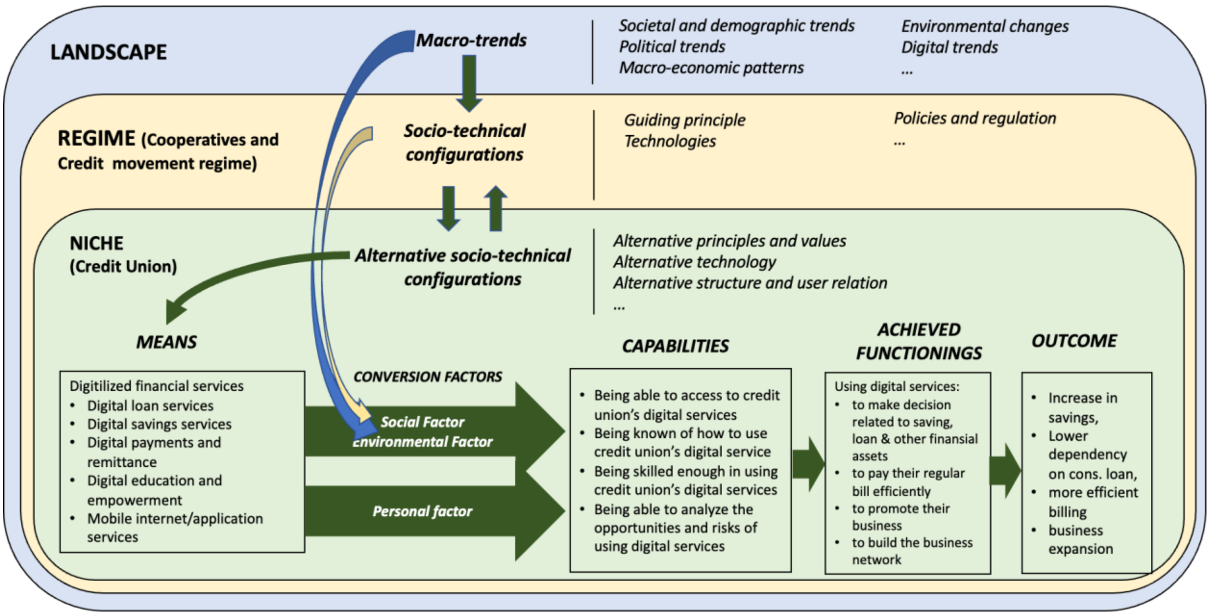

Figure 1. The proposed operational framework of the capability approach in the context of credit union digitalization
Source: Inspired and adapted by the author from Bajmócy et al. (2022), Belda-Miquel et al. (2020), Fahmi & Savira (2021), Fernandes & Nunes (2015); Gébert et al. (2017), Vicari (2014).

We consider the potential importance of the existing structures in influencing the change process, including the digital transformation of credit unions. For this reason, the author draws inspiration from a study by Belda-Miquel et al. (2020), to develop a multi-level analysis of change. This analysis aims to shed light on how the landscape and regime structure both constrain and enable the change that grassroots initiatives like credit unions bring about. The main concept is that the global or national landscape, which encompasses societal and demographic trends, political patterns, macro-economic patterns, environmental changes, and digital trends, has the potential to shape the behavior of credit unions and cooperative movements. This influence can manifest in the form of guiding principles, technologies, and regulations. These factors could drive credit unions' alternative strategies, as well as the external and internal conversion variables that impact the capability process, as previously discussed.

5. Conclusion

Applying the capability approach provides a picture of how digitalization is impacting the credit union at the individual member level. It shed light on the sequential causal process of how digital features of credit union services (as a means) could influence the members' well-being. We suggest conducting additional research to empirically test the proposed operational framework in this paper, specifically in the context of credit union digitalization. Even though the author notes that there is a great possibility that there is some variation between specific credit union cases when using this operational framework, Thus, when using this operational framework, it will be more beneficial to do case studies in a specific credit union or some credit union with similar characteristics.

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POLITICAL CONNECTION, AUDIT COMMITTEE CHARACTERISTICS, AND RELATED PARTY TRANSACTIONS DISCLOSURE IN INDONESIAN COMPANIES – A QUALITATIVE RESEARCH

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ABSTRACT

Related party transactions (RPTs) is a phenomenon that occurs in companies in Indonesia, because the majority of companies in Indonesia are group companies. This study aims to reveal how political connection of supervisory board and audit committee characteristics have an effect on RPTs disclosure. In-depth interviews were conducted with audit committee and external auditor. This study found that political connection and audit committee characteristics play a role in RPTs disclosure.
Keywords*: Related Party Transactions Disclosure; political connection; audit committee characteristics.*

1. Introduction

According to the OECD, stakeholders should have timely and consistent access to relevant, sufficient, and trustworthy information. The corporate governance structure should ensure that all important information about related party transactions (hereafter RPTs) is disclosed in a timely and correct manner. Certain critical functions should be performed by the board, such as monitoring and controlling potential conflicts of interest among management, board members, and shareholders, such as misuse of corporate assets and abuse of RPTs.

The market needs to know whether the company is being run with all of its investors' interests in mind. To that end, the company must fully disclose material RPTs to the market, either individually or in aggregate, including whether they were completed at arms' length and on normal market terms. In some jurisdictions, this is already a legal obligation. Related parties may include entities that control or are under common control of the company, significant shareholders, including their family members, and key executives. Transactions involving major shareholders (or their immediate families, relationships, etc.), directly or indirectly, can be the most difficult type of transaction.

In some jurisdictions, shareholders with a shareholding limit of 5% or more are required to report transactions. Disclosure requirements include the nature of the relationship in which control exists and the nature and extent of related party transactions, grouped as appropriate. Due to the inherent opacity of many transactions, the unitholders may be required to notify the board of the transaction, and the board will be required to disclose information to the market. This does not exempt the board from monitoring its own company, which is an important responsibility.

In Indonesia, Statement of Financial Accounting Standards Number 7 (PSAK 7) defines RPTs, as transactions carried out by an entity with managers, a board of directors, shareholders, as well as companies and subsidiaries affiliated with that company. PSAK No. 7 regulates the disclosure of related parties and has the scope to identify relationships and transactions with related parties, identify balances, commitments between the entity and related parties, and determine the disclosures required for financial statements. Entities need to disclose transactions with related parties because transactions and financial statement balances are influenced by parties who have a special relationship with the entity.

Entities that have transactions with related parties during the period covered by the financial statements should disclose at least the number of transactions, the amount of the balance, the allowance for doubtful accounts related to the amount of the balance, and the expenses recognized during the period in the case of doubtful receivables. doubt or write-off of receivables from related parties. Transactions disclosed with related parties include the purchase or sale of goods, the purchase or sale of property or other assets, the provision or receipt of services, rentals, the transfer of research and development, the transfer under license agreements, the transfer under financing agreements, and provisions for guarantees or collateral.

According to Wulandari and Setiawan (2021), companies engage in RPTs for three primary reasons: economic motives, profit manipulation, and tunneling. The accounting literature provides three different views regarding RPTs. The first opinion is the agency hypothesis, which states that related party transactions are a mechanism for transferring wealth between companies and related parties. The second approach is the efficient transaction hypothesis, which considers RPTs as transactions that can maximize value because RPTs can reduce transaction costs and can be used as an efficient transaction mechanism in underdeveloped capital markets (Bansal and Thenmozhi, 2020). Pizzo (2013) suggests that RPTs are influenced by organizational context and social factors, as well as complementarity and substitution between governance factors.

Because of its distinctive institutional features, Indonesia provides an intriguing context for this research. Habib et al. (2017b) have explained five conditions. First, Indonesia is a strong religious country. Second, company value and company performance in Indonesia are influenced by the company's political connections. Third, there is a high ownership concentration. Fourth, RPTs are transactions that commonly occur in companies in Indonesia, because the majority of companies in Indonesia are group companies. Fifth, there is weak corporate governance in Indonesian companies.

El-Helaly (2018) suggests that corporate governance can reduce the risk of RPTs, by taking over shareholder wealth, decreasing company value, lower quality of financial reporting, and decreasing company performance. In their research, Anwar and Aziz (2019) show that corporate governance will consider the interests of stakeholders, and the independence of the audit committee has a positive effect on company profitability. The audit committee provides recommendations to the board of commissioners regarding whether there is a risk of a potential conflict of interest for the issuer.

Political connections consist of former members of parliament, ministers or heads of local governments, having close links with politicians or parties, and military membership (Habib et al., 2017a; Habib et al., 2017b; Habib & Muhammadi, 2018). Arifin et al. (2020) distinguish political connections into transactional political connections and relational political connections. Joni et al. (2020) view political connections as the external side of the company. Nasih et al. (2020) emphasize political connections owned by the board of directors, board of commissioners, audit committee members, and company secretary members and then classify political connections based on BI Regulation Number 12/3/PBI/2010. The board of directors, the board of commissioners, audit committee members, and company secretary members are part of corporate governance in a company. Preuss & Königsgruber (2021) suggest two measures of political connections that can be measured from financial statements, namely personal service and state ownership.

The objective of this paper is to examine how corporate political connections and audit committee characteristics play a role in RPTs disclosure. To achieve the objective, an in-depth interview with the audit committee and an external auditor were held and analyzed using thematic content analysis. This research contributes to methodological and theoretical contributions. This research uses a qualitative approach to explain how political connections and audit committee characteristics play a role in RPTs disclosure. Previous research used the qualitative method with a face-to-face semi structured interview to explain that there is no requirement for a specific classification of related party transaction disclosure (Marchini et al., 2019). Based on resource dependence theory, political connections and audit committee are resources owned by the company to reduce uncertainty.

2. Literature Review

2.1. Network interactionist

In Indonesia, patron-client relationships have a significant influence on an organization's business network. In countries with weak institutional environments, such as Indonesia, close personal relationships with strong political patrons can reduce uncertainty in business and access to public sector contracts (Turner, 2007). Networks built by the board of commissioners/directors can reduce uncertainty and information gaps (Carney et al., 2020).

The importance of business networks in East Asian countries has been documented by previous researchers (Carney et al., 2020). The existence of professional networks, family networks, government networks, and political networks is important for a business organization. There are several countries with strong networks, namely: a) China, namely business relationships based on kinship, with networks based on business relationships, guan xi (social connections); b) Thailand, namely family and kinship networks that form business groups (glum thurakit); c) Philippines, namely family networks, called family-owned conglomerates; d) Indonesia and Malaysia, namely patron-client relationships that have a significant impact on the organization's business network. In a weak institutional environment like Indonesia, close personal relationships with political patrons can reduce uncertainty and secure contracts in the public sector. e) Japan, a business network known as keiretsu, which dominates the Japanese economy. f) South Korea, a business network dominated by elite business families known as chaebol.

2.2. Resource Dependence

In accordance with resource dependence theory, organizations seek to exercise control over their environment by co-opting the resources needed to survive (Hillman et al., 2009). In accordance with this perspective, governance and board membership are seen as resources that can add value to the company (Carpenter and Westphal, 2001). A larger board of directors with professionally qualified members can better help the company manage its resources. The purpose of political connections can be explained by resource dependence theory, which explains that one of the several ways companies use to reduce the uncertainty of the external environment is to form political connections (Hillman et al., 2009).

2.3. Isomorphism Normative

There are three mechanisms of institutional isomorphism, namely: 1) coercive isomorphism. Coercive isomorphism stems from formal and informal pressures exerted on the organization by other organizations on which it depends and by cultural expectations in the society in which it functions. 2) mimetic isomorphism. Not all organizations are isomorphism and when the organization has poor technology and the goals of the company are ambiguous or when the environment of the organization creates uncertainty, it encourages the company to model other organizations. Modeling is a solution for organizations to reduce uncertainty. Organizations tend to model their own organizations after similar organizations in their field that are considered more successful. 3) normative isomorphism. Normative isomorphism mainly comes from professionalization. Professionalization consists of two aspects: formal education and elaboration with professional networks (Dimaggio and Powell, 1983).

2.4. Previous Research in Political Connections, Audit Committee Characteristics, and RPTs Disclosure

A previous study documented a quantitative method to explain the effect of corporate political connections on RPTs disclosure. Habib et al. (2017b) documented an association between political connections and RPTs size. Previous studies have examined the relationship between corporate governance and RPTs disclosure (Utama and Utama, 2014a; 2014b). Marchini et al. (2019) used the qualitative method with a face-to-face semi structured interview to explain that there is no requirement for a specific classification of RPTs disclosure.

Several studies have documented the effect of the number of audit committee meetings on several types of accounting information disclosure. Chariri and Januarti (2017) presented results showing that the frequency of audit committee meetings has a positive effect on financial reporting. Research in Indonesia has examined the characteristics of audit committees. Syofyan et al. (2021) found that the frequency of audit committee meetings is positively related to the timeliness of reporting. Haji (2015) presented evidence that the number of audit committee meetings has a positive effect on intellectual capital disclosure. Appuhami and Tashakor (2017) tested the influence of audit committee characteristics and found that the number of audit committee meetings had a positive effect on corporate social responsibility disclosure. Salehi and Shirazi (2016) presented evidence that the number of audit committee meetings has a negative effect on the quality of company disclosure.

Several studies have documented the influence of audit committee expertise on certain types of accounting information disclosure. The financial expertise possessed by audit committee members influences shorter audit reporting delays and increases the timeliness of financial reporting (Sultana et al., 2015). Chariri and Januarti (2017) stated that audit committee expertise has a positive effect on financial reporting. Dewayanto et al. (2017) presented evidence of a positive relationship between the experience and competence of the audit committee and the disclosure of the internal control index. Expertise in the audit committee can eliminate earnings management (Suprianto et al., 2019; Mardjono et al., 2020; Dwiharyadi, 2017). Irwandi and Pamungkas (2020) suggest that the legal expertise of audit committee members moderates the strength of the relationship between the risk of investor distrust and the quality of financial reporting. The financial expertise of audit committee members is considered a major determinant of the effectiveness of financial reporting (Garner and Conover, 2016). Haji (2015) shows that the audit committee's financial expertise influences intellectual capital disclosure. Salehi and Shirazi (2016) presented evidence that the financial expertise of the audit committee has a positive effect on the quality of company disclosure.

Several studies have presented evidence of the influence of audit committee expertise on RPTs disclosure. Sellami and Fendri (2017) stated that accounting and financial expertise combined with industry expertise possessed by audit committee members is better in increasing TPB disclosure compared to accounting and financial expertise. Institutional theory, in this case normative isomorphism, mainly comes from professionalization. Professionalization consists of formal education and professional networks. The audit committee expertise in accounting and finance is in accordance with the normative isomorphism theory.

3. Research Methods

The open-ended interview questions were developed to fulfill the research objective. The questions were structured under four headings: political connection, related party transactions, audit committee meetings, and audit committee supervision of system and procedure. In-depth interviews were conducted in 2023 with one audit committee and one external auditor. A copy of the interview guide can be found in Appendix 1. The questions were centered around how political connections and corporate governance affect related party transaction disclosure. The variety of interviewee profiles can be clearly seen in Table 1.

Table 1. Participant

Code	Description	Interview Duration
P1, CA	Audit committee in BUMN	41 minutes
P2, EA	Eksternal auditor	34 minutes

Following contact by phone to make appointments, interviews were conducted online using the Zoom meeting platform. The interviews (recorded with the permission of the interviewees) lasted for 41 minutes for participant 1 (P1) and 34 minutes for participant 2 (P2). Qualitative data collected during the interviews was in the form of audio files saved from the Zoom meeting platform. The audio data were subsequently transcribed by one of the researchers to convert the data into text, which enabled the application of text analysis. The original interviews were conducted using Indonesian and converted to English. The qualitative data were analyzed using thematic analysis, which can be defined as “a method for identifying, analyzing, and reporting patterns (themes) within data” (Braun and Clarke, 2006). It is a systematic way of identifying all the main concepts arising in the interviews and then categorizing these into common themes. Given the relatively small number of interviews, the data were processed manually.

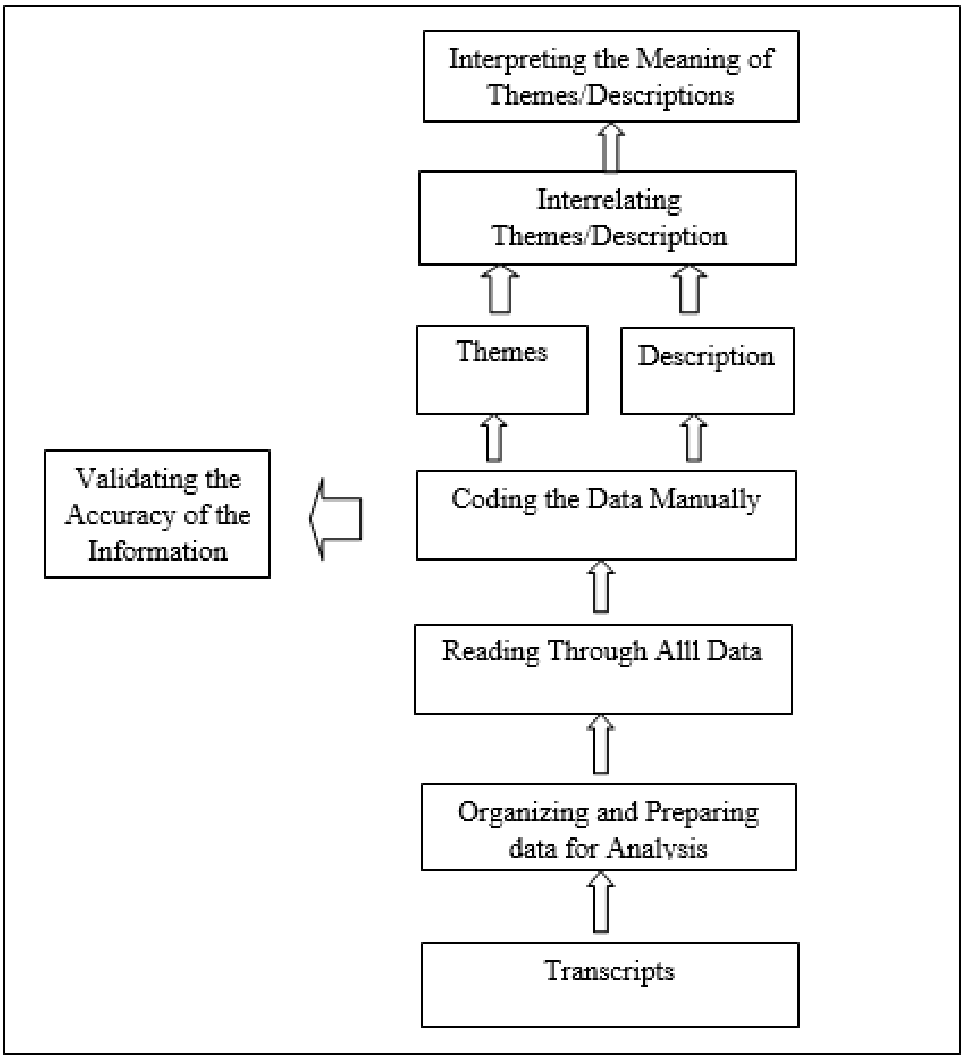
Thematic analysis organizes and describes data in a more detailed form. Data collected during the interview process was recorded and saved in the form of audio files. The audio data is then transcribed to convert the data into text data that can be analyzed. Thematic analysis is used to interpret textual data. In this study, themes are identified and built on the issue being researched. The main themes developed are related party transactions and corporate governance.

Transcription is a process for changing audio data obtained during the interview process into a text document. The transcription process allows researchers to classify and analyze data systematically. The thematic analysis used aims to assist in transforming qualitative information into manageable and meaningful concepts. The transcription process includes steps to convert audio data collected during the interview process into a data set. Analytical tools are needed to transform data into meaningful information. This transformation involves coding qualitative information and requires explicit coding. Codes can be a list of themes, a complex model consisting of themes, indicators, and related qualifications, or something in between (theme and model). Figure 1 explains the steps in a qualitative approach, namely

a. Organize and prepare data for the analysis stage. At this stage, the process of transcription of the company's annual report and interview recordings is carried out.
b. Read all the data. At this stage, the entire meaning of the information obtained in the first stage will be studied.
c. Code the data. Coding data is a process for organizing data by taking text data obtained during data collection, sorting sentences or paragraphs into categories, and labeling categories using measurements.

d. Use the coding process to produce a description of a situation or person as well as categories or themes for analysis. A description includes details about people, places, or events in a setting. The coding process is also used to generate themes or categories.
e. Interrelated themes describe how descriptions and themes will be represented in the qualitative narrative. The approach used is a narrative section to convey the findings of the analysis.
f. The final step in data analysis is making interpretations in a qualitative approach from the findings or results. Interpretation of the results can come from the researcher's personal interpretation or by comparing it with the theory used as a reference.

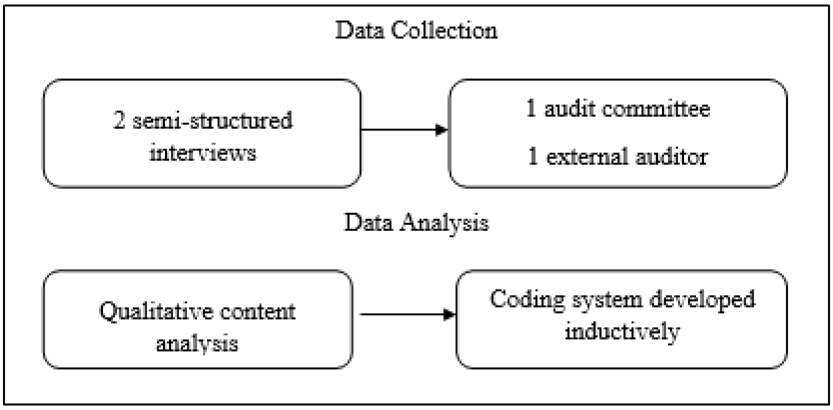
The data consists of transcripts from interviews with audit committee members from companies selected from the sample (P1, KA) and external auditors (P2, AE).



Resource: Creswell (2014)

Figure 1. Steps in Data Analysis

Interviews were conducted using the Zoom meeting platform. Data obtained during the interview is in the form of audio files stored in a video recording device downloaded from the Zoom meeting application. The audio data is then transcribed to convert the data into written data. In this research, themes were identified and built around RPTs disclosure. There are several steps in the analytical cycle to analyze data in the form of interviews, namely description, comparison, categorization, conceptualization, and theory development. To perform the analytical process, a bookcode and thick description are used. The codebook can be seen in Appendix 2, and the thick description is in Appendix 3. The research design was highlighted in Figure 2.



Resource: Boruchowitch and Fritz (2022)

Figure 2. Research Design

4. Research Findings and Discussion

This section provides the results of the interviews as they relate to the research questions detailed previously. These questions, in turn, are then answered in the conclusion.

4.1. Political Connection

According to Preuss and Königsgruber (2021), political connections can be measured using eight proxies, and this research uses political connection proxies, which are measured by politicians' positions on company boards of commissioners and government share ownership. The interview stage was carried out to explore the role of political connections and government share ownership on the RPTs disclosure.

There is influence, for example, in state-owned mining companies whose parent companies are The Ministry of Energy and Mineral Resources and The Ministry of State-Owned Enterprises. Well, the mining commissioner of course comes from the government. (P1, AC)

The Ministry of SOEs does, the Ministry of Energy and Mineral Resources does. (P1, AC)

Well, of course, if mining is the commissioner, which one is from the government. (P1, AC)

The existence of political connections means that many commissioners do not understand their capacity as company supervisors because their knowledge and knowledge in accounting and tax reporting may not be understood. (P2, EA)

So if he has anything to do with a political party, he is not allowed to join. (P2, EA)

By using the code words 'BUMN', 'The Ministry of Energy and Mineral Resources', 'The Ministry of State-Owned Enterprises', and 'government', the analysis carried out on the first participant's statement shows that political connections, in this case government share ownership, play a role in the transparency of related party transactions. By using the code words 'political connection' and 'political party', the analysis carried out on the second participant's statement shows that political connections, in this case the political connections of the board of commissioners, play a role in the transparency of related party transactions.

4.2. Audit Committee Characteristics

The qualitative stage aims to find out how committee characteristics play a role in disclosing related party transactions. There are several participant statements that examine the role of audit committee meetings.

Well, this was, that, detailed and in-depth, yes, because we know very well the conditions why party A did not pay us immediately, what the difficulties were, well, we already knew that from the internal auditor, they gave us a quarterly report, then at the director and commissioner level, this has also been discussed in the monthly reports from directors to commissioners. (P1, AC)

This is deep, we are under the realm of law, yes. If we make a mistake, what is it called, give a recommendation, give a wrong solution, we are in the realm of law. So, we have to be really careful, then we understand the problem, the existing debts and receivables, and so on, as clearly as possible, then, we as representatives of minority shareholders on the stock exchange, of course we want to provide good transparency, that's clear, that's it. It's not detrimental, just what's fair, what's right. It's not detrimental to the company, or anything, but the sentence that was written sounds very clear, that's how it is. (P1, AC).

One, for example in the financial statements, the disclosures may have hundreds of items, because the accounts will be explained, for example, accounting policies. There may be several, a, b, c, d, e, so right, well we discuss it in detail and in depth, because the audit committee is given the opportunity to review yes, review, he will review until the end of the financial statements. (P1, AC)

The audit committee itself, when holding meetings with management in presenting financial report presentations, if the SOP rules are regulated, which ones must be disclosed in the meeting agenda will definitely be clearer, which limits are violated, risks -what risks, what management can cause distortion. (P2, EA)

If it's red, it's a concern, when we meet the risk monitoring committee... Well, why is it red? Well, you can't lie anymore, because the application control itself has already said that, right? (P2, EA)

I think eee the rules that ee set both eee limits and eee what should be opened in eee meetings, meeting agendas, it determines eee the supervisory function itself in addition to eee SOPs or internal controls or eee delivery of authority systems that have been set up at the beginning. (P2, EA)

By using the code words 'detailed', 'deep', 'review', 'meeting' (in Bahasa Indonesia: pertemuan), 'meeting', 'meeting' (in Bahasa Indonesia: rapat), and 'meeting agenda', the analysis carried out on participant statements shows that audit committee meetings are carried out in detail, in depth, and discuss the presentation of financial report.

At the interview stage, information was sought on how the characteristics of the audit committee play a role in the transparency of related party transactions. There are several participant statements that examine the role of audit committee types, namely

So there is a main commissioner, who is usually also an independent commissioner, he is an expert in maritime affairs, and so on, for example. Because our production is at sea too, right? Then secondly, independent commissioner, which was because of his expertise. Then the regular commissioner. So, for example, an ordinary commissioner could come from the government, or at the request of the region. (P1, AC)

The commissioner is the supervisor, and the rules of the audit committee itself are actually in its capacity to assist the board of commissioners to carry out the supervisory function in company management. (P2, EA)

And that makes it easier for all parties, both internal audit and the audit committee, which helps supervise the implementation of supervisory functions within the company. (P2, EA)

If these limitations are presented and expressed, it will be very, very helpful for us as an audit committee in supervising company management. (P2, EA)

By using the code words 'commissioner', 'audit committee', and ‘supervisor’, the interview results showed that participants explained the types of commissioners who discussed the company's financial reports at audit committee meetings. One type of commissioner is an independent commissioner, who is the chairman of the audit committee. And the function of the audit committee is to monitor company management.

There are several participant statements that examine the role of the accounting and/or financial educational background of audit committee members.

The audit committee must consist of two, one whose background is geology, the other whose basis is finance, because according to POJK regulations, at least one member of the audit committee must understand accounting or finance, that is, or business, like that. (P1, AC)

At least one member of the audit committee must understand accounting or finance, or business, like that. (P1, AC)

Well, that's actually good because they collaborate, complement each other, that's how it is. (P1, AC)

The OJK regulations themselves actually already exist, so there must be someone who is an expert in auditing. (P2, EA)

By using the code words 'accounting', 'finance', 'collaboration’, ‘complement’, and 'audit', the results show that an expertise background in accounting, finance, or auditing is one of the requirements that must be met in the composition of the audit committee.

In general, the interview results show that political connections, audit committee characteristics (number of meetings, type, and accounting and/or financial expertise) play a role in the transparency of related party transactions. The research results support network interactionist theory (Carney et al., 2020), resource dependence theory (Hillman and Collins, 2009), and normative isomorphism theory (Dimaggio and Powell, 1983). Figure 3 explains the framework for analyzing the results.

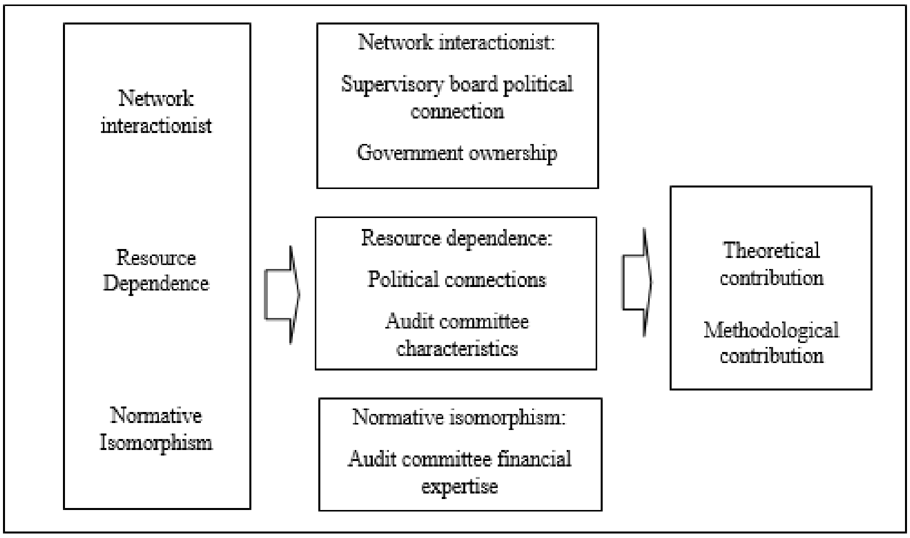


Figure 3. Framework for analyzing results

5. Conclusion

The results of this research show that political connections, in this case, government ownership and the political connections of the supervisory board, play a role in the RPTs disclosure. Audit committee meetings are held in detail, in depth, and discuss the presentation of financial reports. The audit committee functions as a supervisor of company management. Expertise in accounting, finance, or auditing is one of the requirements that must be met in the composition of the audit committee. A limitation is that the participants in the interview sessions were audit committee members and external auditors. Future research can add the board of commissioners, the board of directors, and the company secretary as participants.

This study supports network interactionist theory (Carney et al., 2020), resource dependence theory (Hillman and Collins, 2009), and institutional theory, namely normative isomorphism (Dimaggio and Powell, 1983). The purpose of political connections can be explained using resource dependence theory, which states that one of the several ways companies use to reduce the uncertainty of the external environment is to form political connections (Hillman et al., 2009). The research results have implications for the application of institutional theory, namely normative isomorphism. Normative isomorphism mainly comes from the professionalization of audit committee members; that audit committee members must have expertise in accounting, finance, and auditing to support their professional duties.

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SUSTAINABLE BRANDING STRATEGIES OF NIGERIAN BOTTLING COMPANY (COCA-COLA): ENHANCING CONSUMER PERCEPTIONS IN NIGERIA'S BLUE ECONOMY

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ABSTRACT

The study is directed to the issue of identification of how the branding strategies of the Nigerian Bottling Company (NBC) are used to change consumer attitudes towards the country's blue economy. The objective here is to look into aspects that make consumers choose NBC's eco-friendly brand and indicate useful approaches to green branding. Through in-depth discussions with the marketing and sustainability experts of NBC, we can obtain insights into the company's initiatives. The consumer survey will monitor the audience's level of awareness, attitudes, and purchase intentions. The revealed results of the qualitative and quantitative studies are to pinpoint the most significant factors that promote sustainable brand image among Nigerian consumers. This study expands existing knowledge on sustainable branding in Nigeria's blue economy, adding to literature that is still quite limited by illustrating how consumption behavior impacts branding dynamics and brand maintenance approaches in this environment. The above findings will apply to NBC as well as other operators in the ocean industry. Eco-conscious consumers will be attracted if these companies operate sustainably according to the principles of environmentally friendly branding.
Keywords: *Blue Economy, Consumer Perception, Environmental Consciousness, Sustainable Branding*

1. Introduction

Nigerian Bottling Company (NBC) - a local bottler for Coca-Cola products in Nigeria - has been the trail-blazer in an environmental friendly approach to branding in the nation's blue economy as shown by (Sustainability Takes Center Stage as Nigerian Bottling Company Unveils Green Area in Abuja, 2023). The Blue Economy, which is centered the sustainable-use of oceans resources for the growth of business, improved livelihoods and job creation. It has become a component of the Nigeria economic development focus (Okon Jacob & Joseph Umoh, 2022). In such a situation, the specific branding techniques used by NBC that aim to boost the brand's image and create a strong connection with consumers in terms of sustainability become highly valuable.

The research problems scrutinized in the study is to assess whether the advertiser's strategy, as deployed by the Nigerian Broadcasting Corporation, contributes to the development of a favorable background by the Nigerians to the blue economy (Gbadegesin & Akintola, 2021). The aim of this study is to identify the aspects that support the use of NBC's ecofriendly brand by the consumers and to examine the effective ways to use green branding in this context (Adegbite & Nwankwo, 2021).

Two key research questions guide this study:

a. What are the specific branding strategies employed by NBC to promote its sustainable image and influence consumer perceptions of the blue economy in Nigeria?

b. How do consumers in Nigeria respond to NBC's sustainable branding efforts, and what factors contribute to their attitudes and purchase intentions towards the company's eco-friendly products?

The novelty of this study is the concentrated on the blue economy sector as one of the intersections of sustainable branding in the Nigerian context; the area that has not been a subject of literature review in the existing one (Okon Jacob & Joseph Umoh, 2022). Through NBC's strategies and the way consumers reacted to these projects, this study intends to enlarge the intellectual base around branding in the country's maritime sectors.

The outcomes of this study have pertinent implications for NBC and other actors in the ocean business in Nigeria. Consequently, eco-friendly brand image can become a more powerful factor in consumer behaviour, if we look at what generates it and how it works. Thus, realising this potential blue economy companies can design more efficient eco-conscious branding strategies to attract those environment conscious consumers, who are the ones to contribute to the development of the blue economy and success of eco-business schemes (Okeke, 2021).

The research will be structured as follows: To begin, the latest scientific findings on the Sustainable Branding and the Blue Economy will be reviewed in literature review. In continuation, the procedures including both the qualitative and the quantitative methods will be duly explained. The study findings, including the specialists ' expertise in marketing and sustainability at NBC, will be analyzed as well. Concluding, the study will describe its findings and explain details of the proposed study that will be conducted.

2. Literature Review

In the blue economy, sustainable branding strategies have gained more and more attention as companies try to implement this technological development so that their brand image would correspond to the environmentally sustainable idea (Sustainability Takes Center Stage as Nigerian Bottling Company Unveils Green Area in Abuja, 2023). The matter of sustainable branding implies using marketing and communication tools to bring to the forefront more eco-friendly approaches and products, so to change consumers' perceptions about environment protection hand in hand with their behavior.

The study of blue economy in Nigeria has not been elaborated to demonstrate any role of sustainable brands in terms of consumers' opinions in particular. While those are made in other scenarios, though, research finds crucial lessons aiming to inform this study.

It is very important for sustainable branding to have eco-friendly bags or boxes. The research conducted by Kotler et al. (2019) suggested that the packaging design and materials has a significant role in the conformation of the consumers' perception of brand sustainability. The usage of eco-friendliness by NBC as regards the adoption of recyclable bottles and packaging that would biodegrade easily is a step in the right direction that might work in creating a sustainable brand image and attracting environmentally conscious consumers.

Moreover, having corporate social responsibility (CSR) programs is one of the main features of sustainable branding as well. The support for CSR initiatives of organizations that are directed to environmental conservation, and community growth as being seen as socially responsible and environmentally conscious (Sustainability Takes Center Stage as Nigerian Bottling Company Unveils Green Area in Abuja, 2023). NBC's engagement in activities like beach clean-ups, marine protection and sustainable fishing helps to raise a positive attitude among consumers regarding the company's involvement in the profits of the sea and sustainable policies.

Consumers` attitudes and related behaviors related to sustainable brands are conditioned by a variety of determinants. One of the factors lies in the area of environmental consciousness. It becomes easy for the consumers who are more concerned about environmental issues and have developed change in their lives to select the brands followed by the sustainable practices (Kotler et al. , 2019). As a result, examining the level of environmental consciousness of the customers in Nigeria and their knowledge of the blue economy will be central in the assessment of the sustainability success of the blue branding strategies by the NBS.

Moreover, consumer confidence too takes hold in significant position in green marketing. According to (Sustainability Takes Center Stage as Nigerian Bottling Company Unveils Green Area in Abuja, 2023), consumers tend to trust retail brands that show their willingness and commitment to sustainability by being transparent about their sustainable practices. NBC's sustainable practices, practiced through labeling/disclosures, could make a new channel of communication that will create consumer trust and build their sustainable brand image.

However, the knowledge on sustainable branding in the blue economy is scarce, with just few works mainly in stark contrast to the Nigerian context. In this study, we plan to fill the gap by looking at branding techniques used by NBC and investigating the impacts of these branding techniques on consumer perceptions. Through investigating the linkage of consuming behaviour, branding dynamics and brand maintenance principles, this study will be devoted to the current understanding of green branding in the context of the Nigerian blue economy (Okon Jacob & Joseph Umoh, 2022).

3. Methodology

The mixed-method approach of the study examines sustainable branding strategies that the Nigerian Brewing Company (NBC) used in Nigeria's blue economy and their effects on the perception of consumers in that area.

3.1 Qualitative Approach

This study also includes interviews with marketing and sustainability experts at NBC, these interviews hold qualitative aspect of the study. By purposive sampling, participants will be chosen from the company’s marketing and sustainability departments. The interviews will target to get an in-depth understanding of the exclusive branding strategies put forth by NBC in the name of being eco-friendly and thereby getting the consumers comfortable with the blue economy. The interview questions will cover topics such as:

a. NBC's sustainability initiatives and their integration into the company's branding efforts
b. The communication channels and messaging used to convey the company's commitment to the blue economy
c. Challenges and opportunities faced in implementing sustainable branding strategies
d. Perceptions of consumer responses to NBC's sustainable branding efforts

The qualitative data will be coded and then analyzed by means of theme analysis to single out the main topics ranked with the highest frequency of appearance.

3.2 Quantitative Approach

The quantitative part of the research will center on a consumer survey that will determine the level of awareness, attitude, and intention to purchase to an extent of NBC's sustainable efforts to the consumer.

A sample consisting of 248 customers who are being drawn randomly from different locations across Nigeria will be used. The survey will include questions on:

a. Awareness of the blue economy and environmental issues
b. Perceptions of NBC's sustainable branding and its impact on brand image
c. Factors influencing consumer attitudes and purchase intentions towards NBC's eco-friendly products
d. Demographic information (age, gender, and education level)

The quantitative information will be handled through the use of data analytical methods like descriptive statistics, and correlation analysis among others. These techniques will help in finding the strong factors that influence consumer perceptions and attitudes toward NBC's branding approach which is centered on sustainability.

With a comprehensive integration of qualitative findings with the quantitative results, an in-depth comprehension of the way in which the green branding tactics of NBC influence Nigerian consumers' perception in regards to the blue economy will be achieved. These results will help expand what we already know about Green Marketing and provide a practical guide for the operators of the ocean business.

4. Research Findings and Discussion

This study examines the Sustainable branding strategies of nigerian bottling company (coca-cola): enhancing consumer perceptions in nigeria's blue economy.

The demographical distribution:

The demographic information includes a sample size of 249 participants from Nigeria. The participants, including Male and female

Table 1. Gender of the respondents

Gender	Frequency	Percentage
Female	130	52
Male	118	48
Total	248	100

Source: Fieldwork by the author, 2024

On the survey, gender split is evenly enough with a little bit edge for women (52%) while men (48%) endure slight edge.

Table 2. Age of the respondents

Age	Frequency	Percentage
18-24	94	38
25-34	105	42
35-44	31	13
45-54	15	6
55+	3	1
Total	248	100

Source: Fieldwork by the author, 2024

The most reported age group to the survey was 25-34 years with 42 % of total participants. The other one is the age of adolescents that is younger than 25 years old (18-24), which is 38%. The remaining age groups have a significantly lower representation: 35-44 (13 %), 45-54 (6%), and 55 + (1%).

Table 3. Educational level of the respondents

Educational level	Frequency	Percentage
High school diploma	58	23
college	32	13
Bachelor's degree	104	42
Graduate Degree	54	22
Total	248	100

Source: Fieldwork by the author, 2024

The largest group of respondents i.e., 42%, have education level Bachelors Degree. The Tertiary education programs like the Graduate degrees are the second following suit at 22%. pooling 36% of respondents with high school diploma (23%), some college experience (13%).

RQ1. What are the specific branding strategies employed by NBC to promote its sustainable image and influence consumer perceptions of the blue economy in Nigeria? Open ended questions

Based on this, we asked four open-ended questions and got answers back from the consumers. The answers were scrutinized, and then a brief synopsis is carried out below.

1. Does NBC effectively integrate its sustainability initiatives into its branding efforts to create a positive and environmentally conscious image?

Answer: Sustainability initiatives implemented by NBC were among the main things participants appreciated; they included use of recyclable and recycled packaging materials, investments in marine conservation programs, and electing staff and participants to join beach clean-up activities. These programs were deliberately connected with the company's branding intention at the end to show its degree of devotion to environmental sustainability and the deep blue savings.

"We have been persistently endeavoring to often associate the brand image with the sustainability practices. Our drift of packaging, our campaigns of marketing and our communication of community all reflect the measures we have taken to protect marine environment and stimulate the prosperity in blue economy."

2. What communication channels and messaging does the company use to display its commitment to the blue economy?

Answer: The experts highlighted the necessity of sound communication skills and, most importantly, interactive stakeholder participation in crafting sustainable branding strategy. NBC after all remains affable with customers, local communities and environmental societies in order to pass the message about its sustainability endeavours and the blue economy.

"We know communicating to our stakeholders our Sustainability initiatives is important. That's why we use various channels ranging from social media to community events to story-tell and inspire others to involve in protecting oceans and creating the blue economy."

3. What are the Challenges and opportunities faced in implementing sustainable branding strategies?

Answer: The interviews too identified some issues encountered by NBC in the actualization of sustainability branding. These included the preferably high expenses that are related to sustainable packaging materials and the corresponding necessity of continuous innovation to lead the market.

Despite all these contestations, however, the ones who participated felt highly positive towards the future of NBC's eco-conscious marketing initiatives. They talked about the fact that the organization is devoted to sustainable development and spares some resources to make the research, which may bring about new solutions and improve current practices.

"We acknowledge that there is always some progress to be made. We are committed to conducting R&D in alternative packaging materials and technologies that can further help us reduce our ecological footprint. Our long-term targets are to constantly bring about innovation, while prompting others within the blue economy to follow suit."

4. What are the Perceptions of consumer responses to NBC's sustainable branding efforts?

Answer: The participants stated sustainability initiatives of the NBC leads to the build of trust and eventually develop of consumer perception and brand loyalty. Customers have learned to be more mindful of environment-oriented actions taken by the company, which then leads to an increased possibility that they choose gets NBC products instead of those of competitors. “The customers we serve have been more attached to environmental concerns and have seen our brand as taking sustainability to heart. This has gone to show that there is a direct correlation between us and the blue economy and has so far strengthened our brand identity.”

Results from this study essentially reveal to us that green brand is a focal point in the Blue Economy. It is the case of Nigerian Bottling Company that highlights the absolute necessity of ascertaining a company's sustainability policies and communication strategies alongside its brand gesture.

Through the careful insertion of the environmental tasks into the branding operations of the company, NBC has been witnessed to create a solid competitive advantage and be able to appeal to the ever-growing demand for eco-friendly products. Although the company used stakeholder engagement and communication effectively, its sustainability practices also played an important role in creating a positive perception and a strong trust in stakeholders.

These outcomes, therefore, beyond one particular case, may have a wider ethical relevance for companies in the blue economy. Sustainable branding might be a good booster for firms to display their commitment to the blue economy, environmental protection and make their market position much stronger. On the contrary, but quite importantly, to be successful in sustainable branding, companies must undertake real and influential sustainability actions. Greenwashing is publicity that touts environmental efforts that are not true and so will lessen the credibility of a company and can ruin its brand.

RQ2. How do consumers in Nigeria respond to NBC's sustainable branding efforts, and what factors contribute to their attitudes and purchase intentions towards the company's eco-friendly products?

Table 4. Awareness of the blue economy and environmental issues

Questions	Very familiar (5)	Quite Familiar (4)	Somewhat Familiar (3)	Slightly familiar (2)	Not familiar (1)
How familiar are you with the concept of the blue economy?	15 (6%)	37 (15%)	71 (29%)	58 (23%)	67 (27%)

Source: Fieldwork by the author, 2024

Table 5. Awareness of the blue economy and environmental issues

Questions	Highly aware (5)	Quite aware (4)	Somewhat aware (3)	Slightly aware (2)	Not aware(1)
To what extent are you aware of the environmental challenges facing our oceans and	58 (23%)	92 (37%)	41 (17%)	33 (13%)	24 (10%)

marine ecosystem?					

Source: Fieldwork by the author, 2024

Table 6. Awareness of the blue economy and environmental issues

Questions	Extensive knowledge (5)	Quite knowledge (4)	Somewhat knowledge (3)	Slight knowledge (2)	No knowledge (1)
How much do you know about government and industry initiatives to promote environmental conservation in the blue economy?	30 (12%)	53 (21%)	61 (25%)	66 (27%)	38(15%)

Source: Fieldwork by the author, 2024

The study's findings ascertained that the public is mildly charged about the maritime economy vision as well as the ocean problems and the environment in general.

a. **Awareness of the blue economy**: The majority (that is 29%) of those polled explained to be average familiar with this concept while 23% understood it partially and 27% knew nothing about the blue economy. 15 percent and 6 percent had a very and moderately high sense of familiarity with the campaigns while the rest had a little. Hence it's obvious to say that there has to be a way to raise public awareness and education on the subject.
b. **Awareness of environmental challenges:** A similar trend can be seen when addressing the critical environmental issues related to our oceans and marine ecosystems. If we asked the question, "What percentage of respondents are aware highly to a little," about 37% of the respondents reported being moderately aware, and about 23% mentioned being highly aware. Meanwhile, the 17% responded that their awareness on this topic was moderate, 13% on this subject was slight, and 10% on this topic was none at all. It is an encouraging finding, since it implies that people are to greater extent aware of the necessity to maintain ocean wellness.
c. **Knowledge of government initiatives**: The distinction is that the individuals' awareness of exactly the government initiatives as well as those organizations, which is aimed at environmental preserving in the world of the blue economy, seems to be even lower. As it turned out, 12% of the polled subjects claimed the depth of their knowledge of the issue was excessive; the other 21% came in the category of considerable knowledge. The bulk of the participants (42%) attributed themselves either as individuals who have mastered the subject (25%) or those who have adequate knowledge (15%), and 15% claimed to not know of it whatsoever. This calls to mind the need to respond by enhancing communication strategies aimed at telling the community about activities geared towards curing the environmental problems of blue economy.

Table 7. Perception of NBC's sustainable branding and its impact on brand image

Questions	Highly committed (5)	Quite committed (4)	Somewhat committed (3)	Slightly committed (2)	Not committed (1)
How would you rate NBC's commitment to sustainability and environmental responsibility?	59 (24%)	109 (44%)	45 (18%)	22 (9%)	13 (5%)

Source: Fieldwork by the author, 2024

Table 8. Perception of NBC's sustainable branding and its impact on brand image

Questions	Strongly positive (5)	Positive (4)	Neutral (3)	Negative (2)	Strongly negative (1)
To what degree do NBC's Sustainability efforts positively influence your perception of the company's brand?	70 (28%)	62 (25%)	57 (23%)	23 (9%)	36 (15)

Source: Fieldwork by the author, 2024

Table 9. Perception of NBC's sustainable branding and its impact on brand image

Questions	Definitely more likely to purchase (5)	Likely more likely to purchase (4)	Neutral impact on purchase decision (3)	Likely less likely to purchase (2)	Definitely less likely to purchase (1)
To what extent does NBC's Sustainable image make you more likely to purchase its product	63 (25%)	42 (17%)	81 (33%)	37 (15%)	25 (10%)

Source: Fieldwork by the author, 2024

The survey results on NBC's commitment to sustainability and environmental responsibility offer some interesting insights: The survey results on NBC's commitment to sustainability and environmental responsibility offer some interesting insights:

Public Perception of NBC's Sustainability Efforts:
Moderate Commitment Perception: The attention of many voters (44%) leaning toward NBC being quite committed reveals the concerns of their residents for the active role. On the other side, still, a combined 24% expressed indifference because either they were merely fascinated or they were not committed at all, meaning that there is still a need for development of public opinion.

Impact on Brand Image:
Positive, but Room for Growth: The replies from 53% joined hands with the other 28% to give the sustainability effort of NBC a brilliant perception. Contrary to this, 24% still don’t have a positive point of view about Coke's activities towards the environment and these include some who are neutral or negative about the issue.

Influence on Purchasing Decisions:
Moderate Influence: One in every four respondents (25%) indicated absolutely a chance that they would acquire the services / products because of / thanks to NBC’s eco-friendly reputation. Nevertheless, it is important to take into account that 1/3 (33%) of the sample population is not able to make a judgment, and the level of the impact is 25%.

The survey data indicates that NBC’s sustainability initiatives are having a modest effect. Consumers sometimes acknowledge this level of commitment and it makes them more open to the brand. Nevertheless, there is a necessity to improve the general people's attitude and potentially illustrate the implications of their activities in order to win over neutral spectators and those who are unaware their efforts.

Table 10. Factors influencing consumer attitudes and purchase intentions towards NBC’s eco-friendly products:

Measures	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Environmental consciousness	20 (8%)	44(18%)	50 (20%)	70 (28%)	64 (26%)
Perceived corporate social responsibility (CSR)	11(4%)	34 (14%)	56 (23%)	67 (27%)	80 (32%)
Brand loyalty	19 (8%)	23 (9%)	47 (19%)	82 (33%)	77 (31%)

Source: Fieldwork by the author, 2024

The survey results reveal several key factors influencing consumer attitudes and purchase intentions toward NBC's eco-friendly products: The survey results reveal several key factors influencing consumer attitudes and purchase intentions toward NBC's eco-friendly products: • Environmental Consciousness: A majority of the participants (i.e., 54.04% of them in total) strongly agree or agree that environmental awareness does have an impact on their choice of organic product of the NBC company. That means more and more consumers are increasingly becoming prepared to spend a bit more for environmental products.

a. Perceived Corporate Social Responsibility (CSR): The proportion is even higher (32.26% + 27.02% = 59.28%) when it comes to the strong or weak responder who says that the commitment of corporations to social responsibility does influence their purchase decisions regarding NBC's green products. It appears that the consumers consider the Earth both, an ecological problem and social issue.
b. Brand Loyalty: Brand loyalty also contribute in consumer's behaviour, with 33.06% + 31.05% = 64.11% mentions that it guides their choices with positive responses. This point to the fact that NBC should focus on creating a strong brand loyalty among environmentally conscious customers. To sum up, the survey data indicated that the consumers show a higher level of inclination towards the green products which they think are also socially responsible

Table 11. Correlations

		bran loyalty	CRS
Brand loyalty	Pearson Correlation	1	.925*
	Sig. (2-tailed)		.024
	N	5	5
CRS	Pearson Correlation	.925*	1
	Sig. (2-tailed)	.024	
	N	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

The table above indicates how Brand Loyalty is related to CRS through a small sample (N=5). The correlation coefficient is .= Using the Pearson's Correlation Test, we found a very strong positive correlation of 0.925. This generally implies a perfect and strong positive relationship between brand loyalty and CRM. This analysis reveals that the wider the brand loyalty of the customers, the higher CRS they tend to have. The p-value, which is. 0.024 is significant statistically at the p-value of 0.05. 0.5 (denoted by the {asterisk} symbol). Therefore, the estimated level of confidence that this observed correlation was not due to a chance is quite high. It is, however, essential to highlight the fact that a correlation does not directly indicate a causal link. While there is the implication of branding having an effect on CRS and CRS having an effect on branding, there is no clear proof, yet, that the relationship has a causal nature or otherwise. There might be some other variable that can be attributed to the response and customer retention being on the high up.

Table 12. Correlations

		environmenta l Consciousnes s	bran loyalty
environmental Consciousness	Pearson Correlation	1	.918*
	Sig. (2-tailed)		.028
	N	5	5
brand loyalty	Pearson Correlation	.918*	1
	Sig. (2-tailed)	.028	
	N	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

The table presented shows the correlation between being environment-consciousness and brand loyalty. The correlation coefficient stands at. 0.918, which is very close to 1, a value that suggests very strong positive correlation. A positive correlation denotes a relationship, in which these two variables move in the same direction or in other words, they are positively associated. Here, it is a clear indication that the loyalty of the brand is tremendous when customers begin to reflect environmental issues. The level of significance, expressed here as * p-value, means that there is * chance that it is produced by chance or just pure randomness. About 0.28, is less than 0 . 05. Such tendency reveals that the correlation of the observed data is a statistically significant one. Statistically, there is a very low probability, that this outcome is due to chance

The research findings imply that there exists a very strong positive correlation between environmental consciousness and brand loyalty. Consumers who are more environmentally aware are consumers who are loyal to NBC brands they perceive as really environmentally friendly as well.

Table 13. Correlations

		environmental Consciousness	CRS
environmental Consciousness	Pearson Correlation	1	.945*
	Sig. (2-tailed)		.015
	N	5	5
CRS	Pearson Correlation	.945*	1
	Sig. (2-tailed)	.015	
	N	5	5

*. Correlation is significant at the 0.05 level (2-tailed).

This correlation implies very strong and positive link between environment perspective and CSR (Corporate Social Responsibility). The highest possible correlation (xy= 1. 00) is a perfect positive correlation, which is represented by the Pearson correlation coefficient of 1 (rounded to two decimal places), i. e. 1. 00. This can be translated as the cause and effect relationship: when environmental consciousness scores get higher, CRS scores also appear on a high level and vice versa. The significance level (p-value) of zero. 015 is not as much as 0.

The Pearson's correlation coefficient is estimated to be near 0.5 as a standard value. In other words, the correlation which was observed is statistically significant, and, therefore, there is the high probability that it is not due to random chance.

5. Limitations of the Study

Sample Size: The researcher employed open-ended questions, which might have influenced making of a small sample size, thus limiting the generalizability of the findings to the whole population.

6. Recommendations to Increase the Strength of NBC within the Blue Economy

Based on the study's findings, here are recommendations for NBC to solidify their position in the blue economy: Based on the study's findings, here are recommendations for NBC to solidify their position in the blue economy:

a. Boost Public Awareness: Launch education campaigns to inform consumers on NBC's blue economy and their own sustainability initiatives. Such an approach may include online media communications, educational alliances, or intuitive containers that describe how this region is vital for the blue economy.
b. Showcase Impact: Quantify both the ecological and social influence of NBC's sustainable performances and explicitly express those results. Trust development and brand reputation, reinforce the company as a leader in the blue economy. Emit tangible success, in within the waste reduction, and resource conservation of which all local communities fall under toe.
c. Cultivate Brand Loyalty: Work on the focused strategy to build customer loyalty from the consumers who advocate fair trade. This could be achieved through, for example, loyalty programs and reward schemes that encourage environmentally conscious choice, collaborations with environmental NGOs, or unique (eco-friendly) product lines.

7. Conclusion

Accordingly, the blue economy and environmentally related problems were acquainted with moderate mental knowledge of public. Despite a fairly positive view consumers hold towards NBC's sustainable efforts, there is still considerable quest to get more people informed about sustainability. Consciousness of environment,the issue of corporate social responsibility,as well brand loyalty were identified as major factors of people starting to chose the NBC's green line. Indeed those output indicate that NBC might be in a long run hold a larger part of the blue economy by giving the consumers more knowledge about the blue economy and its activities, showing potential impact of their works and strengthening trust of the environmental friendly consumer. This way offers the possibility to involve the company's sustainability endeavors in its brand positioning, achieving greater recognition among environmentally aware consumers and adding to a more sustainable blue economy.

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DIGITAL INNOVATION IN BUSINESS AND ECONOMY: COLLABORATION OF BACK-OFFICE AND FRONT-OFFICE EMPLOYEES WITH ADVANCED TECHNOLOGY IN FACILITATING SEAMLESSNESS SERVICE QUALITY DELIVERY IN HOTEL INDUSTRY

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ABSTRACT

The main objective of this research is to investigate how back-office and front-office employees in collaboration with advanced technology facilitate seamlessness in the hotel industry. A constructivist research paradigm is employed while effectively utilizing mixed methodology. The research adopts a multiple-case study design, focusing on two hotels; a five-star hotel and a three-star hotel, both located in Yogyakarta, Indonesia. SPSS data analysis tool will be applied to diverse primary and secondary data sources, including interviews, focus group discussions, survey questionnaires, and online customer survey reports from each hotel's official website and social media platforms such as Instagram. Additionally, the seamless hotel organization theoretical framework is employed for this study as a roadmap towards data collection, analysis, and interpretation, guiding the investigation of the study. By analyzing and comparing the strategies, challenges, and opportunities in both hotels, the study has revealed or discovered the importance of effective collaboration of back-office & front-office employees with advanced technology in every hotel in enhancing seamlessness hotel service operations. The findings reveal that there is effective collaboration of back-office and front-office employees with advanced technology in facilitating a sustainable seamlessness service quality delivery in hotel industry.

Keywords: *Seamlessness, Advanced-technology, Hotel industry, Front-office, Back-office*

1. Introduction

Seamlessness in hospitality captures a meticulously orchestrated service delivery that is perfect and efficient, aiming to enhance customer satisfaction and ensure a positive service experience (Schnieder & Bowen, 1995). In the realm of hospitality, particularly within the hotel industry, achieving seamlessness involves a blend of cutting-edge technology, stringent service quality standards, collaboration between front-office and back-office staff, continuous feedback mechanisms for customer satisfaction, and the harmonious integration of various service quality dimensions (Schnieder & Bowen, 1995). The ultimate objective for service-oriented businesses like hotels is to establish an operational environment where all facets work seamlessly together, emphasizing the crucial role of technology, employee collaboration, and service quality control in sustaining the seamlessness of hotel operations.

In the context of daily hotel operations, a seamless experience is defined by a smooth and uninterrupted transition between various activities, facilitated by the integration of digital technologies and applications throughout the hotel's operations (Mullet, 2003; Slywotzky & Weber, 2011; Buhalis & Leung, 2018). Embracing the Internet of Things enables hotels to offer customers a connected and hassle-free experience, necessitating the development of transparent and flexible infrastructures with minimal customization of interfacing software to ensure consistent seamlessness in operations (Buhalis & Leung, 2018). By catering to the evolving demands of customers for personalized services and enhanced digital interactions, hotels can foster seamless experiences by aligning their services across various touchpoints and integrating technology effectively into the guest experience (Wang et al., 2016; Lim et al., 2018). Initiatives such as keyless entry systems and digital service platforms not only enhance convenience for guests but also contribute to the smooth functioning of hotel operations, emphasizing the importance of integrating technology seamlessly to elevate the overall guest experience (Lim et al., 2018; Kansakar, Munir, & Shabani, 2019).

For example, according to Mercan et al. (2021), with the support of the Internet of Things, Disney has the opportunity to collect customer data such as attraction preferences, purchase history, location, etc, which helps to customize marketing messages; however, it requires careful planning. This requires a high degree of technical interconnection, which should always be secured and regularly upgraded, so the digital apps comprising the overall smart hotel ecosystem would be highly effective in offering a seamless service provision (Stylos et al., 2021). According to Chacko (1998), for constant seamlessness in hotel operations, hotel organization structure must combine three elements: *circular*, which emphasizes that all boundaries of the hotel where employees serving customers must be equally accessible; *flat*, which emphasizes that the number of hierarchical levels within the hotel must be reduced; and *dynamic*, which emphasizes creating flexibility in operations to serve the changing needs of guests or customers.

The following figure presents ideal dimensions or elements of seamlessness hotel operations as developed by the researcher.

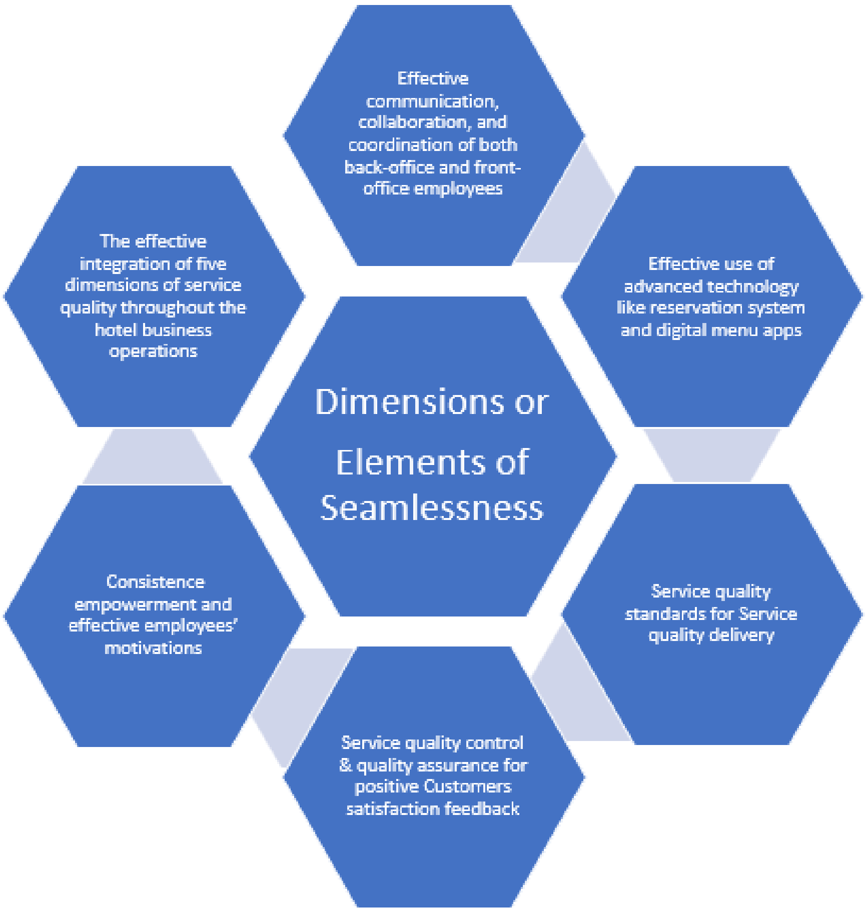

Figure 1.1. Dimensions or Elements of Seamlessness

Therefore, it is important and crucial for the hotel management team to coordinate well all these aspects that lead to seamlessness hotel operations, such as effective collaboration of advanced technology with back-office & front-office employees, service quality standards & quality insurance, customer satisfaction feedback, consistency empowerment, and effective employees' motivation, as well as the effective integration of dimensions of service quality throughout the hotel operations so as to provide hotel quality services for consistent customers satisfaction. Henceforth, a consistent and effective quality service delivery strategy (seamlessness) in a hotel leads to customer satisfaction, customer loyalty, business sustainability, and profit maximization.

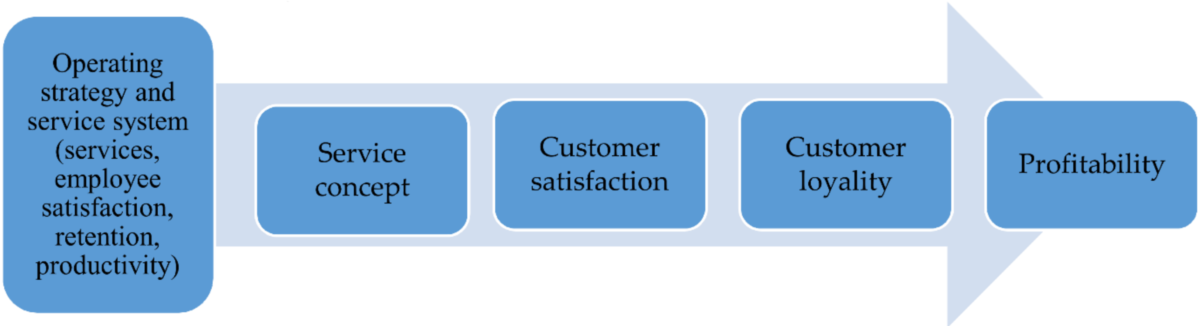

Figure 1.2. Quality Service Delivery Strategy

Various researchers have explored how the collaboration between back-office and front-office employees, along with advanced technology, enhances seamlessness of service quality delivery within the hotel industry across different countries. However, many studies predominantly focus on how advanced technology improves operational efficiency in hotels, neglecting the crucial role played by human aspects (back-office and front-office employees) in facilitating seamlessness when effectively integrated with advanced technology. This study investigated how the effective collaboration between human aspects and advanced technology enhance the seamlessness of hotel operations, leading to increased revenue and profitability in Yogyakarta, Indonesia. This study emphasizes that advanced technology alone cannot achieve seamless hotel operations without the successful integration of human elements, prompting the need for tailored training programs for both back-office and front-office employees to optimize technology utilization throughout the operational processes.

To address the gap in understanding how the collaboration between back-office and front-office hotel employees with advanced technology contributes to the seamlessness of service quality delivery in the hotel industry, the study utilized specific research objectives. These included assessing the advanced technologies employed in selected hotels for seamless operations, evaluating the collaboration between front-office employees and technology, examining the collaboration between back-office employees and technology, and assessing the availability of training programs for both employee groups on utilizing advanced technology effectively for seamless operations both hotels. Conducted in the Yogyakarta region of Indonesia, the mixed-method study involved two hotels ranging from Five-star to Three-star categories and engaged 85 participants from back-office and front-office roles. The research employed various data collection methods such as survey questionnaires, focus group discussions, interview questionnaires, and customer feedback reviews, utilizing both closed-ended and open-ended questions to achieve the research objectives effectively.

2. Literature Review

2.1. Background of the Study

The hospitality industry has witnessed a significant transformation over the past decade, with the integration of advanced technologies such as robotics and artificial intelligence (AI) to enhance customer experiences and streamline operations (seamlessness service operations) (Kolodny, 2016). These technologies, including robots in hotels and chatbots for customer assistance, have become essential tools for improving economic decision-making and ensuring seamless interactions with guests (Gupta et al., 2022). By incorporating robotic back-of-the-house applications that adapt to individual employee work habits, hotels aim to optimize operations and maximize customer satisfaction (Bowen & Morosan, 2018). To effectively implement these technologies, Chacko (1998) emphasizes the importance of providing a supportive framework that enables real-time decision-making and empowers employees to engage with customers through digital communication tools (Buhalis & Sinarta, 2019).

Furthermore, the hospitality industry has embraced computerized processes and AI-driven systems like property management systems (PMS) and revenue management systems (RMS) to analyze key performance indicators and enhance service delivery (Mariani et al., 2018). Robotic appliances are not only used for housekeeping tasks but also as waiters in restaurants, illustrating the diverse applications of technology in hospitality settings (Drexler & Lapre', 2019). The introduction of robots in hotels and restaurants not only improves operational efficiency but also enhances customer experiences, as seen in establishments like the Henn na Hotel in Tokyo, which operates with minimal human labor through the use of robotics and cutting-edge technology (Masuda & Nakamura, 2008). Seamlessness solutions, such as keyless systems, empower customers by providing greater control over their interactions with service providers, thereby enhancing overall service quality and customer satisfaction (Lim et al., 2018).

According to Han et al., (2021), the development of hotel smart technologies applications that enhance guests' experience has triggered discussions on their usefulness, user-friendliness, security as well as users' intention to use the technologies because these issues are closely interrelated to user behaviors, studies on guests' acceptance of specific smart technologies in the hotel sector, such as hotel reservation website, self-service technologies and hotel access. Furthermore, Rotana.com (2020) exposed that AI from Ain Rotan Hotel in the United Arab Emirates (UAE) offers customers a smart bed console that can control room temperature, lights, and air conditioning for seamless hotel operations. AI in services for standardization (mechanical AI), personalization (thinking AI), and relationship or relationalization (feeling AI), where mechanical AI can support in achieving cost leadership, thinking AI can lead to effectively master quality leadership and feeling AI can support in establishing relationship leadership in hospitality industry particularly in hotels and restaurants (Huang and Rust, 2021). All those helps to provide seamlessness that leads to service quality delivery to satisfy the customers' needs and expectations. For instance, in China there is a seamless service hotel special for customers who try to avoid physical contact and any other interaction with others (Haastrecht, 2020).

Therefore, according to Bhasin (2023), hotel management should address five key gaps to ensure seamless service delivery: knowledge gap, standard gap, delivery gap, communications gap, and satisfaction gap.

Figure 2.3. The five Gaps of Service Quality
Bhasin, H. (2023). *The SERVQUAL Model* – Definition, Dimensions, Gaps and Advantages Service

2.1.1. Pragmatic theory

In this mixed method research, pragmatism theory is applied. The theory of pragmatism underpins mixed techniques. According to Cherryholmes (1992), Morgan (2007), and Creswell (2014), in pragmatism world view; *Pragmatism is a philosophical approach not tied to any singular system of thought, resonates with mixed methods research, where scholars freely blend quantitative and qualitative assumptions in their investigations. This freedom of choice allows researchers to select methods and techniques that best suit their objectives. Just as pragmatists reject the idea of a singular unified reality, mixed methods researchers embrace diverse approaches to data collection and analysis. Truth, according to pragmatism, is what works at a given time, aligning with the use of both quantitative and qualitative data in mixed methods research to achieve a comprehensive understanding of research problems. Pragmatist researchers focus on the intended consequences of their work, while mixed methods researchers must establish a purpose and rationale for combining different data types. Additionally, both pragmatist and mixed methods researchers acknowledge the contextual nature of research, incorporating social, historical, and political dimensions. Ultimately, pragmatism broadens the horizons of mixed methods research, allowing for the integration of various methods, worldviews, assumptions, and forms of data collection and analysis. Also, the Conceptual Framework: 'the Seamless Hotel Organization' is applied in this study.*

2.1.2. The Conceptual Framework: The Seamless Hotel Organization

Chacko (1998) introduces the modified seamless hotel organization design, which consists of two main job categories: Guest Service (front-office) and Internal Service (back-office) as illustrated in Figure 2.4. The key difference between these categories lies in the volume and frequency of guest interactions. Employees in the Guest Service category is responsible for frequent guest interactions and providing guest service, encompassing roles in the front office, food and beverage service, and other guest-facing services. On the other hand, Internal Service encompasses operations within the hotel that support Guest Service staff, resembling traditional functional staff departments like accounting, housekeeping, and sales (Chacko, 1998).

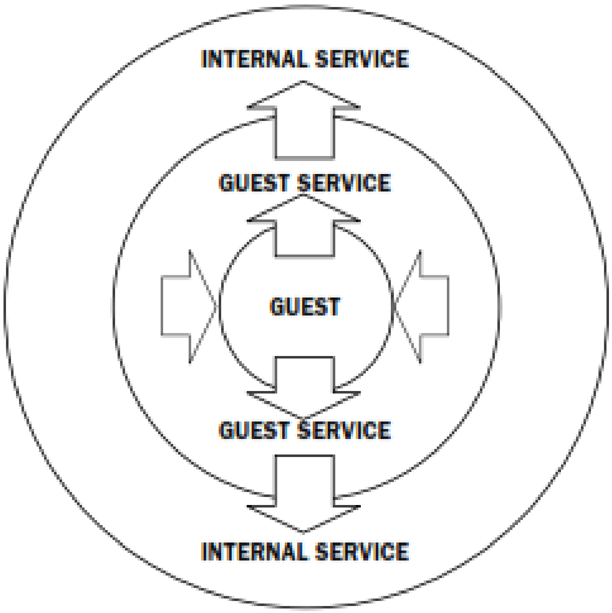

Figure 2.4. The two job categories of the seamless hotel organization

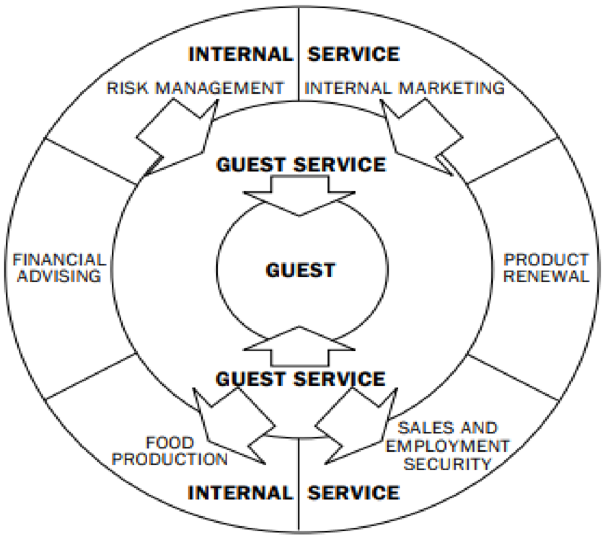

Figure 2.5. The seamless hotel organization (Adapted from Chacko, 1998)

2.1.2.1. Guest Service

As demonstrated in figure 2. 4, employees in Guest Service (GS) (front-office employees), handle all of the needs of guests in the hotel. As a result, they require specialized training such as customer service skills, technology related skills, communication skills, listening skills, etc, to become truly multiskilled and ready to collaborate in cross-functional teams (Chacko et al., 2012). The ability to meet each guest's unique needs must be the first and most crucial skill. To do this, staff members must be skilled communicators with guests in order to perform the customary tasks of welcoming, listening, taking complaints, and solving problems for the seamlessness of hotel operations (Chacko et al., 2012).

2.1.2.2. Internal Service

In addition to GS, the Seamless Hotel Organization concept acknowledges that certain specialized skills are required for the efficient seamlessness of hotel operations (Chacko et al., 2012). The purpose of each staff group in this new organization (figure 2.5) will be redefined, but these are still referred to as staff functions. Employees in this job category (internal service) are primarily responsible for supporting G.S. (front-office) employees, and this support could include anything from timely financial information requests to requests for clean hotel rooms (Chacko et al., 2012). According to Chacko et al. (2012), structural adjustments that guarantee these workers are acting in the best interests of their frontline colleagues are necessary to bolster the Internal Service concept. Internal service involves human resource, accounting & finance, sales & marketing, risk management (security), etc., as demonstrated in figure 2.5.

Therefore, in order to effectively address the research objectives, these hypotheses were investigated: H_1. There are different advanced technologies used or effectively applied in each hotel for seamlessness hotel operation. H_2. Front-office employees are effectively collaborated with advanced technology to provide seamlessness hotel operations. H_3. Back-office employees are effectively collaborated with advanced technology to provide seamlessness hotel operations. H_4. There are different training programs available for both back-office and front-office hotel employees on how to effectively use advanced technologies for seamlessness service quality delivery within the hotel. Not only hypotheses but also the following questions were investigated as well: 1. What are the different advanced technologies used or effectively applied in each hotel for seamlessness operation? 2. How front-office employees effectively collaborated with advanced technology to provide seamlessness hotel operations? 3. How back-office employees effectively collaborated with advanced technology to provide seamlessness hotel operations? 4. Are there different training programs for both back-office and front-office hotel employees concerning the use or effective application of advanced technology leading to seamlessness service operation in each hotel?

3. Research Methods

This study utilized a mixed research method, combining both qualitative and quantitative approaches as defined by (Creswell, 2014; Clark, Foote & Walton, 2018). The integration of these methods allows researchers to address various complexities in research challenges. Recker (2013) further elaborates on the characteristics of mixed research methods, emphasizing the importance of combining quantitative and qualitative techniques for data collection and interpretation. The study focused on a mixed methods case study design involving two hotels (The Royal Ambarrukmo Yogyakarta and Tjokro Style hotel) in Yogyakarta city, aiming to enhance seamlessness in hotel operations through the integration of advanced technology. Triangulation was employed to ensure the validity and reliability of the findings by utilizing multiple data sources such as interviews, focus group discussions, survey questionnaires, and customer review feedback reports. The use of Statistical Package for Social Sciences (SPSS) for data analysis adds rigor to the study, making it ideal for hotel businesses seeking to understand customer behavior and requirements (Emeritus, 2023).

4. Research Findings and Discussion

4.1. Findings and Discussions

In this study, the total of 85 hotel employees from eight hotel departments namely front-office, housekeeping, food & beverage, sales & marketing, human resource, accounting & finance, engineering & security, and IT department participated in both hotels. 67 general hotel employees participated in survey questionnaires, 12 general hotel employees participated in focus group discussion, 5 heads of departments as well as 1 general manager participated in the interview questionnaires.

4.1.1. The Cronbach Alpha Reliability test

It is essential to compute the reliability index for the data collection instruments used in this research. Given the nineteen items used to collect data, the researcher calculated the Cronbach Alpha as the reliability index.

4.1.1.1. Cronbach Alpha Reliability Statistics

Table 4.1. The reliability values

Cronbach's Alpha	N of Items
.887	19

Given the values for reliability, 0.887 indicate good reliability or data collection item consistency. If ever used on the other sample from the same population and under the same conditions, it would consistently yield almost the same results.

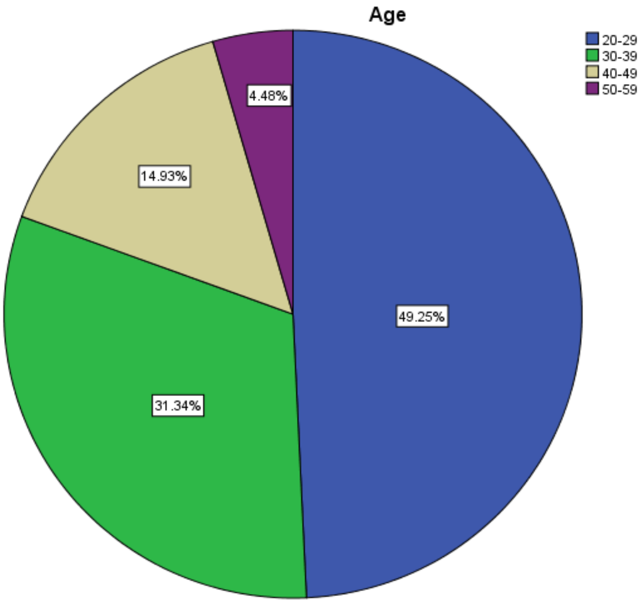

Figure 4.6. Percentages of respondents Age

Figure 4.6. Represent the percentages of respondents' age in the hotels ranging from 20s to 60years old. For instance, the findings from The Royal Ambarrukmo Yogyakarta and Tjokro Style hotle demonstrate that hotel industry employs mostly young generation than more aged people for example, 49.25% are employees with the age between 20-29years; 31.34% are employees with age between 30-39years; 14.93% are employees with the age between 40-49years; and 4.48% are employees with the age between 50-59years. So, this conclude that more than 80% of young generation are employed in hotel and hospitality industry in general. This is because hotel industry is more dynamic and complex sector which requires more young and enegetic workforce expecially in the guest service (front-office). However, aged workforce are not totally left behind, they are still employed in the hotel as internal service (back-office) like accounting & finance, security & engineering, etc., to support the guest service (front-office) because still they have more experiences in some roles than the young generation.

H_1: ***There are different advanced technologies used or effectively applied in each hotel for seamlessness hotel operations***

According to the general managers and human resource managers of hotel A&B, confirm that they have different soft technologies applied in their hotels such as RAPTOR-for menu display, menu ordering, cahier; WEELOY- as customer reservation system; VHP-for visual hotel program; etc., and hard technology such as scanning machines, cleaning machines, cooking facilities, laundry machines etc. Also, the heads of front-office, executive chef, and production manager from hotel B during the interview, confirmed that those mentioned advanced technologies applies in their respective departments.

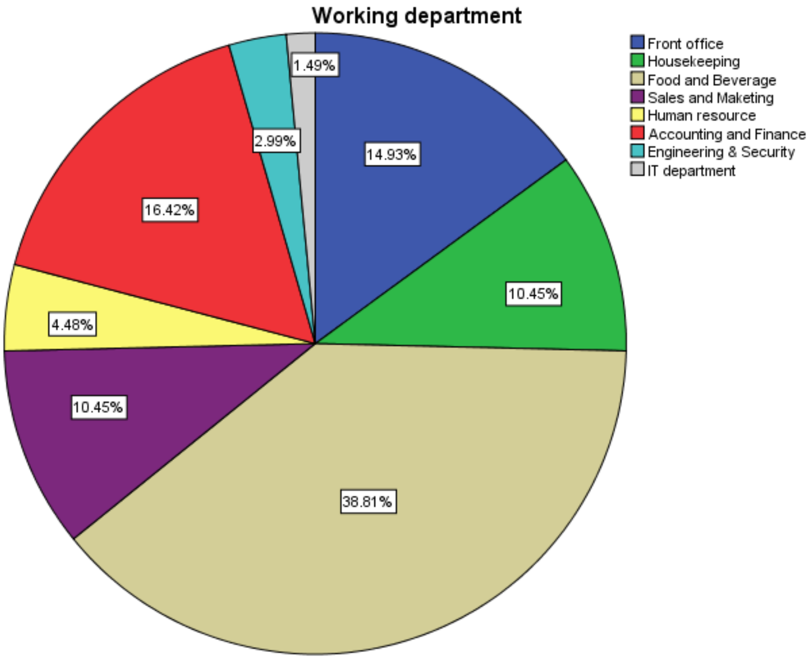

Figure 4.7. The percentage of employees from each Hotel departments participated in the study

Figure 4.7. Demonstrate the percentage of employees from each department of the hotel who participated in this study. According to the findings, Food & beverage department has the highest number of employees in the hotel with 38.81% than other department while IT department has the lowest number of employees in each hotel with 1.49% of all employees within the hotel. As per this study findings in the hotel, food & beverage department and front-office department account for 53.74% which involves waiters & waitress and receptionists who encounters moment of truth everyday while working in the hotel industry to facilitate seamlessness hotel service operations. Therefore, 53.74% of front-office hotel employees participated in this study while 46.28% of back-office employees participated in this study.

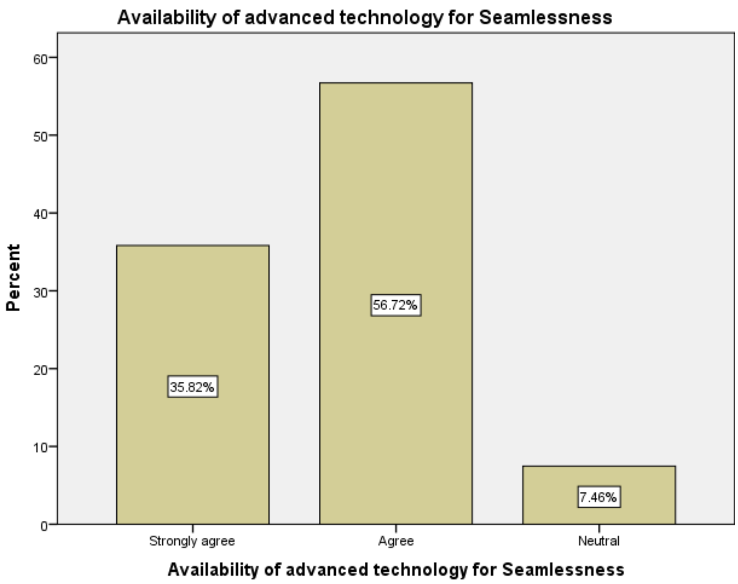

Figure 4.8. Availability of advanced technology in each department for seamlessness service operation in the hotel

Figure 4.8. shows the percentages of employees who agrees the availability of different advanced technology in their departments to facilitate seamlessness hotel service quality

operations. 56.72% of respondents agree, 35.82% of respondents strongly agree while 7.46% of respondents are in between to either strongly agree or agree. This implie that 56.76% of hotel employees have high interactions with advanced technologies in the hotel in their daily activities while 35.82% of hotel employees has moderate interactions with advanced technologies in the hotel throughout their daily hotel activies this depends on the role they perform within the hotel for example, reservation manager, receptionists, accounting& finance, sale & marketing, as well as waiter & waitress in hotel like The Royal Ambarrukmo Yogyakarta has more opportunity to interact with advanced technologes due to the high status of the hotel than in the Tjokro Style hotel which is avearage hotel. On other hand, the employees works as general cleaners, security, assistance chefs, etc., has less interaction with advanced technologies especially in the midium size hotel like Tjokro Style hotel. Additionally, 7.46% of the hotel employees are neigher accept nor denie the availability of different advanced technologies applied in their hotel may be due to lack of awareness of these advanced technologies within the hotel.

By looking the data 56.72% of participants approves the availability of different advanced technologies in The Royal Ambarrukmo Yogyakart and Tjokro Style hotel, 35.82% participants strongly approve the availability of different advanced technologies in The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel, while 7.46% participants they are not sure whether there is advanced technology applied in the hotel for seamlessness service quality operations or not. So, by taking the percentages of all hotel participants who strongly agrees and who agrees they account to 92.54%. This means in hotel The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel there are different advanced technologies applied or used in different departments and hotel in general for seamlessness service quality operations however, the amount of the advanced technologies used differs due to the status of each hotel. Also, 7.46% of the Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel employees who are not sure to whether agree or disagree it is because according to the interview and focus group discussion, there are some departments which are looking on the certain kind of advanced technology to be applied in their department but not yet adopted by the hotel for example, HRM software (Human Resource Management System).

Furthermore, according to the survey customer's feedback reports from Google reviews and official Instagram pages of The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel shows that more than 98% of customers experienced seamlessness service quality delivery due to the application of different advanced technology from reservation system, payment process, check-in process to the check-out time everything went very smooth. This means that there is effective collaboration of back-office and front-office with advanced technology in facilitating seamlessness service quality delivery in the both hotels.

H_2: ***Front-office employees are effectively collaborated with advanced technology to provide seamlessness hotel operations***

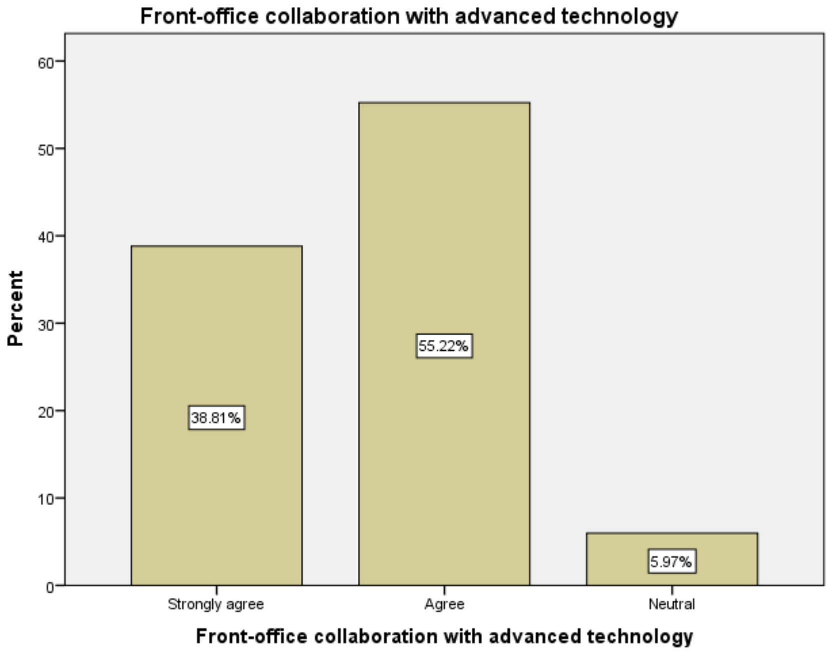

Figure 4.9. Percentages of Front-office collaboration with advanced technology

Figure 4.9. Represent the percentage of front-office employees who confirm that there is an effective collaboration of front-office with advanced technology in both hotel The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel. For example, 55.22% agree, 38.81% strongly agree, and 5.97% of front-office employees are not sure to agree or disagree to the effective collaboration with advanced technology for seamlessness service quality operation in both The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel.

The data shows that 55.22% of front-office participants confirm their effective collaboration with advanced technology, 38.81% of front-office participants highly confirm their effective collaboration with advanced technology for seamlessness service operations in both hotels. The different gap between the hotel employees who highly agrees and the employees who agree is due to different working experience in front-office and unit or the role an individual employee is work in. For example, the employees who works as receptions encounters with different technologies such as reservation system, payment system, and menu application than the employees who works as waiter & waitress. According to the interview with the head of front-office department of The Royal Ambarrukmo Yogyakarta, 'front-office employees are trained to have multiple skills in different advanced technologies applied in the hotel to be awere of operationals systems within the hotel.

Also, during the focus group discussion the employee of Tjokro Style hotel who works as cashier said, "*RAPTOR system performs as payment system and menu application, so it helps me as a cashier to know what customers have consumed so as to print the personalized bills*". So, by looking the total of 94.03% of The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel front-office employees confirming their effective collaboration with advanced technology implies that there is seamlessness service quality delivery process starting from the point of the moment of truth.

On the hand, 5.97% of front-office employees who are not sure to whether agree or disagree is due to the fact that they are still new to the advanced hotel technology system, and some they are still undergoing training as it was explained by one employee during focus group discussion from hotel Tjokro Style hotel she said, "*I am still undertraining so I am not yet familiar with advanced technology in front-office because where I worked before, we used manual system*".

*H3. **Back-office employees are effectively collaborated with advanced technology to provide seamlessness hotel operations***

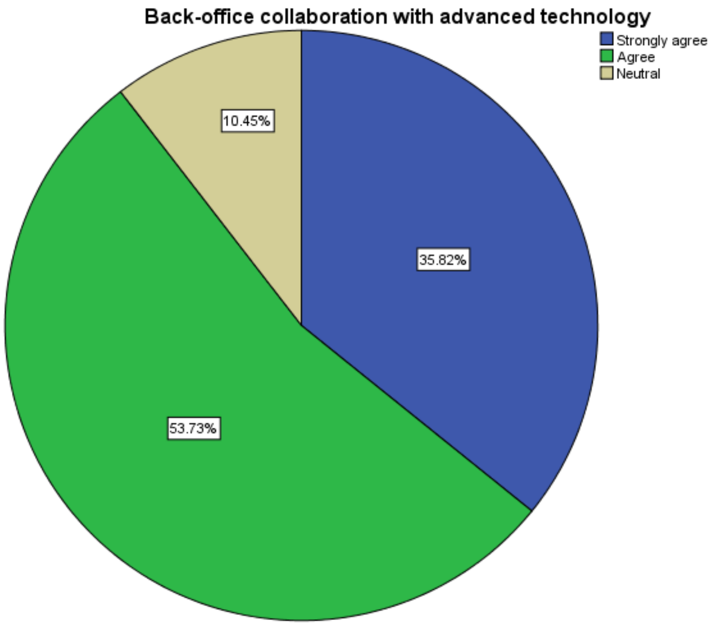

Figure 4.10. Percentages of Back-office collaboration with advanced technology

Figure 4.10. Represent the percentage of back-office employees who confirm that there is an effective collaboration of back-office with advanced technology in both hotel A& B. For example, 53.73% agree, 35.82% strongly agree, and 10.45% of back-office employees are not sure to either agree or disagree to the effective collaboration with advanced technology for seamlessness service quality operation in both hotels.

The data shows that 53.73% of back-office participants confirm their effective collaboration with advanced technology, 35.82% of back-office participants highly confirm their effective collaboration with advanced technology for seamlessness service operations in both The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel. The different gap between the hotel employees who highly approve and the employees who approve may be due different working experience in back-office departments or the roles of individuals within the hotel on the departmental level. For instance, the employees who works as accounting & finance, purchasing, and sales & marketing, marketing & communication to mention few, encounters with different advanced technologies such as RAPTOR, VHP, POS, and WEELOY than the employees who works as general cleaners outside the hotel. According to the interview with the executive chef of The Royal Ambarrukmo Yogyakarta, back-office employees are also trained to have multiple skills in different advanced technology applied in the hotel especially in the kitchen such as cooking equipment, washing equipment, storage equipment, menu application etc. Also, during the focus group discussion the employee of Tjokro Style hotel who works as cook said, "*RAPTOR system helps to send and print customers' orders in the machine connected and installed in the kitchen as per que*".

So, by looking the total of 89.55% of The Royal Ambarrukmo Yogyakarta and Tjokro Style hotel back-office employees confirming their effective collaboration with advanced technology, implies that although they don't have direct contact with customers still thier roles as back-office has much contribution in facilitating seamlessness service quality delivery process in the hotel. On the hand, 10.45% of back-office employees who are not sure to whether agree or disagree is because of the role they are working on in a particular hotel for example in hotel The Royal Ambarrukmo Yogyakarta, indoors cleaners uses equipment with very sophisticated advanced technology while the cleaners of hotel Tjokro Style hotel uses normal cleaning equipment. Also, some of them are still new to the advanced hotel technology system, in which they are still undergoing training as it was explained by one employee during focus group discussion from, The Royal Ambarrukmo hotel she said, "*I am still undertraining so I am not yet familiar with advanced technology in IT department especially on cybersecurity advanced technology*".

H$_4$: ***There are different training programs available for both back-office and front-office hotel employees on how to effectively use advanced technologies for seamlessness service quality delivery within the hotel***

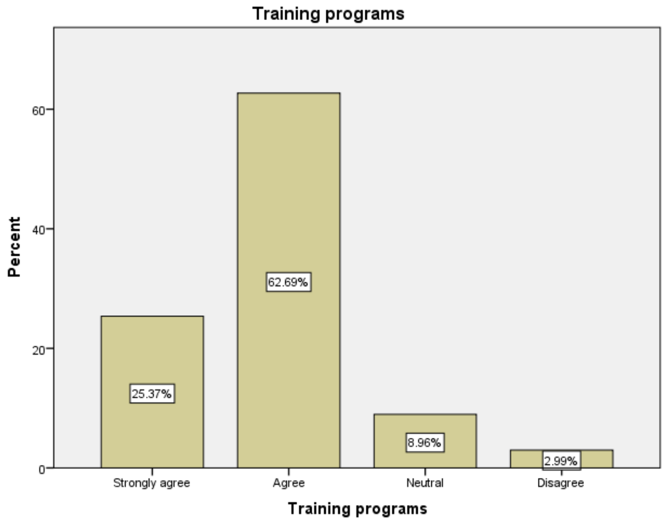

Figure 4.11. Represent the percentages of Training programs in the hotel

Figure 4.11. Represent the percentages of respondents who responded the availability of different training programs for both back-office and front-office employees for effective application of advanced technology for seamlessness hotel service operations in both The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel. For instance, 62.69% agree, 25.37% strongly agree, 8.96% of front-office employees are not sure to agree or disagree, and 2.99% of respondents responded that there are no training programs for both back-office and front-office employees for effective use or application of advanced technology for seamlessness hotel service operations in both The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel.

The study result indicates that 62.69% of participants acknowledge the presence of training programs in The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel tailored to their departmental requirements, with an additional 25.37% expressing strong agreement on the availability of such programs. Moreover, 8.96% of participants are uncertain about the existence of diverse training initiatives in the both hotels, while 2.99% claim there are no training programs offered. The employees who strongly agree with the availability of training programs suggest that these initiatives effectively meet their personal and departmental needs. Equally, those who simply agree indicate that the scheduled training primarily addresses departmental rather than personal requirements. This sentiment was echoed during focus group discussions where back-office employees expressed a desire for more specialized technology training to enhance service operations. Overall, 88.06% of The Toyal Ambarrukmo Yogyakarta and Tjokro Style hotel employees affirm the presence of training programs catering to both back-office and front-office staff, particularly emphasizing the use of advanced technology for seamless service delivery. This is further corroborated by positive customer feedback from Google reviews and the hotel's official Instagram accounts, highlighting high satisfaction levels with service quality attributed to the effective utilization of technology. Equally, employees uncertain about training availability may not perceive its benefits, while those unaware of any training may be newcomers to the industry requires more personalized training to provide seamlessness service quality to the diversified needs of customers.

5. Conclusion

The research findings reveal a significant level of effective collaboration between front-office and back-office employees and advanced technology in the hotel industry, specifically at The Royal Ambarrukmo Yogyakarta and Tjokro Style hotel. The data shows that 94.03% of front-office employees confirm their effective collaboration with advanced technology, indicating a seamless service quality delivery process. Moreover, 89.55% of back-office employees acknowledge effective collaboration with advanced technology for seamless service operations. The slight variance in percentages may be attributed to differing levels of experience and roles within the departments in each hotel. These findings highlight the positive impact of integrating advanced technology into the daily operations of the hotels, enhancing service quality and efficiency. The feedback underscores the importance of continuous training and support to ensure all staff members are proficient in utilizing technological tools, which is key to maintaining a high standard of service delivery in the competitive hotel industry.

6. Recommendations

The study conducted on the collaboration of back-office and front-office employees with advanced technology faciliatating seamlessness service quality delivery in the hotel industry has shown that a significant number of employees from both hotels recognize the effectiveness of this collaboration in enhancing the quality-of-service delivery. The research indicates that the integration of advanced technologies has positively impacted the service operations of The Royal Ambarrukmo Yogyakarta and Tjokro Style hotel. To further enhance the seamlessness of service quality delivery, the researcher suggests hotel industry to continue providing training and support for new employees and promoting personalized and cross-departmental training to bridge any gaps in collaboration between front-office and back-office employees with advanced digital technology in business and economy of the hotel and individual employees in general. Also, the hotel management teams in both hotels while planning for training programs which fucuses on integrative and collaborative advanced technologies, should focus on addressing these five key gaps to ensure seamlessness service quality delivery in each hotel: knowledge gap, standard gap, delivery gap, communications gap, and satisfaction gap. By fostering a culture of continuous learning and collaboration, both hotels can ensure that their workforce remains proficient at leveraging advanced technologies to deliver exceptional service quality to their guests.

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EXPLORING AESTHETIC VALUE: HOW IT MEASURED? DOES IT AFFECT THE SATISFACTION AND LOYALTY OF GALLERY VISITORS?

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ABSTRACT
Art galleries are one of the crucial infrastructures in the creative sector, serving as a platform to promote and develop the creative works of society for sustainable development. In the consumption of art galleries, aesthetic value plays a vital role, more than functional values, for gallery visitors. This study aims to develop a measurement tool for the construct of aesthetic value and test its influence on the satisfaction and loyalty of art gallery visitors. In the first study, a literature review on the concept was conducted and then used to create measurement tools and develop the conceptual model. Data from a survey of 242 art gallery visitors in Yogyakarta were analyzed with Exploratory Factor Analysis (EFA) to determine the number of factors retained in the concept. In the second study, the influence of aesthetic value on consumer satisfaction and loyalty (intention to revisit and intention to recommend) was tested. Survey data from 225 respondents were analyzed using Structural Equation Modeling-Partial Least Square (SEM-PLS). The results of the two studies revealed four dimensions representing Aesthetic Value: artwork, facility-place, knowledge, and emotion. Additionally, aesthetic value also influences consumer satisfaction and loyalty (intention to revisit and intention to recommend) in art galleries.
***Keywords**: aesthetic value, art gallery, scale measurement, satisfaction, loyalty.*

1. Introduction

Aesthetic value, as described by Holbrook (1999), involves an intrinsic appreciation of self-oriented consumption experiences that end in themselves. In customer value research, aesthetic value is recognized as a significant form of customer value in art consumption (Wagner, 1999a). As a form of service organization in the arts sector, art galleries are also evaluated based on aesthetic value by their consumers or visitors. As a service organization whose primary purpose is to exhibit artworks, art galleries are interested in ensuring that visitors receive and appreciate these artworks. Traditionally defined primarily in terms of function rather than purpose, art galleries' functional definition is more related to activities within the gallery, focusing on the internal and object-based aspects, namely displaying artworks (Weil, 1990, as cited in Rentschler & Gilmore, 2002). There has been a shift in the understanding and orientation of art galleries. Art galleries are now moving towards a purpose-oriented orientation, which relates to the gallery's intentions, vision, or mission, focusing on the external aspects of leadership and serving visitors, serving the community, and facilitating development through education and entertainment (Besterman, 1998, as cited in Rentschler & Gilmore, 2002).

In its development, various marketing aspects, both tangible and intangible, have become tools used by art galleries to attract a wider audience. Visitors are no longer merely objects or complements to the existence of art galleries; instead, visitors have been positioned as important subjects influencing an art gallery's presence, sustainability, and success. The existence of an art gallery would diminish and vanish without the support of visitors. Visitors are one of the main components of an art gallery, alongside other components such as artists, artworks, collectors, and the general art public. Therefore, the aspirations of visitors become something significant for the art gallery to consider.

However, the customer orientation adopted by galleries must still be conducted within the boundaries of the organization's mission and not sacrifice the aesthetic value of the displayed art objects (Boorsma, 2006). Kotler and Scheff (1997: 34) suggest that a customer-centric approach should be applied to something other than the art itself but rather to how it is narrated, priced, packaged, enhanced, and presented to its audience. It is further stated that customer-centric organizations can be defined as those making every effort to sense, serve, and satisfy the needs and desires of clients or the public within the bounds of their mission and budget (Kotler and Scheff 1997: 36). Hence, the role of art marketing is considered one that indirectly supports the achievement of an art organization's aesthetic mission by increasing presence and generating funds for the organization (Kotler et al., 2008: 23).

For art galleries, marketing is the exchange process to offer high value to visitors (Kotler et al., 2008). Holbrook (1986) asserts that an individual's participation in artistic activities is viewed as a form of fulfilling aesthetic needs. Aesthetics is generally defined as an aspect of sensory experience that arises from consuming art objects or activities presumed to have aesthetic qualities (Burgeon-Renault, 2000). Visiting art objects such as art galleries will undoubtedly stimulate the formation of an individual's aesthetic experience. Consequently, consumer choices are no longer based on the utility of products or services but rather on the aesthetic value obtained by the consumer. Therefore, the criterion for the success of art gallery consumption lies in the aesthetic value derived from the experience of visiting art galleries.

Unfortunately, although there have been several studies conceptualizing and operationalizing aesthetic value in service organizations, , Most studies utilize contexts of fundamentally utilitarian services and employ aesthetics as differentiators or attractions (Mathwick et al., 2001; Gallarza and Gil-Saura, 2006; Sanchez-Fernandez et al., 2009; Gallarza et al., 2017).

Based on the literature review, few define and develop a measurement model of aesthetic value in contexts where aesthetics are fundamentally offered, such as in art galleries. Gronroos and Voima (2013) mention that the fundamental premise in the development of empirical research on value is greatly influenced by contextual factors. Therefore, if concepts and instruments of aesthetic value of products or services that are fundamentally utilitarian and have aesthetic dimensions are used in contexts of products or services that are fundamentally aesthetic, they may need to be sufficiently representative and have adequate explanatory power for such phenomena. In addition to the measurement model of aesthetic value, it is also necessary to test the extent to which aesthetic value influences visitor responses, especially regarding their satisfaction and loyalty to an art gallery.

This study has two main objectives, given the importance of aesthetic value in the consumption of art services such as art galleries. The first study will be conducted on the development of aesthetic value measurement within the context of art galleries. The second study examined the influence of aesthetic value on consumer satisfaction and loyalty. Consumer loyalty, mostly applied empirically and utilized in this study, is a combination measure of word-of-mouth recommendations and intention to revisit (Harison and Shaw, 2004).

2. Study 1: Aesthetic Value Measurement Development

2.1 Literature Review

In study 1, a search and review of the literature on aesthetic value in various fields, particularly art, psychology, management, and marketing, was conducted. The literature review utilized major academic databases such as Proquest, EBSCO, and Google Scholar, searching with the keywords "aesthetic value" and "aesthetic' AND "value." A total of 112 articles were utilized in the development of the concept of aesthetic value from approximately 1,390 journals, books, conference papers, and others. The following paragraphs outline the results of the literature review.

2.1.1 Theory of Value in Consumption Experience

In the services marketing domain, value has important epistemological implications for understanding customers' cognitive, affective, and behavioral responses to marketing stimuli (Homer & Kahle, 1988) and is a crucial determinant of competitive advantage (Woodruff, 1997; Parasuraman, 1997). However, existing value typologies and methodological approaches to capturing value remain abstract due to the diverse and complex nature of the concept (Gallarza et al., 2017). Marketing scholars focusing on customer perceived value identified several definitions through two main approaches: economic (cost-benefit) and consumption experience (Holbrook, 1999; Woodruff, 1997; Zeithaml, 1988).

The economic approach is the initial stage of the conceptual development of value, where value is defined as consumers' overall assessment of the utility of a product based on what is received and what is given (Zeithaml, 1988). In addition, value is conceptualized as a unidimensional construct. Value is considered a single overall latent construct measured by items or a set of items that represent it. Although multiple antecedents may also influence the unidimensional construct, it is not an aggregate concept formed from multiple components (Sánchez-Fernández and Iniesta-Bonillo, 2007).

Over time, services marketing researchers have shifted their focus from the economic (cost-benefit) approach (Zeithaml, 1988) to the consumption experience approach, which is an interactive consumption experience based on relativistic preferences (Holbrook, 1999). This approach supports a broader conceptualization of value. Value is no longer limited to cognitive judgments alone. It also encompasses affect and emotion, thus complementing the economic basis (Gallarza et al., 2017). Consequently, the unidimensional conceptualization of value has been criticized for being simplistic (Sánchez-Fernández et al., 2009), arcane (Huber et al., 2007), and narrow (Mathwick et al., 2001). Furthermore, it fails to acknowledge the value construct's multidimensional potential and does not guide how managers can create or enhance value (Petrick, 2002).

Using the consumer experience approach, the concept of value is considered an entirely relativistic phenomenon. Therefore, it allows for adaptation to any consumption setting that reflects the uniqueness of each situation (Gallarza et al., 2017). Value is ultimately understood as a dynamic and situational multidimensional concept, depending on the context and moment in time when consumption occurs (Holbrook, 1999; Woodruff, 1997). Some studies that have developed the multidimensional concept of value, which are pretty representative, include Sheth et al. (1991) with functional, social, emotional, epistemic, and conditional values; Babin et al. (1994) with hedonic and utilitarian values; Holbrook (1999) with intrinsic-extrinsic, self-oriented-other-oriented, and active-reactive values; Sweeney and Soutar (2001) with emotional, social, economic, and functional values. The multidimensional concept of value in these studies has gained considerable acceptance and has been replicated in various settings, especially in the service sector (e.g., Stoel et al., 2004; Carpenter & Moore, 2009; Lloyd et al., 2011).

2.1.2 Aesthetic Value in Art Service Consumption

The emergence of art consumption phenomena in the cultural or creative industries today, which is more based on creativity, skills, and aesthetic aspects, directs consumers not only to focus on utility value but also to pay more attention to the aesthetic or artistic value of a product or service (Purnomo & Kristiansen, 2018). Holbrook (1980) stated that consuming art or cultural products generates specific behavioral responses, where consumers' aesthetic perceptions play a more significant role in attitudes, evaluations, and decision-making. Therefore, aesthetic value becomes necessary and should be a focus for academics' future research on consumer value themes.

Aesthetic value is part of intrinsic value that is often generally equated or referred to within the scope of hedonism (Babin et al., 1994; Sweeney & Soutar, 2001). Aesthetics or aesthetic value often serves as a hedonic variable presented in service contexts as the appearance of destinations (Pandža Bajs, 2015), physical environments (Ryu et al., 2012), or atmospheres for restaurants (Sánchez-Fernández et al., 2009). However, Charters (2006) refuses to equate aesthetic value with hedonism because they differ. According to Charters (2006), aesthetic value is the entirety of the consumption experience involving cognitive, affective, and various sensory aspects. Conversely, hedonic value pertains more to the pleasure derived from consumption. Therefore, although elements of the consumer's aesthetic experience can take the form of pleasure, and that experience can lead to hedonic responses, they are distinct. Furthermore, aesthetic value in the context of art services encompasses not only the physical environment and atmosphere of services but also relates to the artwork itself as a stimulus factor (Colbert & St-James, 2014; Bourgeon-Renault, 2000).

Theoretically, values associated with art objects, such as aesthetic value, are intrinsic (Holbrook, 1999). Intrinsic means that the value is an end or goal in itself rather than a means to an end. Additionally, aesthetic value is not solely presented as a hedonic aspect but is analyzed based on its significance in consumption. Aesthetic value is also not associated with purchasing decisions but represents the outcome of the overall consumption experience. Thus, value is no longer the result of calculation but rather the output of an experience (Bourgeon-Renault et al., 2006).

In the form of customer interaction with art galleries, customers will encounter two types of aesthetic experiences, namely content experience and environmental experience (Colbert & St-James, 2014), as well as emotions (Botti, 2000). Content experience is the aesthetic experience visitors gain based on their interaction with the artworks exhibited in art galleries (Bourgeon-Renault, 2000). Nuttavuthisit (2014) refers to this experience as an appreciation of an artwork for its own sake. As a form of service whose primary goal is to showcase artworks, art galleries are interested in ensuring that the artworks are well-received and appreciated by visitors. Leder et al. (2004) used a psychological approach to develop an integrated model of aesthetic experience from artworks.

Furthermore, it is stated that art, like other activities of the mind, is a subject of psychology that requires a comprehensive understanding of mental functions. Aesthetic experience towards artworks is depicted as an input-process-output mechanism, where the input is an artwork processed in the mental mind starting from perception, memory integration, classification, cognition, and evaluation. Then, it ends as an output in the form of aesthetic judgment. Leder et al. (2004) also emphasize that in the pre-classification stage, contextual features are essential to classify objects as art contextual features are essential, with the emergence of objects in art exhibitions, such as art galleries, serves as contextual solid cues for classifying objects as ones that ensure aesthetic processing.

Meanwhile, environmental experience is the aesthetic experience obtained by art gallery visitors from factors or activities surrounding the aesthetic experience of artworks (Colbert & St-James, 2014). This experience is referred to by Nuttavuthisit (2014) as a time when aesthetic responses or appreciation occur and where artworks serve as aesthetic stimuli (such as in art galleries). Environmental experience may also be called the contextualization of aesthetic experience from an encounter with artworks. As service organizations, art galleries display their artworks in a specific environment that includes building architecture, room layout, lighting, signage, and supporting facilities (restrooms, cafes, and souvenir shops).

According to Joy and Sherry (2003), the interconnection between embodiment, movement, and multisensory experiences within art galleries suggests that customers' aesthetic experiences can originate from the gallery's architecture. Meanwhile, Goulding (2000) asserts that in the context of art galleries, the framing of exhibitions is a dominant motivator. Thus, it can be manipulated and controlled regarding the active vs. passive participation level, content type, and attractiveness. Aesthetic experience can be achieved by arranging environmental factors in the art gallery, such as content placement, layout, lighting, and visitor movement arrangements. Therefore, various arrangements of these environmental factors will affect the aesthetic experience and assessment of art gallery visitors.

Other behavioral studies have found that presenting artworks accompanied by narratives, such as titles, texts, or other cognitive information, significantly influences customer evaluations and their aesthetic experience of an artwork (Cupchik, 1994; Russell, 2003). Some of the pleasure derived from viewing artworks (paintings) comes from visitors' success in interpreting and grasping the message intended by the artist. Russell (2003) states that information aiding the interpretation of a painting will make the painting more meaningful and enhance its aesthetic value.

Art consumption can be distinguished from other forms of consumption by its emotional or non-utilitarian aspects (Botti, 2000). The existence of an artwork, such as a painting, is not solely perceived through its physical form. However, it is interpreted by its audience based on the extent to which the artwork evokes certain feelings or emotions, such as joy, surprise, anger, sadness, and others. Therefore, the experience customers gain during their visit to an art gallery will elicit and shape specific feelings or emotions. In psychology, there is still debate about whether aesthetic emotion is a specific everyday emotion (Juslin, 2013). Silvia (2005; 2009) has shown that aesthetic judgments encompass a broad spectrum of specific emotions, including pleasure, pride, surprise, anger, disgust, shame, guilt, regret, confusion, and so on. Although these emotions are part of aesthetic judgment, the explicit distinction between aesthetic and non-aesthetic emotions is not mentioned.

Specifically, Frijda (1989 in Markovic 2012) formulated complementary and responsive aesthetic emotions. Complementary emotions bear similarities to emotions generated by the content of an artwork, such as the feeling of pain from depictions of suffering. Meanwhile, responsive emotions arise from the artwork's structure, such as pleasure and fascination with the perfection of its artistic composition. Similarly, Cupchik (1994) offers explicitly two forms of aesthetic, emotional processes: reactive and reflective. The reactive form emphasizes the pleasure and excitement induced by the specific content of the artwork.

In contrast, the reflective form pertains to the contribution of emotions in generating meaning from various aesthetic narratives. The reflective orientation proves crucial to the aesthetic experience as it connects and integrates various contextual relationships and meanings into overall aesthetic coherence. Scherer (2005) also distinguishes aesthetic emotions from utilitarian emotions. Utilitarian emotions have precise adaptive functions and require assessments of goal relevance and potential coping strategies. Furthermore, it is stated that aesthetic emotions are not homeostatic and utilitarian but rather intrinsic, generated by the quality of the aesthetic object itself. Aesthetic emotions include being moved or captivated, filled with wonder, admiration, happiness, attraction, harmony, joy, sincerity, and the like.

2.2 Research Methods

This research develops the aesthetic value scale adopted by the scale development procedure outlined by Lavie and Tractinsky (2004) and Gallarza et al. (2017). First, the conceptual domain of the construct was defined. Second, a set of items representing the conceptual domain of aesthetic value was generated. Third, the researcher assessed content validity by consulting a panel of experts regarding the representativeness of the items. Three experts were invited: the first, a professor in marketing management who is also an artist in visual arts and Javanese dance, and the second and third, senior lecturers in management and art enthusiasts from Universitas Gadjah Mada Yogyakarta. The Content Validity Index (CVI) was calculated and evaluated using Aiken's (1985) assessment procedure.

Furthermore, the researcher created the measurement model by specifying the scale and measurement format. Then, the researcher formulated and carried out field research using this measurement model as a foundation. This study surveyed visitors to Yogyakarta's art galleries, including Jogja Galeri, Sangkring Art Space, Langgeng Art Foundation, Galeri R. J. Katamsi, Bentara Budaya, and Taman Budaya Yogyakarta. Yogyakarta was chosen because it is known as city of culture in Indonesia. Yogyakarta is a benchmark for Indonesian visual arts, supported by many artists and sufficient art infrastructure such as art galleries.

Later, the researcher examined and analyzed the survey results by implementing Exploratory Factor Analysis (EFA) utilizing SPSS. The factor analysis aims to uncover latent variables that contribute to the covariance among observable variables. Afterward, the researcher assessed the goodness of fit of the measurement model. Finally, the researcher evaluated the reliability and validity of the scale. The complete research stages can be seen in Figure 1.

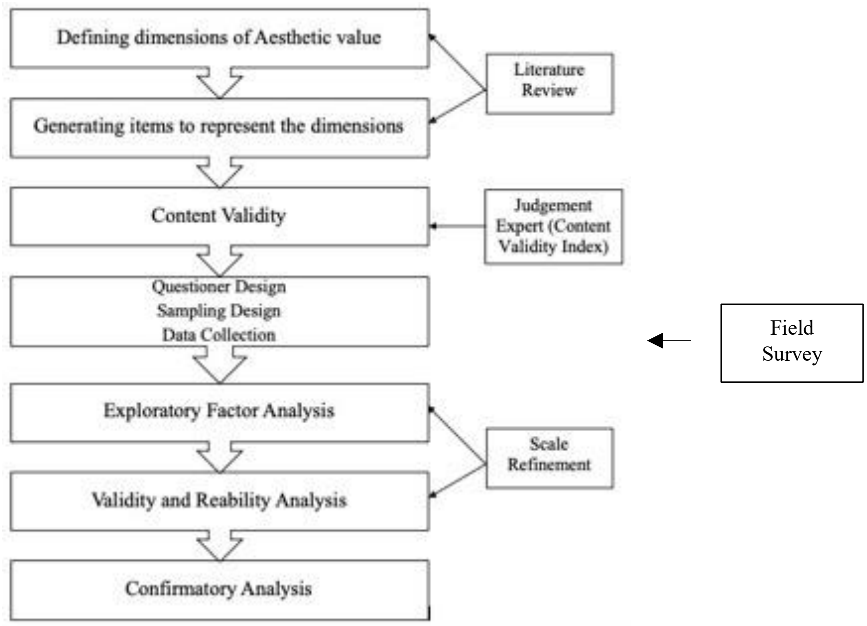

Figure 1. Research Process

2.3 Research Findings and Discussion

Based on the literature review, the definition of aesthetic value is formulated as follows: *"Consumer aesthetic value is the consumer's appreciation of an object (art) that involves cognitive, affective, and sensory aspects based on the consumer's overall experience, which is intrinsically evaluated as self-oriented and end of itself."*

Results of the literature review indicate that 38 out of 112 articles used in developing the aesthetic value concept indicate the presence of three key elements or dimensions: sensory, cognitive, and affective. Furthermore, referring to the formal definition and the discussion of the previous dimensions of aesthetic value, a set of measurement items was generated, representing the conceptual domain of aesthetic value. By deducing from theory and literature review, 30 items were developed and grouped into three dimensions, namely (1) sensory, (2) cognitive, and (3) affective. Table 1 displays the dimensions of consumer aesthetic value and the development of items based on the literature review.

Table 1. Dimensions and Items of Consumer Aesthetic Values

Dimensions	Discription	Items	Refference
Sensory	Utilizing multiple sensory channels by consumers to feel and perceive services (art gallery).	Content (exhibited artworks): beauty, composition, color, form, unity, texture.	Bourgeon-Renault (2000); Colbert & St-James (2014); Csikszentmihaly & Robinson (1990); Kulka (1981)
		Context (environment where artworks are exhibited): architecture, layout, cleanliness, display, fragrance, lighting, atmosphere.	Bitner (1992); Wagner (1999a); Botti (2000); Wang et al. (2013); Nuttavuthisit (2014)
Cognitive	During the cognitive mastery stage, consumers engage in contemplation, evaluation, and understanding.	style, theme, meaning, technique, material, originality, comparison, knowledge, contemplation, stimulation	Leder et al. (2004); Cupchik (1995); Russell (2003); Radbourne et al. (2010); Stecker (2012); Newman & Bloom (2012)
Affective	The emotional state of consumers arises as an assessment of a consumption experience.	joy, delight, happiness, joyfulness, admiration, fascination, passion	Botti (2000); Cupchik (1995); Scherer (2005); Markovic (2012)

Source: Data Processed (2023)

At the initial stage, after item development, the researcher used the Content Validity Index (CVI) to assess content validity and sought three experts' opinions to evaluate the content's representativeness and the substance of the measurement tool (Aiken, 1985). Items with a CVI above 0.75 were retained, while others were discarded. The CVI results indicated that 25 items or indicators constituted the aesthetic value construct, demonstrating that 80% were correctly classified. Further, the researcher collected data through a field survey based on this measurement model. There were 242 valid responses gathered from 285 potential respondents. The subject-to-variable (STV) ratio is 5:1, making it acceptable, according to Hair et al. (2014) and MacKenzie et al. (2011). Respondents came from various art galleries in Yogyakarta, including Gallery R.J. Katamsi (22.3%), Langgeng Art Foundation (18.2%), Jogja Galeri (17.8%), Sangkring Art Space (14.5%), Bentara Budaya (15.3%), and Taman Budaya Yogyakarta (12%). Most respondents were male (58%), with most being between 16 and 25 years old (37%).

The researcher conducted an exploratory factor analysis (EFA) using SPSS version 2.3. The main objective of this factor analysis is to uncover the co-variation among latent variables, thereby reducing the number of observed variables. Subsequently, the researcher conducted data analysis and assessed the goodness of fit for the measurement model. KMO score revealed a value of 0.843, suggesting that the sample responses were sufficient. Bartlett's Test of Sphericity also showed significance (0.00), and the item communalities were acceptable, with values exceeding 0.40.

To ensure the absence of validity concerns, conceptual blending, or multidimensionality issues, the researcher removed several indicators that posed problems (Mackenzie et al., 2011). The study excluded indicators with insignificant loadings below 0.50 and those with substantial and statistically significant cross-loadings. The researcher removed 3 items and retained 22 measurable items for further calculations. After rerunning the factor analysis test using the remaining 22 items, the KMO value and Bartlett's Test of Sphericity were obtained at 0.853 with a significance of 0.000. Furthermore, items were grouped into four factors, each with factor loadings greater than the required criterion of 0.4. Additionally, there were no more instances of cross-loading in each item. Finally, the analysis findings reveal that individual items with strong inter-correlations form clusters within the existing factors. In Table 2, it can be observed that the first factor consists of eight items. The second factor comprises seven items. The third factor consists of four items, while the fourth and final factors comprise three items.

Table 2. Pattern Matrix

	Faktor			
	1	2	3	4
Sensory				
A2				0,796
A3				0,824
A4				0,831
A5		0,733		
A6		0,636		
A7		0,769		
A8		0,738		
A10		0,826		
A11		0.769		
A14		0,787		
Cognitive				
B2			0,780	
B3			0,726	
B4			0,843	
B5			0,735	
Affective				
C1	0,743			
C2	0,820			
C3	0,797			
C4	0,761			
C5	0,746			
C6	0,811			
C7	0,810			
C8	0,792			

Source: Data Processed (2023)

There are two dimensions resulting from statistical tests in the sensory category. The first dimension is labeled *Artworks*, which measures individual sensory aspects in perceiving artworks exhibited in an art gallery. Respondents are asked about their assessments and interests in artworks' form, composition, and beauty. The first dimension consists of three items, as seen in Table 3. The second dimension is *Facilities-Place*, measured by asking respondents about their assessments and interests in the gallery's architecture, walls and floors, spatial layout, cleanliness, lighting, artwork display, and the gallery's atmosphere. The second dimension consists of seven items, as seen in Table 3. The cognitive category is the third dimension, and it is called *Knowledge*. This dimension measures how respondents gain knowledge and understanding from their experience visiting art galleries. The third dimension consists of 4 items, as seen in Table 3. The fourth dimension is the affective aspect, which is then named *Emotion*, consists of 8 items.

Table 3. Aesthetic Value: Dimension and Scales

Dimension	Codes	Item of questions
Artworks	Aw1	I interested in the form of the exhibited artwork
	Aw2	I like the overall composition of the exhibited artwork.
	Aw3	I appreciate the beauty of the exhibited artwork.
Facilities-Place	FP1	I appreciate the architectural display of the art gallery.
	F2	The colors of the walls and floors of the art gallery complement and harmonize with each other.
	FP3	The layout of the art gallery space makes it easy for me to move around.
	FP4	The cleanliness of the art gallery is always well-maintained.
	FP5	The lighting in the gallery space is sufficient for me.
	FP6	The arrangement or display of artworks is very appealing to me.
	FP7	Overall, the atmosphere of the art gallery provides comfort for me.
Knowledge	KL1	I gained an understanding of the meaning of this work of art.
	KL2	I gained an understanding of the originality of this work of art.
	KL3	I can distinguish one artwork from another.
	KL4	I get new knowledge.
Emotion	ET1	I feel positive emotions.
	ET2	I feel a sense of joy.
	ET3	I feel a sense of happiness.
	ET4	I feel a sense of contentment.
	ET5	I feel a sense of delight.
	ET6	I feel a sense of admiration.
	ET7	I feel a sense of fascination.
	ET8	I feel a sense of excitement.

Source: Data Processed (2023)

3. Examination of the Effect of Aesthetic Value on Customer Satisfaction and Loyalty

In study 2, the main focus of the research was to use aesthetic value to predict the two main consumer behavior outcomes of satisfaction and loyalty.

3.1. Literature Review

3.1.1. Influence of Aesthetic Value on Satisfaction, Recommendation Intention, and Revisit Intention

In the domain of services, several researchers, such as Babin et al. (1994) and Holbrook (1994), emphasize the relevance of affective or emotional dimensions alongside cognitive or economic 22perceived customer value experience, encompassing not only utilitarian aspects but also symbolic, hedonic, and aesthetic aspects of the consumption process. Holbrook (1999) develops types of customer value, one of which is intrinsic value. Intrinsic value occurs when specific consumption experiences are valued as ends in themselves, for their own sake, as self-justification or autotelic.

In the consumption of art services (such as art galleries), aesthetic value is one of the intrinsic values customers encounter in a consumption experience (Holbrook, 1999; Wagner, 1999a). Customer value has long been considered the most essential and comprehensive antecedent of customer satisfaction (Gallarza et al., 2013; Gallarza et al., 2016). Research on customer value in the hotel context indicates that visitors' evaluations of aesthetic value predict visitor satisfaction (El-Adly, 2018). Similarly, research by De Ruyter et al. (1997) in the museum context shows that when customers appreciate a museum, it influences their tendency to experience satisfaction. Customers are inclined to experience satisfaction when they perceive positively the experience and aesthetic value they obtain from an artwork. Therefore, a positive perception of aesthetic value from an experience visiting an art gallery will create positive customer attitudes and feelings, leading to customer satisfaction.

This allows for the formulation of the following hypothesis:

H1: Customer aesthetic value positively affects customer satisfaction.

In line with the existing theoretical framework (Gallarza et al., 2017), besides satisfaction, loyalty is the second output or the most prominent influence on consumer value. Zeithaml et al. (1996) and Brady et al. (2005) use loyalty in the form of behavioral intention to capture different outcome dimensions, such as recommendation, repeat purchase, and willingness to buy at a higher price. This dimension is also a form of consumer loyalty (Oliver, 2010, p. 432), where consumer loyalty is most widely applied empirically combined with measures from word-of-mouth recommendations and repurchase intentions (Cronin et al., 2000; Harrison & Shaw, 2004; Gallarza & Gil-Saura, 2006; Hu et al., 2009). Research by Gallarza et al. (2016) specifically formulated that aesthetic value directly affects consumer loyalty.

This allows for the formulation of the following hypothesis:

H2: Customer aesthetic value positively affects the intention to recommend art galleries.

H3: Customer aesthetic value positively affects the intention to revisit the art gallery.

3.1.2. Influence of Satisfaction on Recommendation Intention and Revisit Intention

Customers who feel satisfied tend to lean towards continued interest in a product or service, likely leading to intentions for repeat purchases or returns (Oliver, 2010; Harrison & Shaw, 2004). Based on research findings (Cronin et al., 2000), loyalty is not only expressed by the intention to return but also by the intention to recommend. The importance of customer satisfaction in the service sector is typically illustrated by its emphasis on word-of-mouth communication, as opposed to traditional promotional methods such as advertising. Word-of-mouth communication efficiently attracts customers to cultural facilities such as museums and art galleries (Di Maggio, 1985, cited in Harrison and Shaw, 2004). Hausmann (2012) also states that word-of-mouth is essential in the current era of social media, as it has become a highly effective way to reach an unlimited number of people. Several studies (Harrison & Shaw, 2004; Hausmann, 2012; Santos & Meléndez, 2016) in the context of museums and art galleries formulate the influence of customer satisfaction on the intention to recommend and revisit art galleries.

This allows for the formulation of the following hypothesis:

H4: Customer satisfaction positively affects the intention to recommend art galleries.

H5: Customer satisfaction positively affects the intention to revisit the art gallery.

3.2. Research Methods

To test our hypotheses, the data were primarily obtained from respondents through questionnaires based on purposive sampling techniques of visitors to art galleries in Yogyakarta, namely Jogja Galeri, Sangkring Art Space, Langgeng Art Foundation, Galeri R. J. Katamsi, Bentara Budaya, and Taman Budaya Yogyakarta. We found that a total of 225 questionnaires were obtained. A total of 133 respondents (59.1%) are men, making up the majority of the respondents, 86 respondents (37.2%), or most responders, were between 16 and 25. Data collected shows that Jogja Gallery with 45 people (20%), Langgeng Art Foundation with 30 people (13%), Sangkring Art Space with 35 people (15.6%), Taman Budaya

Yogyakarta with 36 people (16%), Bentara Budaya with 35 people (15.6%), and Gallery R.J. Katamsi with 44 people (19.6%).

Further, to measure aesthetic value, we adopt four formative indicators from study 1: artwork, facility-place, knowledge, and emotion. The customer satisfaction variable was measured using 5 (five) reflective indicators from Taylor et al. (2004). The intention to recommend variable was measured using 3 (three) reflective indicators adapted from Babin et al. (2005). The intention to revisit the variable was measured using 3 (three) reflective indicators adapted from Taylor et al. (2004). A Likert scale with five points, 1 for strongly disagreeing, 2 for disagreeing, 3 for neutral, 4 for agreeing, and 5 for strongly agreeing, was used to quantify the variables. The data in this research were analyzed using a structural equation model with smartPLS software. The first step involved testing the validity and reliability of the model, followed by the discriminant validity test, multicollinearity, R test, and finally, the hypothesis test by comparing the t-test results with a value above 1.96 and a probability value <0.05 indicating influence.

3.3. Research Findings and Discussion

3.3.1. Measurement Model Evaluation

In this study, there are two measurement models: the formative measurement model for the aesthetic value variable and the reflective measurement model for customer satisfaction, intention to revisit, and intention to recommend.

Table 4. Formative Measurement Model Test Result

Variable	Code	Indicators	*Outer Weight*	p-*value Outer Weight*	*Outer Loading*	*p-value Outer Loading*	*Outer* VIF
Aesthetic Value	AW	Art-Work	0,343	0,001	0,520	0,000	1,052
	FP	Facilities-Place	0,264	0,011	0,792	0,000	1,868
	KL	Knowledge	0,178	**0,077**	0,762	0,000	2,094
	ES	Emotions	0,533	0,000	0,893	0,000	2,526

Source: Data Processed (2023)

Based on the results of testing the formative measurement model in Table 4, it can be seen that almost all indicators of aesthetic values, such as Artwork, Facilities-Place, and Emotions, show significant outer weight values ($p < 0.05$). Only one indicator has an insignificant outer weight value, namely Knowledge. Even so, Hair et al. (2019) state that even though the outer weight value is insignificant, if the indicator has an outer loading value above 0.50 and a significant $p < 0.05$, it can be retained. Table 4 shows that the Knowledge indicator has an outer loading value above 0.50 ($p < 0.01$), so the indicator can be retained in the measurement model.

The next check in the formative measurement model for the aesthetic value variable is to look at the outer VIF value. Table 4 shows that the test results indicate that the outer VIF values for all indicators, such as Artwork, Facilities-Place, Knowledge, and Emotions, have an outer VIF value <5, thus indicating that there is no multicollinearity among the measurement indicators.

Table 5. Reflective Measurement Model Test Results

Variable	Code	Indicator	*Outer Loading*			*Composite Reliability*	*Cronbach's Alpha*	AVE
			1	*2*	*3*			
Customer Satisfaction	CS	CS1	0,791					
		CS2	0,852					
		CS3	0,915			0,923	0,894	0,706
		CS4	0,905					

		CS5	0,724					
Intention to revisit	IRV	IRV1		0,794				
		IRV2		0,872		0,895	0,823	0,741
		IRV3		0,911				
Intention to recommend	IRC	IRC1			0,913			
		IRC2			0,953	0,946	0,914	0,853
		IRC3			0,904			

Source: Data Processed (2023)

Further, regarding the results of testing the reflective measurement model of customer satisfaction variables, intention to revisit, and intention to recommend, for convergent validity, Table 5 shows that the customer satisfaction variable measured using 5 indicator items as a whole indicate good convergent validity because all indicators are clustered in one factor. The loading value is ≥ 0.70, besides the AVE value ≥ 0.50. Likewise, with intention to revisit variable measured using 3 indicator items, Table 5 shows that all items have a loading value of ≥ 0.70 clusters in one factor and an AVE value of ≥ 0.50, so it has good convergent validity. The following variable, intention to recommend, measured using 3 indicator items, also has good convergent validity. Table 5 shows that all items have a loading value of ≥ 0.70 and an AVE value of ≥.50. Meanwhile, when viewed from construct reliability, Table 5 shows that using composite reliability and Cronbach's alpha assessments, all variables, namely customer satisfaction, intention to revisit, and intention to recommend, have good construct reliability because the value is ≥ 0.70 (Hair et al., 2019).

Table 6. HTMT Value

	Customer Satisfaction	Intention to Revisit	Intention to Recommend
Customer Satisfaction			
Intention to Revisit	0,733		
Intention to Recommend	0,734	0,544	

Source: Data Processed (2023)

Hair et al. (2019) recommend HTMT analysis to test discriminant validity because it is considered more sensitive and accurate with the recommended value ≤ 0.90. Table 6 shows that the HTMT value is below 0.90 in each pair of variables, so all variables have good discriminant validity.

3.3.2. Structural Model

The next stage of evaluating the structural model is to check the R2 value of the endogenous variables. Table 7 shows that the effect of aesthetic value on customer satisfaction has a coefficient of determination (R2) of 0.30, so it can be said to have low criteria, according to Chin (1998). Next, respectively, the effect of aesthetic value and satisfaction on intention to revisit has a coefficient of determination (R2) of 0.42. In contrast, the effect of aesthetic value and customer satisfaction on the intention to recommend has an R2 value of 0.47. So, both have moderate explanatory value strength (Chin, 1998).

Table 7. *R Square*

Variable	R^2
Customer Satisfaction	0,30
Intention to Revisit	0,42
Intention to Recommend	0,47

Source: Data Processed (2023)

SmartPLS evaluates research ideas and decides which ones to accept or reject. The hypothesis can be accepted if the p-value is less than 0.05 and the path coefficient t-value is greater than 1.96. According to Table 8 and Figure 2, the accepted hypotheses are as follows: H1 stated that aesthetic value positively affects customer satisfaction. The data supports the idea that aesthetic value positively impacts customer satisfaction (t=12.471 and p=0.000). Therefore, H2 is also supported. Aesthetic value positively affects intention to recommend (t=2.043 and p=0.042). H3, which stated aesthetic value positively affects intention to return, was also supported (t=2.191 and p=0.029). Further, H4 stated that customer satisfaction positively affects intention to recommend (t=11.006 and p=0.000) and customer satisfaction positively affects intention to return (t=9.470 and p=0.000), both supported by the data. So, all hypotheses in this study are accepted.

Table 8. *Path Coefficient*

Hypotheses	**Variable Correlation**	***Path Coefficient***	**t-*Statistic***	**p-*Value***	**Result**
Hypothesis 1	Aesthetic Value -> Customer Satisfaction	0,548	12,471	0,000	Accepted
Hypothesis 2	Aesthetic Value -> Intention to Recommend	0,116	2,043	0,042	Accepted
Hypothesis 3	Aesthetic Value -> Intention to Revisit	0,176	2,191	0,029	Accepted
Hypothesis 4	Customer Satisfaction -> Intention to Recommend	0,604	11,006	0,000	Accepted
Hypothesis 5	Customer Satisfaction -> Intention to Revisit	0,533	9,470	0,000	Accepted

Source: Data Processed (2023)

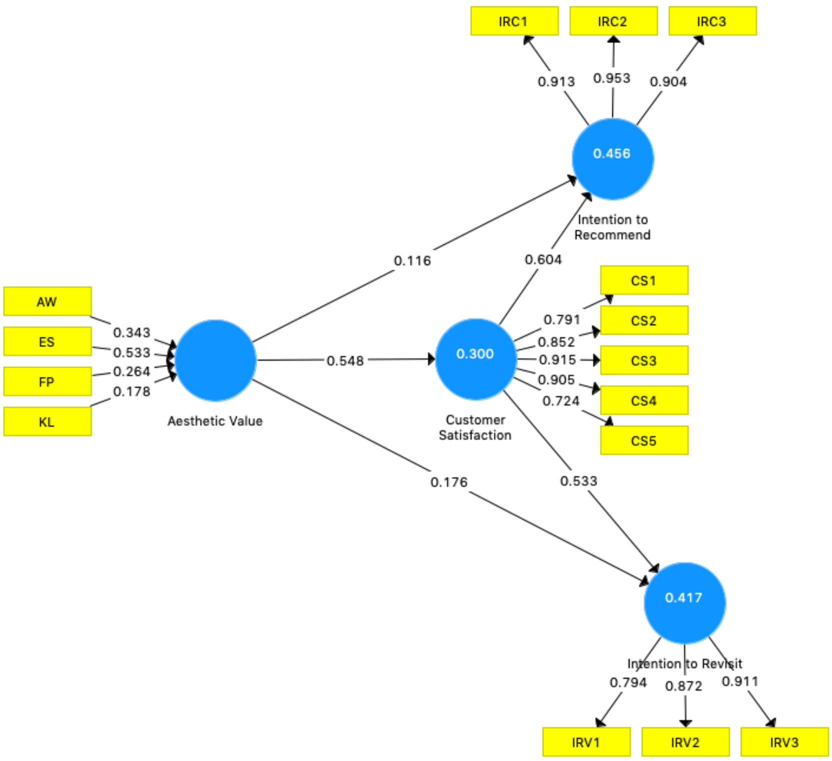

Figure 2. Structural Model

4. Discussion

This research studies aesthetic value in arts organizations, as this field is rarely encountered in the literature on customer value. This is important because aesthetic value can demonstrate a significant role in the competitiveness of an arts organization and the cultural-based business trends in the creative sector. This research focuses on visitors who play a strategic role in the advancement and sustainability of arts organizations because visitors' perceptions of value are crucial for their satisfaction and loyalty to the organization.

This study tests five hypotheses derived from the conceptual model of aesthetic value, consumer satisfaction, intention to revisit, and intention to recommend. As predicted, aesthetic value positively influences satisfaction, intention to revisit, and intention to recommend. This explains that aesthetic value emerges as a form of consumer experience perception in the context of art services (Wagner, 1999a; 1999b; Pine & Gilmore, 1999), and if it then receives a high overall score on that scale, consumers will be more satisfied with the service. However, the perception of high aesthetic value affects satisfaction more related to the past (already occurred) and directs toward loyalty that leads to the future. Thus, it is reflected in consumers' tendency to visit again and recommend the service to others.

So far, aesthetic value has been considered a determinant factor (Gallarza & Saura, 2006) or a dimension of customer value (Holbrook, 1999; Mathwick et al., 2001). In the customer experience, aesthetics plays a vital role as individuals encounter it daily, at home, in retail settings, public spaces, or notably in service sectors like art, entertainment, and various cultural offerings. In the consumption of art services such as art galleries, aesthetic value becomes a dominant perceived customer value compared to, for example, utilitarian value. It is because art is consumed more for its meaningfulness to oneself, emotions, and sensory experiences that arise rather than its practical usefulness.

5. Conclusion

Theoretically, this research clarifies the understanding of aesthetic value as one of the dominant forms of consumer value in art consumption, as articulated by Holbrook (1999) and Wagner (1999a; 1999b). The conceptualization and measurement aesthetic value provide a better understanding of individual responses in the context of art consumption, especially art services. Within the framework of consumer experience theory, customer aesthetic value is defined as the consumer's appreciation of an art object involving cognitive, affective, and sensory aspects based on the overall consumer experience, which is intrinsically assessed as self-oriented and self-terminating. Based on intrinsic motivation in art service consumption (art galleries), various key dimensions such as artworks, facilities, knowledge, and emotions shape consumer aesthetic value.

Empirically, research testing results support and confirm that aesthetic value is an important customer value in art service consumption and influences customer satisfaction and behavioral intentions, such as the intention to recommend and intention to revisit the art service. Consumer aesthetic value not only directly influences consumer satisfaction but also directly influences intention to recommend and intention to revisit.

Practically, art service managers need to pay attention to the importance of consumer aesthetic value and strive to create loyal consumers to experience better organizational growth. Managing aesthetic value will lead to consumer satisfaction, secure loyalty, and ultimately increase profits for the organization. Additionally, marketing practitioners involved in projects or activities to understand and enhance the organization's service offerings to its customers can use the aesthetic value scale to assess, plan, and track tangible and intangible aspects of their service offerings.

This research, of course, has some limitations. The researcher acknowledges that the sample size of art gallery consumers is not proportional across galleries. The sample size is relatively small, although it still meets the required criteria. Nevertheless, the general characteristics of consumers' psychological attributes seem similar across art galleries. The research also focuses on one consumer value, namely aesthetic value, in the context of art services, namely art galleries. It is still possible to expand or compare with other consumer values.

Future research could address several issues. First, there is a need for further research on the determinants and consequences of aesthetic value. Second, it studies the relationship and compares aesthetic value and other customer values in consumer behavior. Third, there is a need to develop an aesthetic value measurement scale for product categories. Developing a broader aesthetic value scale will further clarify the role of aesthetic value in consumer behavior.

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ECONOMIC GROWTH AND POVERTY ALLEVIATION: REINFORCING THE DIGITAL DIVIDE TOWARDS POVERTY REDUCTION-A SYSTEMETIC LITERATURE REVIEW

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ABSTRACT

With the rapid involvement of the digital divide to reduce poverty in Uganda , the social spheres have opted to get involved in the digital divide, however there is limited research on the biometric and analysis of the digital divide, this study set out to investigate the relationship between the digital divide and poverty, the objectives of this study were To examine the relationship between poverty and the digital divide from 2018 to 2022 to determine the level of poverty in Uganda , hence the study uses the literature review obtained from Scopus database published between 2018 to 2022 and a five step method including 1) defining keywords 2) initializing search outcomes 3)inclusion and exclusion of some elements of the initial result 4) compiling initial data context, the digital divide involvement towards poverty reduction has helped to physically display publication assessment over time and identify domains for current poverty measures and finally the research draws a road map for future investigations on poverty

Keywords: *Digital Divide, Poverty, Biometric analysis. Network analysis*

1. Introduction

The digital divide is a social and economic issue that has gained significant interest in recent years and Prior that ye & yang 2020). It refers to the disparity in access to and usage of information and communication technologies, there is no nation that is completely free from poverty. Poverty is a global phenomenon, which affects continents, nations and peoples differently (Vilakazi et al., 2020). It Impacts people in various depths and levels, at different Times and phases of existence. The main difference is the magnitude and prevalence of the digital divide in the malaise. Nations in sub-Saharan Africa, South Asia and Latin America are currently with the highest level of poverty and consequently with the lowest level of socio-economic Development They also have the highest level of social insecurity, Violence, unrest and generally low standard of living (Cheng, 2020).

It is the inability to attain a minimum level of standard of living, this definition considers income and expenditure per capital to be adequate yard stick for measuring welfare. The definition is used to determine who falls below or above the minimum standard of living (Njiru, 2018). Uganda is one of the well-endowed countries on African Continent having a rich nature resource base including high rainfall and fertile land in most parts of the country. Research carried in the 2018 Indicated that the country is among the fastest growing economies in the sub- Saharan region with a high rate of economic growth (Basin, 2008).

Uganda, remains one of the World's poorest country ranked 159th out of 175 poorest countries in the world as per the Human Development Index (1998),started Its independence in 1962, Poverty Level of barely 69% of its population in 1998 less than US $1 dollar a Day and is today struggling to bring it down. It is current teeming Population of about 33.1 million. Of the number of the poverty stricken People, the majority being — in the rural areas where illiteracy Prevalence is high, potable water and health facilities are rarely Available, road and electricity infrastructures are either unavailable or Ill-managed, divide and helps rural areas achieve social inclusion (Ye & Yang, 2020).

The World Bank and United Nations Development Program (UNDP)'s 2002 Human Development Index (HDI) of 0.449 aptly indicate the deplorable state of Uganda's level of poverty and low Human development (Mcneill, 2016). This is in spite of the digital divide that the country is richly endowed with all kinds of nature resources. Unfortunately Uganda's proportion of the poor has doubled over the last two Decades, amid increasing tax revenue. For instance in 2001/02 it collected over sh1266.lb.Uganda's endowment is in opposite direction with her poverty level. Furthermore, according to World and UNDP2001 statistics, Uganda which impressively exports raw coffee And other food stuff Production respectively, its GNP per capital ofUS$280 and is unenviable classified as the poorest nation in the World (Majerová, 2012).

Poverty is currently one of the most serious problems in the World. Recent estimates indicate that about 1.5 billion people live below the Poverty line of Less than one dollar per day in the whole world. Out of The 1.5 billion people, Africa contributes about 250 million, which is about 17% of the world's total Poor population. According to the United Nations Reports (1999), Uganda's Human Poverty Index (HPI) was only 4l.3%, which places the country among the 25 poorest Nations in the world (Pogge, 2014). The HPI for some other African countries like Zimbabwe, Botswana, Kenya, Burkina Faso and Niger were 17%, 22.9%, 26.1%, 58.3% and 66.0% respectively. Additional data from The UHPI (2003) further indicate that life expectancy for Uganda was 45 years, literacy rate was 65% and 42.l% of the rural population do Not have access to potable water, healthcare facilities and electricity, these findings indicate that there is a "digital divide" and an "education threshold" in digital finance. Based on these results, this paper suggests measures for alleviating consumption inequality among(Wang et al., 2022).

What follows is the story of the development of the HDI, Beginning with the early intellectual history of welfare economics and Following this field through three successive revolutions in thought Culminating in the theory of human development this history is traced from the divided origins of economic "utility" theory to Sen's human Capabilities approach. Since HDI's first introduction in 1990, many Scholars have offered critiques of its underlying digital divide and its method of calculation. In many cases, the UNDP has responded by improving HDI As a measure of Economic development based on these critiques.

So many people in Uganda are facing a problem of lack of technological advancement which has led to un employment, and poverty hence leading to high crime rates in Uganda , however with the digital divide advancement in all remote areas of Uganda it can enable people In rural areas to access internet and work online to earn a living . As it has been known in Uganda that every government embarks on one form of poverty reduction strategy or the other. However, what has remained unanswered is the extent to which these programs have impacted on the poor: the target population. Recent studies in 2020 done In Uganda on poverty and digital divide programs Indicated that considerable gap exists between the target objectives:- alleviating or eradicating poverty and achievement. It seems that the Efforts of various governments are ineffective and therefore not much has been done to actualize the benefits. For poverty reduction Agencies, their results do not seem to justify the huge financial Allocations to them. Poor people's perceptions of formal poverty Reduction institutions are largely that of ineffectiveness and irrelevance in their lives as government poverty reduction activities contribute little in their struggles to survive and rarely help them to escape poverty

2. Literature Review

2.1. Digital Divide

The digital divide remains a significant concern for both developed and developing countries, impacting various aspects of society. In the context of poverty reduction in Uganda, understanding the dynamics of this divide is crucial. recent research by Liu , (2021) in china ,as published in sustainability , has shed light on the impact of digital finance on consumption inequality among farmers. The study's findings reveal that digital finance plays a critical role in shaping consumption patterns, potentially reducing inequalities among farmers. This insight is particularly relevant to Uganda, where digital finance can be harnessed to empower marginalized communities and bridge the economic gap.

Another relevant study, conducted by Ye & Yang, (2020) and also published in sustainability , highlights the transition from the digital divide to social inclusion, focusing on mobile platform empowerment in rural areas . This research underscores the transformative power of mobile platforms in connecting individuals in remote and underserved regions, facilitating access to information, resources, and opportunities. Understanding the strategies and outcomes presented in outcomes presented in this study can be valuable for designing interventions in Uganda that harness mobile technology to empower disadvantaged populations, ultimately contributing to poverty reduction.

The insights from these studies by Ye and Yang, (2020) emphasize the potential of digital technologies to mitigate the digital divide and enhance social inclusion , particularly in rural areas . By adapting these lessons to the Ugandan context, policy makers and practitioners can develop targeted interventions that leverage digital tools and platforms to reinforce the structural art of addressing the digital divide ultimately working toward poverty reduction in the country.

2.2. Taxonomy for digital divide

Table 1. Taxonomy for digital dived

AUTHOR/YEAR	TITLE	VARIABLE	INDEPENDENY
Q.MA, A CHAN/2020	Bridging the digital divide for older adults via observations training effects of the model	Age Gender Race Ethnicity location	Education level Income Employment status House hold size
Diana V and Christian C Weller/ 2022	Economic inequality , the digital divide and remote learning during covid 19	Access to devices Internet connectivity Digital skills Frequency of the internet use	Internet infrastructure Availability of devices Technology adoption Technological literacy
R Reynolds MC Gowan et al/ 2022	Digital divide , critical and crisis informatics perspective on k-12 emergency remote teaching during the pandemic	Income Employment status Education level Household income	Education level House hold income Occupation Social economic status
Fei /2022	Covid 19 challenges and the digital divide	Rural / urban divide	Regional infrastructure

3. Methodology

The qualitative analysis method is one of the research methods used in this study to, it involves analyzing qualitative data, extracting valuable insights from textual data obtained from Scopus and discourse within the identified literature, it aims to uncover nuanced insights into structural aspects of the digital divide and how they contribute to poverty reduction initiatives in Uganda. This chapter presents the methods and and procedures that will be in the study in the following order , data source , data collection techniques , data analysis techniques, research type and results, the qualitative research methodology for this study involves an in depth analysis of the digital divide's impact on poverty reduction in Uganda . to achieve this we adopt a multi-faceted approach, hence conducting a comprehensive literature review to gain a deep understanding of existing theories , concepts and findings related to the digital divide and poverty reduction Wang, Chen , and Ding (2022). The data for this study was sourced from reputable scholarly databases, specifically Scopus. Scopus provides access to vast collection of academic journals, and articles offering a comprehensive foundation for exploring the research landscape.

The data collection for this study was conducted using secondary data analysis , in this case the data was extracted from scholarly articles available on Scopus , the articles selected for analysis were focused on digital divide, poverty reduction , and related themes in the context.

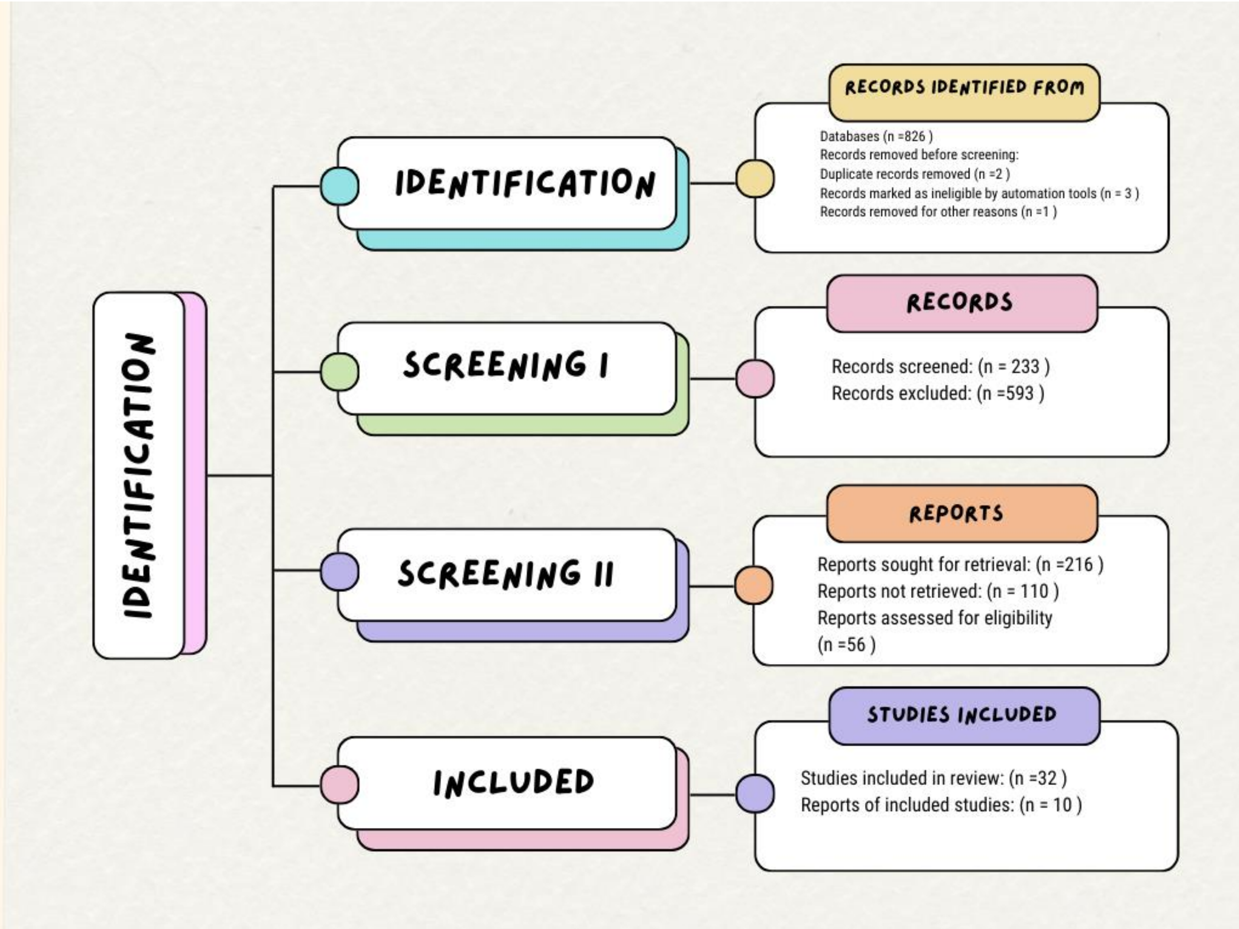

Figure 3. Data Collection Technique

The analysis of the data involved a systematic review and synthesis of the information gathered from the selected articles. The research employed content analysis to identify key themes, patterns, and insights related to the structural aspects of the digital divide and its implications for poverty reduction in Uganda.

4. Result

4.1. Publication by Year

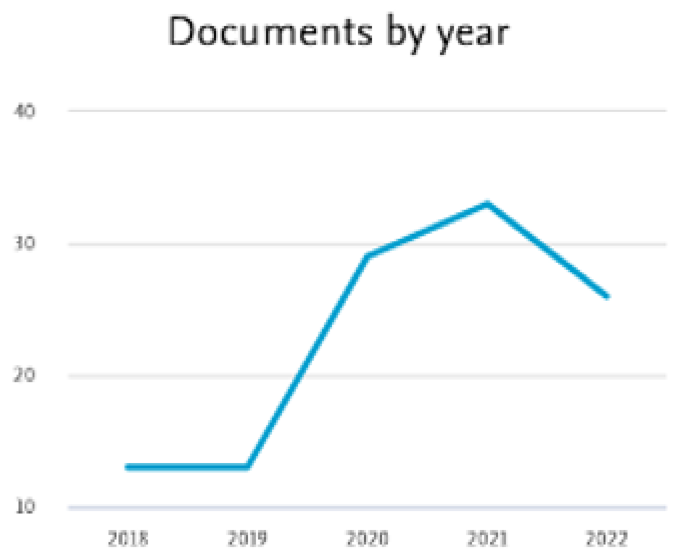

Figure 4. *Publication by year*

From the portrait of the development of this study, it was found that several years responded to the study about digital divide in Uganda., starting from 2018 to 2022, in 2018 there was a total number of 10 documents published related to digital divide inclusion, in addition the overall trend increased in 2019 to 17 documents related to bridging digital divide amidst educational change by Lui,j , impact of digital finance by Ding, S and by 2020 the the publication rate between the three years had increased to 30% ,therefore we can conclude that between 2021 and 2022 there was a decline of over 15 documents related to digital divide in Uganda

4.2. Publication by Country

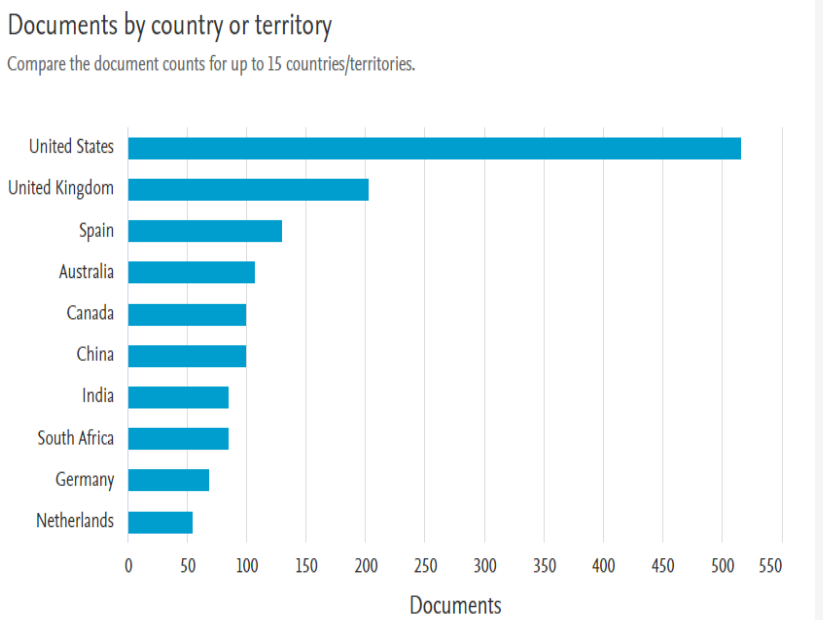

Figure 5. *Publication by Country*

From the fig 3, it can be analyzed that the United states is studying the digital divide in Uganda generally terms related to digital divide through articles like challenges of digital divide inclusion by Ye Wang, making it the largest with 530 publications on digital divide, followed by united kingdom accounting for 200 documents on digital divide and it emerges the second in the digital divide publication in Uganda , hence Spain also studies the digital divide in Uganda in 130 documents ,.Australia in 110 documents , Canada and China 100 documents, however the publication graph decreased with the publication as for India and south Africa show a common interests in the number digital divide publication up to 75 documents, and it continued lowering up to 55 documents by Germany and Netherlands with the lowest publication of 50 documents.

4.3. Publication by author

TABLE 2. The top 10 publications by authors from Scopus on digital divide starting from Robinson, L with the highest number of 4 publications on digital divide in Scopus between 2018-2022, and the fluaction went on decreasing from 4 to 3 documents published by glank G and Ragnedda M and continued reducing to 2 documents published by 7 authors such as Akcaogluim .m, Bernstein.m, Curtis .R, Downey.J, Kale, Laura and leguine .A in Scopus between 2018-2022.

Figure 6. Publication by Author

This a narrative summary highlighting major clusters, including citing articles and cited references, the importance of summarized in terms of citation based on metrics such as citation bursts, network based metrics such as degree centrality and betweenness centrality.

Table 2. Narrative Summary of Major Clusters

ClusterID	Size	Silhouette	Label (LSI)	Label (LLR)	Label (MI)	Average Year
0	44	1	the sociodemographic digital divide in mobile health app use among clients at outpatient departments in inner mongolia, china: cross-sectional survey study	inner mongolia china (4.27, 0.05)	inner mongolia china (0.17)	2019
1	31	1	from digital divide to social inclusion: a tale of mobile platform empowerment in rural areas	mobile platform empowerment (4.67, 0.05)	mobile platform empowerment (0.14)	2016
2	28	1	examining the impact of digital finance on farmer consumption inequality in china	digital finance (5.86, 0.05)	digital finance (0.09)	2019
3	25	1	is there a digital divide between urban students and migrant students in china?	urban student (5.86, 0.05)	urban student (0.09)	2018
4	23	1	bridging digital divide amidst educational change for socially inclusive learning during the	bridging digital divide amidst (5.18, 0.05)	bridging digital divide amidst (0.11)	2020

A VISUALISATION OF THE NETWORK ANALYSIS ON DIGITAL DIVIDE KEYWORDS

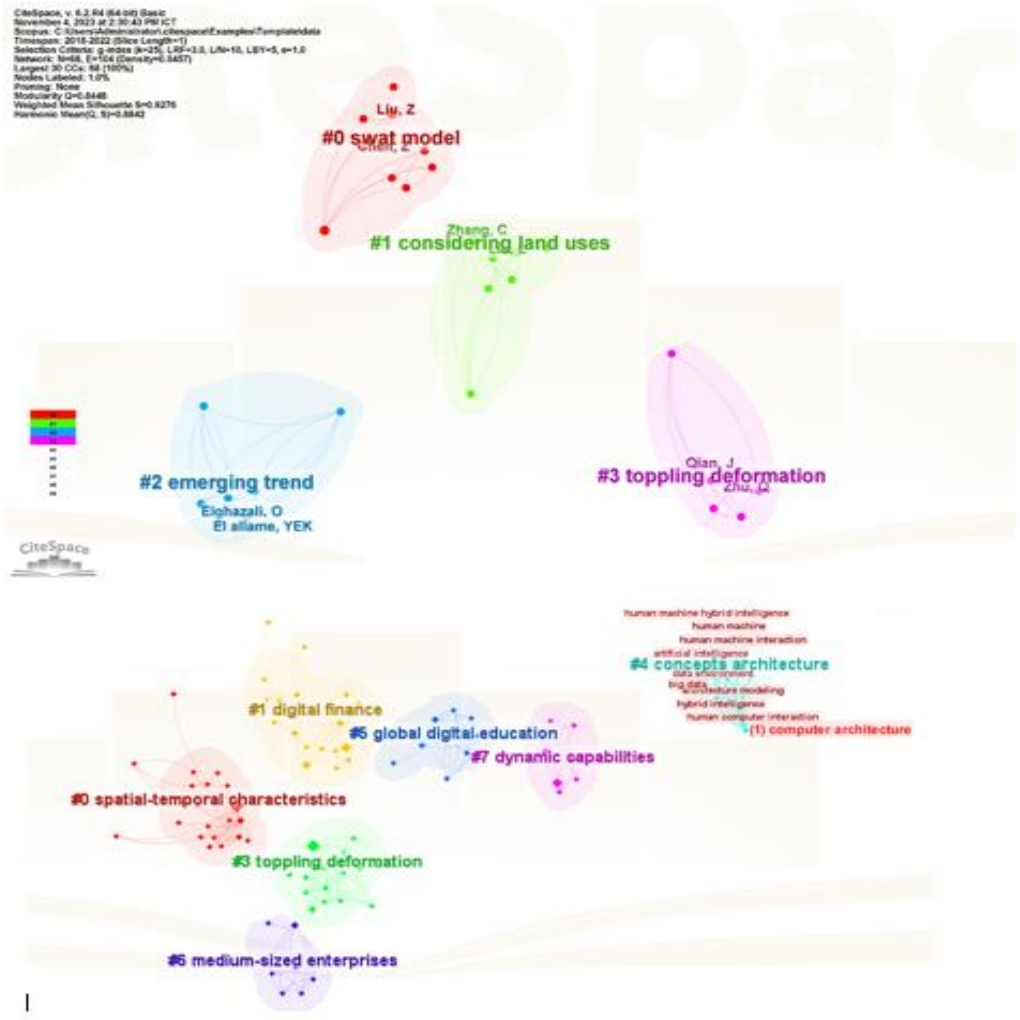

Figure 7. A visualisation of the network analysis on digital divide keywords

In the context of cluster 1 Digital finance has the potential to bridge gaps by providing access to financial services for underserved populations. Mobile banking, digital payment systems, and online lending platforms can reach remote or unbanked areas where traditional banking infrastructure is lacking. Digital finance can reduce transaction costs, making financial services more affordable for low-income individuals. This affordability can attract more people into the formal financial system.

In the context of cluster 2, emerging trends in technology such as the internet of things, artificial intelligence and big data are often concentrated in urban areas , The emergence of smart cities and the clustering of technological advancements within urban spaces , known as the cite space cluster , is intimately connected to digital divide . this phenomenon refers to the unequal access to and use of technology between different groups of people, typically based on factors like income , education , geographical location and infrastructure availability.

In the context of cluster 3 Just as toppling deformation results in a change in the orientation of rocks, the digital divide causes a shift in opportunities. Disparities in access to technology create an imbalance where certain groups or communities have greater access to opportunities presented by digital advancements, while others are left behind. Imbalance in Advancement: The digital divide can create an imbalance in technological advancement. Communities or regions lacking access to technology or proper infrastructure face a 'tilt' in their ability to progress economically, socially, or educationally compared to areas with better access.

Global digital education intersects with the digital divide by highlighting disparities in access to quality educational resources and technology. While digital education has the potential to bridge gaps by offering learning opportunities beyond physical boundaries, unequal access to technology and reliable internet widens the divide. In areas with limited connectivity or resources, students may lack access to online courses, educational tools, or even basic digital literacy, perpetuating disparities in educational outcomes and exacerbating the digital divide.

Dynamic capabilities, in the context of the digital divide, refer to a company's ability to adapt, innovate, and leverage digital technologies effectively. Disparities in resources, skills, and infrastructure create varying levels of dynamic capabilities among businesses. Companies in areas with robust technological infrastructure and skilled workforces can adapt faster to digital transformations, gaining a competitive edge. Conversely, enterprises in underserved regions might struggle due to limited access to technology, hindering their ability to develop and utilize digital capabilities, widening the gap between digitally adept and less advanced firms.

Medium-sized enterprises' (SMEs) relationship with the digital divide often reflects resource discrepancies. SMEs in well-connected areas or those with financial resources can better afford and adopt digital technologies to enhance their operations, market reach, and efficiency. However, SMEs in less developed regions or with limited financial means face challenges in embracing digital tools, leading to reduced competitiveness and restricted growth opportunities, thereby contributing to the digital divide between digitally enabled and disadvantaged businesses.

Conceptual architecture, when applied to the digital divide, refers to the structural design or framework of solutions aimed at reducing disparities in technological access and capabilities. It involves creating strategies, policies, and frameworks that address various aspects of the divide, such as infrastructure, education, affordability, and digital literacy. Conceptual architecture acts as a blueprint for initiatives, guiding the development and implementation of comprehensive solutions to bridge the gap and ensure more equitable access to technology and its benefits across diverse populations and regions.

Top 20 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2018 - 2022
punjab [pakistan]	2018	0.58	**2018**	2018	
sargodha	2018	0.58	**2018**	2018	
commodity	2018	0.58	**2018**	2018	
market system	2018	0.58	**2018**	2018	
ict use	2018	0.58	**2018**	2018	
value chain	2018	0.58	**2018**	2018	
digital mapping	2019	0.8	**2019**	2020	
ict development index	2019	0.6	**2019**	2019	
environmental issue	2019	0.6	**2019**	2019	
multivariate analysis	2019	0.6	**2019**	2019	
spatial analysis	2019	0.6	**2019**	2019	
impact factor	2019	0.6	**2019**	2019	
spatiotemporal analysis	2019	0.6	**2019**	2019	
spatial correlations	2019	0.6	**2019**	2019	
spatial temporal characteristics	2019	0.6	**2019**	2019	
correlation	2019	0.6	**2019**	2019	
urbanization	2019	0.6	**2019**	2019	
index method	2019	0.6	**2019**	2019	
numerical model	2020	0.99	**2020**	2020	
covid 19 pandemic	2021	0.97	**2021**	2022	

Figure 8. *Top 20 Keywords with the Strongest Citation Bursts*

The above table is reflects Key words collected from digital divide articles from Scopus database such as ict use, ict development and digital mapping as well as analyising the years they were published data collected with the strongest citations starting from 2018 to 2020 which shows the strength of the citations from high levels of citation to the lower levels however key words also reveal that the strong citations were made in 2019.

5. Conclusion

According to Poverty alleviation is a key policy debate in recent development Literature. Many researchers the digital divide have argued that the fight against poverty is a necessary condition for division of resources and growth power. The Elaboration of policies for poverty alleviation requires a thorough Knowledge of the poverty phenomenon as well as an understanding of the efficiency of Implemented hence reinforcing the structural art of digital inclusivity highlighted as a pivotal strategy for fostering socio economic growth and diminishing the barriers that perpetuate poverty. By acknowledging the multifaceted nature of the digital divide and its impact on marginalized communities , interventions on the structural art of digital inclusivity as a pivot strategy for fostering socio economic growth and diminishing the barriers that perpetuate poverty

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A STUDY ON PROMOTING TANZANIA'S CULTURAL HERITAGE THROUGH THE LENS OF INDONESIA: *CROSS-CULTURAL COMPARISON*

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ABSTRACT

This study explores how Tanzania can effectively promote its cultural heritage as a key component of tourism, drawing lessons from Indonesia's successful cultural tourism practices. By comparing strategies used in both countries, the study uncovers ways for Tanzania to enhance its cultural promotion, enrich its tourism offerings, and address challenges. Specifically, the research focuses on strategies Indonesia employs to market its cultural heritage, adapting them to Tanzania's context while preserving authenticity. The study's significance lies in boosting Tanzania's tourism sector through better cultural promotion, revenue generation, and preservation, offering insights valuable to tourism officials, cultural organizations, academicians, and the country at large. Methodologically, the study adopts a constructivist research paradigm and a qualitative multiple-case study design, focusing on Arusha in Tanzania and Yogyakarta in Indonesia. Data collection includes interviews and secondary data from reports publications, with thematic analysis guided by the strong structuration theory. The comparison reveals differences in external and internal structures, agency, and outcomes between Tanzania and Indonesia, highlighting the need for Tanzania to shift towards practical implementation in cultural promotion. This study contributes to policy and practice by advocating for revised tourism policies in Tanzania and offers theoretical and practical insights into cultural promotion strategies in Tanzania.

Keywords: *Cultural Heritage, Tourism Development, Cultural Tourism, Tanzania, Indonesia, Comparative Analysis*

1. Introduction

Africans' reliance on oral tradition has led to a significant gap in African knowledge systems, resulting in the loss of valuable knowledge with each passing elderly person. Unlike many cultures of the world that transform past materials into cultural heritage, Africa has struggled to evolve methods for passing down knowledge, failing to preserve important aspects of its ways of life. Only a few elements of African culture are retained. While culture-based tourism practices can help conserve a destination's cultural heritage and generate revenue, most African countries, including Tanzania, have not fully tapped into this potential (Wels, 2002).

Sotirova et al. (2012) define cultural heritage as the legacy of physical artifacts and intangible attributes inherited from past generations. It includes tangible elements such as buildings, monuments, landscapes, books, works of art collections, as well as intangible elements like music, dance, beliefs, social morals, ceremonies, rituals, folklore, traditions, language, and indigenous knowledge (Blake, 2000). Cultural heritage strongly influences our sense of identity, loyalties, knowledge, beliefs, and behaviour (Balandin & Laizane, 2013; Adane et al., 2019). It has an existence value and an aesthetic or artistic value, stimulating sensory or symbolic perceptions of the past in the present, and is considered a resource, monetary spending, expense, or income (Graham et al., 2016). Cultural scholars agree that cultural heritage is what we inherit from the past and use in the present day (Graham et al., 2016).

Cultural heritage has gained increasing attention in recent years for its potential to promote sustainable development (Araoz, 2011). Scholars like Timothy & Boyd (2006) recognize cultural tourism as the largest and fastest-growing global tourism market. According to the World Tourism Organization (2018), four out of ten tourists choose their destination based on its cultural and heritage attractions, and the annual growth rate in cultural trips is estimated to be 15% by the end of the century (Ramires et al., 2018). Timothy (2011) asserts that cultural tourism involves travellers experiencing built heritage, living culture, or contemporary arts, driven by a desire for cultural enrichment, learning, or curiosity.

Culture based tourism may help conserve the cultural heritage of a destination, depending on factors such as government policy and guidance (Henderson, 2002; Swain, 1989, 1990). However, Li (2003) warns that prioritizing tourism over conservation can lead to the loss of culture and traditions. Despite the vast literature on conserving cultural heritage and its role in promoting sustainability, there is a lack of research focused on promoting Tanzania's cultural heritage. Tanzania's focus on wildlife tourism over its cultural diversity is evident in its tourism policies (MNRT, 1999; MNRT, 2002), highlighting the untapped potential of Tanzania's cultural heritage in the tourism sector (Soeroso & Susilo, 2014). In contrast, a country like Indonesia has successfully integrated its cultural heritage into its national branding strategy, making cultural tourism a key aspect of its tourism industry (Soeroso & Susilo, 2014).

This study explores how Tanzania can effectively promote its cultural heritage as a key component of tourism, drawing lessons from Indonesia's successful cultural tourism practices. By comparing strategies used in both countries, the study uncovers ways for Tanzania to enhance its cultural promotion, enrich its tourism offerings, and address challenges. The overarching question of this study is: How can Tanzania promote its cultural heritage as a valuable aspect of tourism by adopting and adapting strategies used by Indonesia to sell its culture as a tourism product? Together with that, three specific research questions take us throughout this paper which are: 1. What specific strategies has Tanzania and Indonesia adopted to promote cultural heritage as a tourism product, and how effective have they been? 2. What are the key challenges and opportunities for Tanzania and Indonesia in promoting their cultural heritage as a tourism product, and how have the challenges been addressed while leveraging the opportunities? 3. How can Tanzania adapt and adopt the successful strategies used by Indonesia to sell its cultural heritage as a tourism product to its own cultural context, while still preserving the authenticity of its cultural offerings?

Consequently, this study adopts a constructivist research paradigm and a qualitative methodology with a multiple-case study design. Focusing on Arusha and Yogyakarta cities from the respective countries, it delves into local knowledge and contextual factors, utilizing primary and secondary data collection methods. Thematic analysis guided by strong structuration theory ensures validity and reliability of the findings, contributing significantly to policy, practice, literature, and theory. The study emphasizes the need for Tanzania to revise its tourism policies, provides valuable insights for practitioners, offers a detailed comparative analysis of cultural heritage promotion strategies, and enhances theoretical understanding through the application of Stones' Strong Structuration theory.

2. Literature Review

Every place possesses heritage although not all resources appeal to tourists despite their significance to locals (Timothy, 2011). The recognition of historical artifacts' importance has led many countries to allocate substantial funds for their preservation, resulting in increased tourist interest (Timothy, 2011). Cultural heritage plays a crucial role in societies, embodying shared bonds and a sense of belonging (Rouhi, 2017; Jokilehto, 2006; Siregar, 2018; Ogundele, 2014; Nnonyelu, 2009). The tourism industry relies on these resources, with cultural tourism becoming a mainstream component, contributing to economies and cultural preservation (Richards, 2001; Ivanovic, 2008). Cultural tourism has evolved from a niche market to a vital industry driver, with a new UNWTO definition emphasizing both tangible and intangible cultural attractions and products (UNWTO, 2018). However, challenges remain, including the impact of unchecked tourism on culture and heritage (Ismail et al., 2014).

Research in cultural tourism has expanded rapidly, covering various aspects such as cultural consumption, motivations, heritage conservation, and economics (Richards, 2013). The global perspective on cultural heritage reveals its compromised significance in numerous locations due to a cycle of excessive development, inadequate investment, and declining returns (Russo, 2002). Countries worldwide exhibit distinct approaches in protecting, preserving, and promoting cultural heritage. For example, Spain emphasizes the pivotal role of cultural activities in attracting tourists and supporting its economy. With a rich cultural heritage, Spain ranked fourth globally in UNESCO-recognized assets (Ponferrada, 2015). The country actively defends its culture through public policies, aiming to make culture an essential public good (Parga-Dans et al., 2020).

Italy, on the other hand, showcases the influence of cultural heritage's monetary value on tourism, with its legal framework providing fundamental protection and encouragement for promotion (Petrillo et al., 2019). South Korea focuses on preserving and promoting its culture through diverse initiatives, including cultural diversity projects and cultural ODA projects (UNESCO, 2018). China emphasizes on-site heritage interpretation to provide tourists with insights into its history and culture (Vong & Ung, 2012). Moreover, countries like Romania, Lithuania, Estonia, and Denmark incorporate creativity as a strategy for preserving and promoting their cultural possessions (Martinaityte & Kregzdaite, 2015; Lorenzen & Andersen, 2012).

In Africa, societies possess captivating cultural heritage infrastructures that can be developed into tourist sites, generating revenue for local communities (Mabulla, 2000; Alisa & Ridho, 2020). These sites include sacred groves marked by ancestors as areas where biodiversity resources are not to be exploited, holding potential as cultural heritage tourist sites (Mabulla, 2000; Sarfo-Mensah et al., 2014). Responsible event organizers produce paraphernalia for cultural observances, aiding attendees in immersing themselves in the occasion while generating revenue for host communities (Twumasi-Ampofo et al., 2020). Additionally, elders in communities strive to honour their ancestors by ensuring the continued observance and commemoration of significant practices and events, supported by government policies (Twumasi-Ampofo et al., 2020).

Several studies highlight Tanzania's recognition of culture-based tourism's potential to diversify the tourism industry and contribute to economic development, supported by formal policies and initiatives such as campsites, home-stays, traditional food experiences, and visits to cultural and historical sites (Salazar, 2012). The Tanzania Tourist Board has a dedicated unit for the development and promotion of cultural tourism (Salazar, 2012; URT, 2010). Some communities, like the Maasai in the Ngorongoro Conservation Area, have already initiated cultural tourism activities (Bruner, 2001). Tanzania possesses a rich cultural heritage, but funding constraints hinder its protection and management (Mabulla, 1996). Developing cultural tourism could generate revenue for heritage protection and create job opportunities (Timothy, 2011). Tanzania aims for a premium tourism experience but faces obstacles like infrastructure deficiencies and marketing limitations (Wade et al., 2001). Furthermore, significant challenges remain in developing indigenous cultural tourism (Melubo & Buzinde, 2016).

In contrast, in Indonesia, culture is a dynamic set of value systems adaptable to change, expressed in daily activities, shaping community identity (Siregar, 2018). Cultural heritage includes documentation like the Borobudur temple and living traditions integrated into daily life (Karsono & Wahid, 2008). Indonesia promotes its cultural heritage through sustainable city development, preserving historical sites, and encouraging private investment (Groizard & Santana, 2018). Cultural tourism is popular among domestic and international tourists in Indonesia and aligns with global trends (Estevao, Cristina & Ferreira, 2009). Indonesia employs various strategies to promote its cultural heritage, including hosting events and exhibitions (Sasana & Novitaninytyas, 2019).

Up to this juncture, extensive research literature has failed to illuminate the avenues through which countries, such as Tanzania, can learn from countries that have done well in cultural heritage promotion like Indonesia through a comparative approach.

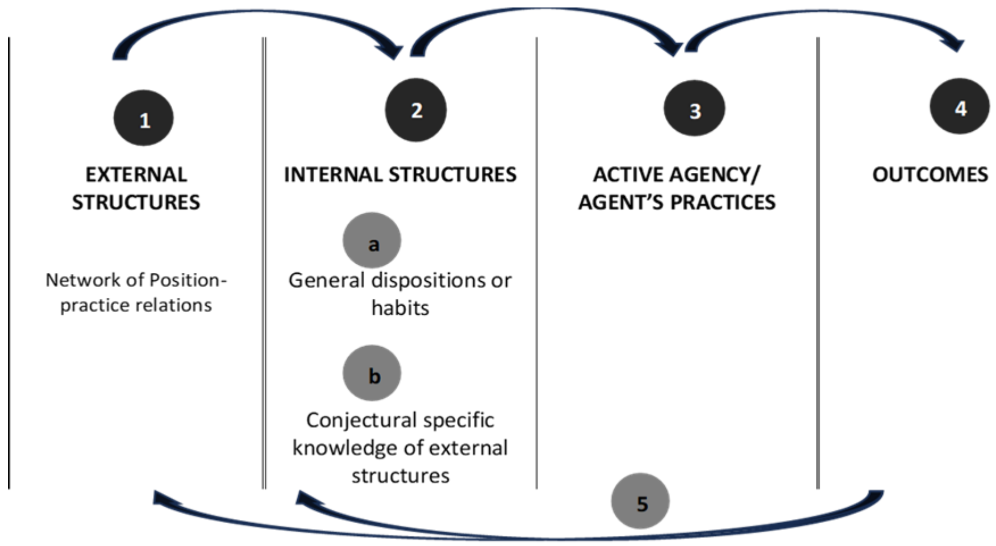
2.1. Theoretical Framework Work: Strong Structuration Theory

Stones' Strong Structuration Theory builds on Giddens' notion of structuration by emphasizing the interplay between structure and agency in social systems. Stones' framework identifies four components of structuration: external structures, internal structures, active agency, and outcomes (Stones, 2005). External structures are the conditions that limit agents' actions, including independent causal influences and irresistible causal forces (Stones, 2017). Internal structures refer to habitual or generalizable elements within agents, including conjuncturally specific internal structures related to specific roles or positions, and general dispositional internal structures such as skills and dispositions (Stones, 2005). Active agency is the application of internal structures to practical action (Stones, 2005). Outcomes are the result of interactions between internal and external structures, including changes, elaborations, reproductions, or preservations of structures, as well as other events resulting from social interactions (Stones, 2005).

The theory also introduces the concept of position-practices, which are enacted within groups of agents and involve identities, prerogatives, and obligations (Jack & Kholeif, 2007). Position-practices help understand how individuals in specific roles contribute to sustaining or altering norms (Elbasha & Wright, 2017). Additionally, the theory introduces the concepts of Agent-in-Focus and Agent-in-Context, which acknowledge the broader social landscape and its influence on agents' actions (Moore & McPhail, 2016).

Stones' theory provides a structured approach to understanding how agents in this study promote cultural heritage in Tanzania and Indonesia, focusing on how rules and resources shape promotion efforts (external structures), how agents view and use their culture (internal structures), and how they respond to tourism demands (active agency). This study involves various agents, including policy makers (who are agents in focus), artisans, tour operators, tour guides, academic researchers, artists, and local communities (who are agents in context), who shape the outcomes of cultural tourism. By comparing these elements in Arusha (Tanzania) and Yogyakarta (Indonesia), the study aims to understand and compare the countries' approaches to cultural heritage promotion, offering insights for recommendations to Tanzania and future research.

Figure 2.1. The quadripartite nature of structuration



Source: Stones (2005, p. 85)

3. Research Methods

This is a qualitative study which adopted a constructivist research paradigm, focusing on how individuals construct their own understanding of the world through experiences and interactions with others (Crewell, 2014; Strauss & Corbin, 2008; Levitt et al., 2017; Dudwick et al., 2006; Gopaldas, 2016). Consequently, this study employed a multiple-case study design focusing on Arusha, Tanzania, and Yogyakarta, Indonesia, exploring how Tanzania can promote its cultural heritage by learning from Indonesia's strategies (Sturman, 1997; Creswell, 2009; Simons, 2009). These cities were purposefully chosen for their rich cultural heritage that attracts tourists and the researcher's familiarity with them. Moreover, Arusha and Yogyakarta, possess rich cultural offerings and significant tourism potential, representing diverse cultural contexts influenced by indigenous tribes and historical legacies, located in Africa and Asia, respectively (Mohajan, 2018; Oun & Bach, 2014).

To clarify on the scope of the study, Arusha and Yogyakarta were chosen as representative cities to narrow down data collection, allowing for a focused and detailed analysis of cultural heritage promotion strategies within these specific contexts (Tanzania and Indonesia). These cities were selected because they are among the top cities in their respective countries, portraying significant cultural heritage. This approach ensured that the findings were rooted in concrete examples, providing valuable insights that contribute to a broader understanding of cultural heritage promotion in Tanzania and Indonesia. While the choice of only two cities might have imposed generalizability, the inquiries (questions during data collection) broadly addressed (targeted) what is happening in the respective countries, making the data valid and relevant.

The methodology used in this study proved suitable for conducting an in-depth exploration, capturing the genuine essence of cultural heritage, interpreting profound insights, and facilitating a comparative analysis between the two countries. The study utilized both primary and secondary data with open ended questions (see appendices A, B, C and D), leading both data collection methods, and together with the assistance of a personal interpreter and google translation where needed for languages different from English (Swahili in Tanzania and Bahasa Indonesia in Indonesia). Primary data involved email and direct interviews with Tanzanian and Indonesian cultural experts, respecting participants' constraints and preferences. Seven groups (two people for each group), including policy makers, community representatives, tour operators, tour guides, artists, artisans, and academic researchers, were interviewed to ensure diverse perspectives. A total of 14 individuals were interviewed from each case making 28 individuals for both of the cases.

Secondary data included reports and publications related to tourism policies and plans from Tanzania and Indonesia. The combination of primary and secondary data enhanced the depth and credibility of the study, allowing for a comprehensive thematic analysis. Thematic analysis, particularly deductive, was chosen to organize and interpret the data, focusing on predefined themes aligned with the research questions (Blum et al., 2020; Braun and Clarke, 2006; Flick, 2004) which was conducted and presented in an excel sheet.

This method facilitated a deeper exploration of cultural heritage promotion in tourism across the two countries, providing valuable insights for future strategies. Together with that, strong structuration theory was incorporated simultaneously with thematic analysis from the early stages of data collection, analysis, interpretation and finally arriving to a conclusion, with the agent in focus in Tanzania being the Ministry of Natural Resources and Tourism (MNRT), and in Indonesia being the Ministry of Tourism and Creative Economy. Consequently, the agents in context in both of the cases were the local community representatives, tour operators, tour guides, artists, artisans and academic researchers.

4. Research Findings and Discussion

4.1. Specific Strategies for Promotion Cultural Heritage and Effectiveness of the Strategies

This study revealed that, both countries (Tanzania and Indonesia) employ community involvement, government financial support, infrastructure development, and the use of cultural events and tourist area mapping as similar strategies in place although in different levels. However, Tanzania's marketing strategy, which includes cultural heritage alongside other tourism products like wildlife, differs from Indonesia's more targeted marketing approach to cultural heritage. Tanzania's approach is more generalized, encompassing all tourism products country wise, while Indonesia's is more specific to every tourism product including cultural heritage, and strategies are unique to every city destination of the country.

Moreover, while both countries prioritize funding for their cultural sectors, Tanzania's lower budget allocation contrasts with the pivotal role government support plays in cultural tourism. This also shows a difference from the literature whereby other countries like Italy and Spain puts decent funding to cultural heritage. Tanzania also employs regulations for cultural tourism management, while Indonesia integrates cultural education into its school curriculum. The effectiveness of these strategies, particularly in increasing visitor numbers, employment opportunities, and heritage preservation, was noted in both countries, but there was a gap in the findings and literature linking specific strategies with their individual effectiveness, suggesting a need for further research to comprehensively evaluate this matter. It was commented:

> As artisans, we can attest to the vibrant role local communities play in preserving Indonesia's rich cultural heritage. In Yogyakarta, where I practice my craft, the local community is deeply engaged in upholding Javanese traditions, including our intricate dances, melodious music, and exquisite crafts (Artisans, ID, 2024).

Also commented:

> Effective participation and engagement of local people can be influenced by ensuring that the National Cultural Tourism Guideline is implemented and Tourism Regulations are updated to meet desired state to community engagement in promoting cultural tourism (Academic Researcher1, TZ, 2024).

4.2. Key Challenges and Opportunities for Promoting Cultural Heritage, and Addressing the Challenges

Consequently, the study revealed several key challenges faced by Tanzania and Indonesia in promoting their cultural heritage as tourism products, together with relating with the existing literature. The findings showed that Tanzania struggles with inadequate financing for cultural initiatives, a shortage of cultural heritage experts, challenges in infrastructure development, hindering accessibility to cultural sites, cons brought by technology and insufficient support from local communities. Indonesia faces challenges in maintaining cultural authenticity amidst globalization, raising awareness among locals about heritage preservation, limited infrastructure, competition from neighboring countries, environmental threats, such as pollution and natural calamities, and dealing with irresponsible tourism practices that harm cultural and environmental integrity. These challenges also relate with the theoretical literature of this study, Stone's strong structuration theory, particularly the concept of external structures as independent forces that limit the freedom of agents (the ministries responsible and other tourism stakeholders) to perform actions (which are the strategies for this study's case). Some respondents commented:

> There is a noticeable lack of investment and advertisement in Tanzania's cultural attractions. Entities responsible for promoting tourism, such as the Tanzania Tourist Board (TTB) and the Ministry of Natural Resources and Tourism, primarily focus on advertising wildlife tourism (Academic Researcher1, TZ, 2024).

Also, others commented:

> The globalization and cultural connectivity have led to a strong influence of foreign cultures, such as K-POP and Western culture, which diminishes the appreciation for Indonesia's local culture. This impacts the preservation of cultural identity. Additionally, comparisons between local tourism destinations and international ones creates the impression that Indonesia lacks unique attractions, affecting its appeal to tourists (Academic Researchers, ID, 2024).

Despite these challenges, the study revealed several opportunities for both countries to leverage such as Tanzania's cultural diversity, with over 120 ethnic groups, which provides a rich tapestry of traditions appealing to tourists seeking authentic experiences. This is also shown in the literature recognizing Tanzania's potential for culture-based tourism (Salazar, 2012). The abundance of cultural sites in Tanzania, including archaeological sites and historical monuments as other opportunities that Tanzania holds, resonates with literature emphasizing the country's rich cultural heritage resources (Mabulla, 1996). Tanzania's strategic geographical position in East Africa and its political stability making it an ideal destination as another opportunity, also aligns with the literature's emphasis on the country's potential for tourism (Salazar, 2012; URT, 2010). Moreover, collaboration with cultural stakeholders, including local communities and international partners, presents opportunities for promoting and preserving Tanzania's cultural heritage, as similarly suggested in the literature (Mabulla, 1996). As cited:

> Unlike several other countries in Africa, Tanzania has never had a history of internal conflict since independence. With the exception of the two years long Tanzania Uganda border war from 1978 to 1979, Tanzania has been identifying herself as the island of peace. Peace is significant in the context of tourism as people from abroad cannot visit places with political turmoil (Ministry of Natural Resources and Tourism, TZ, 2024).

Comparably, Indonesia offers a wealth of cultural diversity, with over 300 ethnic groups contributing unique traditions, which as well aligns with literature emphasizing the importance of cultural diversity in attracting tourists (Estevao et al., 2009). Indonesia's strong inclination towards domestic tourism, as another opportunity, facilitates the preservation and promotion of its cultural heritage, is also in line with literature discussing the positive relationship between competitiveness and innovation in the country's tourism sector (Estevao et al., 2009). Furthermore, Indonesia's adept use of technology, including social media and online platforms, offers opportunities for promoting its cultural heritage globally, is as well discussed in the literature (Lee & Lee, 2015; Surugui & Surugui, 2015). Moreover, another opportunity for Indonesia lies on its leadership role in the ASEAN Tourism Resource Management and

Development Network (ATRM) which allows the country to promote its cultural heritage, reflecting its internal disposition towards regional cooperation and heritage preservation (ASEAN Secretariat, 2016). And finally, world's growing interest in cultural experiences provides opportunities for both countries. As commented:

> One of the greatest opportunities for our country lies in its rich cultural heritage. This heritage encompasses a wide range of aspects, including historical sites, traditional art forms, culinary traditions, and indigenous knowledge systems. Examples of this heritage include iconic landmarks such as Borobudur Temple in Java, traditional dances like the Balinese Legong dance, traditional cuisines such as Padang food from West Sumatra, and traditional healing practices like Jamu herbal medicine. These elements of our heritage not only attract tourists but also serve as a source of pride and identity for our nation (Tour Operators, ID, 2024).

The study also revealed strategies in place for addressing cultural heritage promotion challenges by the countries which include infrastructure investment, sustainable tourism practices, public-private partnerships, and education and training programs in Tanzania. These strategies also align with the literature on Tanzania's efforts to upgrade infrastructure and promote sustainable management of cultural heritage (Tourism Policy, 1999; Tourism Master Plan, 2002). In Indonesia, strategies include promoting community-based tourism, collaborating with local stakeholders, implementing regulations to protect cultural sites, investing in infrastructure, and implementing educational programs. These strategies as well align with literature emphasizing the importance of community involvement, partnerships, legal frameworks, and infrastructure in cultural heritage preservation and promotion (Mabulla, 1996; Petrillo et al., 2019). It was cited:

> Implementing policies and systems for evaluation (ASEAN Secretariat, 2016), rehabilitation, and ongoing preservation efforts (APEC, 2012), effective visitor management (developing systems to manage visitor flow and monitoring visitor behaviours by providing clear guidelines on appropriate conduct at tourism locations) (Ministry of Tourism of the Republic of Indonesia, 2016), regulations in place to manage the sale, trade, exhibition, or transfer of historical and archaeological artifacts (SUSTOUR., 2022), and accurate site interpretation (ASEAN Secretariat, 2016).

4.3. Tanzania Adapting Successful Strategies used by Indonesia to Sell its Cultural Heritage

Finally, the study presented ways which Tanzania can adapt successful strategies used by Indonesia to promote its cultural heritage as a tourism product while preserving authenticity. It is revealed that, Tanzania can benefit from analyzing Indonesia's strategies in depth, understanding the cultural, social, and economic contexts in which they operate. This involves studying specific strategies and their fit within Indonesia's broader landscape, enabling Tanzania to adapt strategies to its own context. Also, Tanzania should identify unique cultural practices, art forms, historical sites, and culinary traditions that resonate with tourists to attract those interested in experiencing its unique offerings.

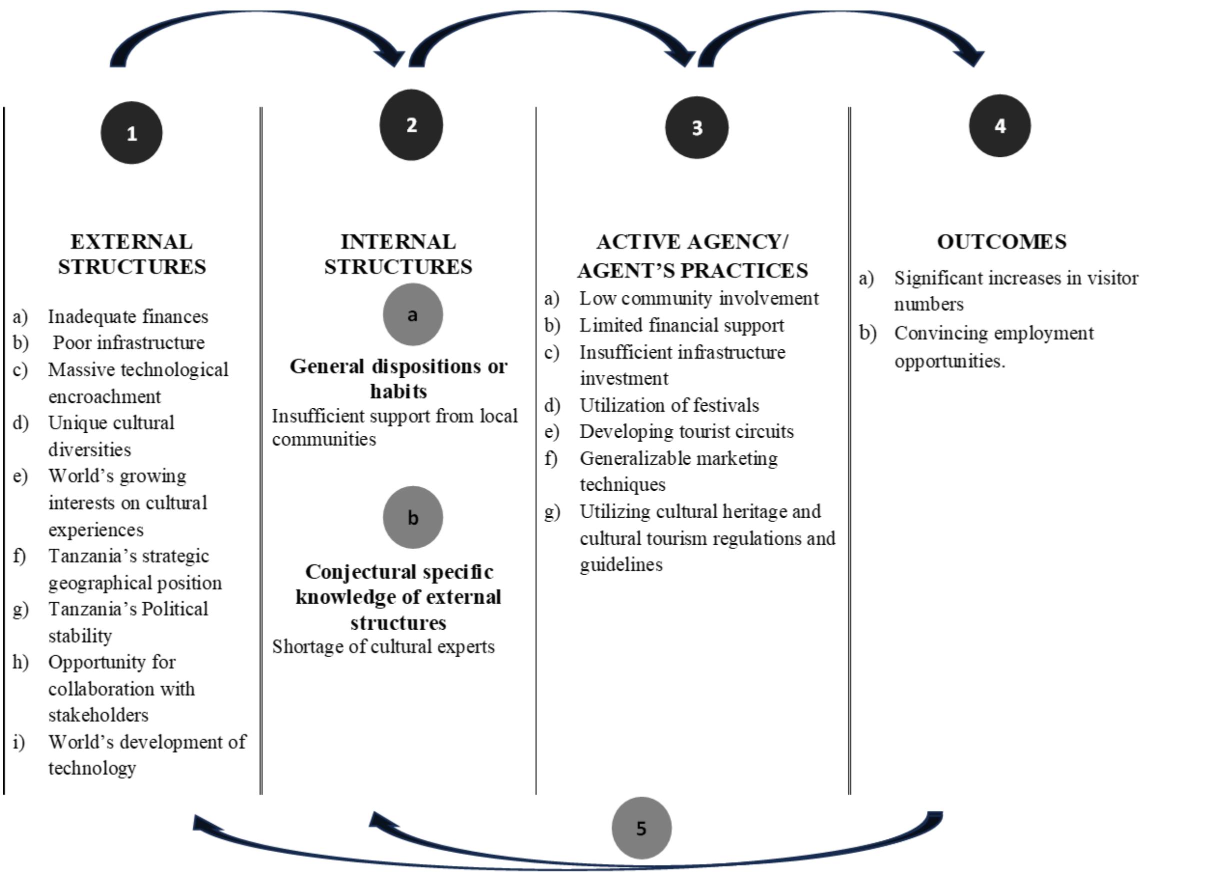
Prioritizing effective community involvement and empowerment was also discussed as crucial, as it ensures a sustainable approach and the continuity of cultural heritage as a living identity. Tanzania should also invest heavily in education and awareness programs to instill pride and appreciation for cultural heritage. Collaboration among government agencies, local communities, and the private sector appeared to also be essential to develop sustainable tourism strategies that protect cultural heritage sites, preserve traditional practices, and create economic opportunities.

Moreover, it was presented that, learning from Indonesia, Tanzania should promote a diverse range of tourism products equally to attract tourists with different interests, differentiate itself from competitors, and appeal to a broader audience. Understanding and appreciating cultural heritage as dynamic rather than static was also discussed as it will allow Tanzania to develop strategies that adapt and innovate cultural offerings, remaining relevant and attractive to tourists. Likewise, efficiently leveraging of technology for promotion was discussed being crucial, as it will allow Tanzania to reach a wider audience and generate interest in its cultural heritage tourism.

In simple terms, stressing on the most important findings of this study which are strategies, opportunities and challenges in promoting cultural heritage of the respective countries, the findings reveal that both countries operate within environmental and structural frameworks, both external and internal, that shape their actions in promoting cultural heritage. These efforts are overseen by ministries (agents in focus) responsible for creating and managing strategies for the culture and heritage industry, which collaborate with other stakeholders (agents in context) in the tourism sector.

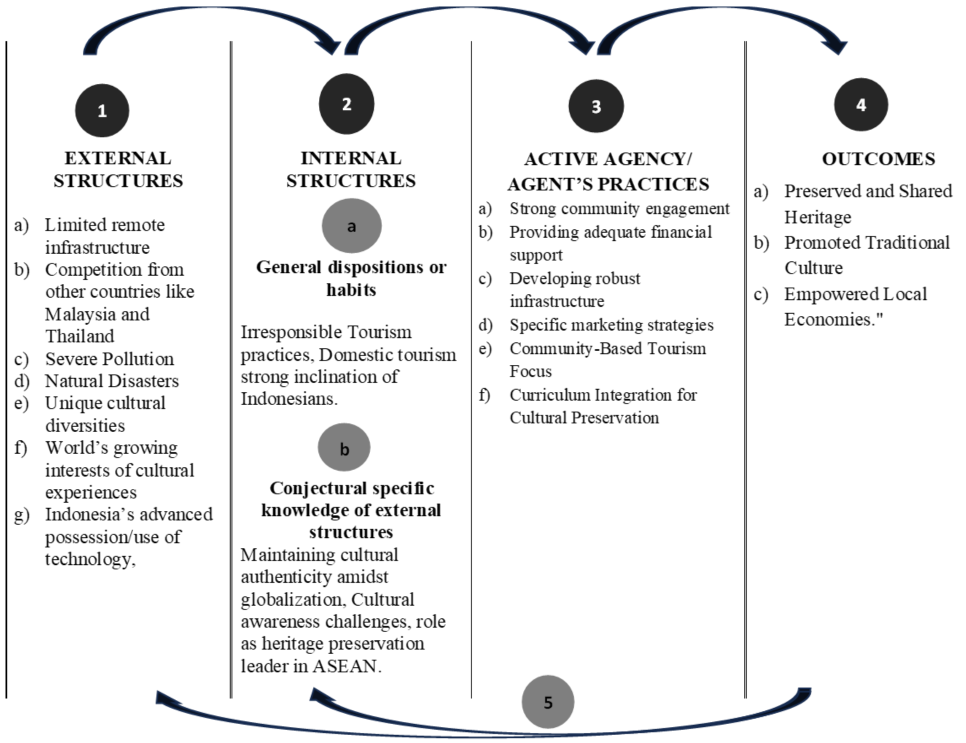
Both countries face challenges but also possess unique opportunities to enhance their cultural heritage promotion strategies. However, a key difference lies in their implementation approaches. Indonesia adopts a proactive stance, emphasizing a community-based approach that sustains culture and heritage, promotes industry best practices, and ensures preservation. In contrast, Tanzania relies more on institutional strategies, adhering to established guidelines on a national level, with limited implementation efforts.

Figure 4.1. SST Summary Illustration of the Results-Tanzania



Source: Adapted from, Stones (2005, p. 85)

Figure 4.2. SST Summary Illustration of the Results-Indonesia



Source: *Adapted from, Stones (2005, p. 85)*

5. Conclusion and Recommendations

5.1. Conclusion

This study's findings indicate that both Tanzania and Indonesia operate within environmental and structural frameworks, both external and internal, that shape their actions (agency) in promoting cultural heritage. This occurs under the auspices of ministries responsible for creating and overseeing strategies for the culture and heritage industry, which do not function in isolation but in collaboration with other stakeholders in the tourism sector. Both countries face challenges, yet they also possess distinct opportunities to enhance their cultural heritage promotion strategies. However, the key disparity lies in their implementation approaches.

Indonesia demonstrates a proactive stance in implementing strategies, emphasizing a community-based approach that sustains culture and heritage, thereby promoting industry best practices and ensuring preservation. In contrast, Tanzania's strategies are predominantly institutional, relying on established guidelines with limited implementation efforts.

For Tanzania to adapt successful strategies from Indonesia, the findings suggest conducting a comprehensive analysis of Indonesia's strategies within the cultural, social, and economic contexts. Tanzania should identify parallels in its own cultural heritage for promotion, prioritize community involvement, invest significantly in education and awareness programs, foster effective collaboration among stakeholders, and embrace a dynamic view of cultural heritage. Leveraging technology is also deemed crucial, although it necessitates skilled personnel.

Furthermore, from a broader perspective gained through this study's exploration, it is revealed that, the discourse on Tanzania's promotion of its cultural heritage as a crucial element of its tourism products is predominantly theoretical and institutional. Despite the formulation of numerous strategies and plans, the implementation aspect appears lacking in substance and efficacy. The outcomes fail to provide concrete evidence of the impact of these plans and strategies on cultural heritage and tourism in Tanzania. One glaring example is Tanzania's continued reliance on a tourism policy dating back to 1999, and 2002 strategic master plan, indicating a stagnation in strategies and policy evolution and implementation. Additionally, the overwhelming emphasis on wildlife tourism as the focal point of Tanzania's tourism offerings, relegating other forms of tourism to the background, suggests a lack of prioritization and effective implementation of cultural heritage promotion efforts and other kinds of tourism.

The perspectives of various stakeholders highlight a consistent theme of unrealized potential and unfulfilled promises in Tanzania's cultural heritage promotion efforts despite of there being numerous opportunities available. The findings denote that to a larger extent, Tanzania is far behind from transforming its theoretical plans and strategies into tangible actions that effectively promote its cultural heritage within the tourism sector. This requires a shift in focus towards the practical aspects of implementation, including monitoring, controlling, and evaluating the effectiveness of these efforts. Only through a concerted effort to address these implementation challenges, can Tanzania truly harness the full potential of its cultural heritage as a valuable asset in its tourism industry.

Moreover, there is a palpable disconnection between the richness of the country's cultural heritage and its contemporary societal fabric in Tanzania. Despite boasting a diverse tapestry of traditions, languages, and customs, much of Tanzania seems to operate as an empty vessel, devoid of the vibrant essence of its cultural roots. This disconnects manifests in various ways, from the neglect of traditional practices, cultures, heritage and languages in favour of more dominant cultural influences to the marginalization of indigenous knowledge systems and rituals. Tanzanians, particularly the younger generations, often find themselves navigating a cultural landscape that feels foreign and disconnected from their own heritage. It's as if Tanzania is promoting its cultural heritage in an empty vase, where the vessel is there, but the substance and essence that should fill it with life and meaning are sorely lacking. As a result, Tanzania's rich cultural tapestry risks fading into obscurity, overshadowed by modernity and external influences, unless deliberate efforts are made to revive, celebrate, and integrate these cultural elements into everyday life. As the saying goes, "out of sight, out of mind," and "charity begins at home," it is evident that promoting something that is not appreciated and acknowledged by its own people is challenging. It is crucial for any promotion to start with strong support and recognition from the people owning the culture itself.

On the other hand, cultural heritage is deeply ingrained in the fabric of Indonesian life, where the act of living embodies and sustains their rich traditions. The essence of Indonesian culture is not merely displayed but lived, a testament to their profound connection and commitment to preserving their heritage. This dedication serves as a bridge between the past, present, and future, binding generations together through a shared love and appreciation for their cultural identity.

Indonesians are fervent champions of their own culture, demonstrating an unwavering passion and pride in their heritage. This fervour is evident in the vibrant and diverse cultural celebrations that take place throughout the country, as well as a high rate of domestic tourism visiting cultural sites, drawing participants from all walks of life, including families, friends, and students to mention a few. These festivities and travel behaviours not only showcase the depth and breadth of Indonesian culture but also underscore its significance in the daily lives of its people.

At the heart of Indonesia's cultural promotion efforts are its people, who play a central role in preserving and promoting their heritage. The strategies for promoting cultural heritage in Indonesia are rooted in the grassroots, with the Indonesian people themselves driving initiatives and activities that celebrate their culture. This bottom-up approach ensures that cultural promotion is not only effective but also sustainable, as it is deeply rooted in the daily lives of the population. One of the remarkable aspects of Indonesia's cultural promotion is its ability to make its heritage appealing to younger generations. Through innovative approaches and engagement strategies, Indonesia has successfully romanticized its culture, making it relevant and attractive to the youth. This ensures the continuity and vibrancy of Indonesian culture, safeguarding it for future generations. Furthermore, the strategies formulated ensures that the promotion is authentic, sustainable, and reflective of the diverse traditions and practices across the archipelago.

Consequently, Indonesia places a strong emphasis on the implementation of its cultural heritage plans, policies, and strategies. Regular monitoring and evaluation are conducted to assess the effectiveness of these initiatives and to make adjustments as necessary. This ensures that resources are used efficiently and that the goals of cultural heritage promotion are being met. Which at the end results to the industry's best practices.

5.2. Recommendations

Tanzania possesses a rich cultural heritage that can be effectively promoted through several key strategies. Firstly, it is essential for Tanzania to develop a deep understanding of its culture and heritage. By encouraging Tanzanians to learn about their own cultural background, there will be a greater capacity to teach and share this knowledge with others. This approach can generate enthusiasm and appreciation for Tanzania's cultural heritage, attracting more attention and support.

Storytelling is another powerful method for preserving and promoting oral traditions, heritage, and culture. By sharing stories that uphold values such as redistribution, reciprocity, and mutual responsibility, Tanzania can ensure that its culture remains vibrant and relevant. Additionally, viewing culture and heritage as dynamic entities that can adapt and evolve while retaining their essence is crucial. This perspective will not only safeguard Tanzania's heritage but also showcase it to others, ensuring its continued significance.

Also, various professionals play critical roles in conserving and displaying cultures and heritage. These include archaeologists, archivists, art historians, conservators, librarians, museum curators, and tourism specialists. Tanzania should prioritize supporting and encouraging individuals in these fields and professions as much as it does to other science professions like engineering and medicine. Moreover, consulting professionals in marketing, media, and tourism, as well as those familiar with current technological trends, can enhance the promotion of cultural heritage.

Adaptation to change is also vital, as cultures and heritage undergo transformations over time. While adaptation can be a form of preservation, fundamental values, traditions, and heritage should remain intact. It is essential to strike a balance between conserving meaningful aspects of cultural heritage and adjusting to the changing world.

Building upon the aforementioned points and focusing on specific recommendations, it is further advised that Tanzania undertake the following actions:

- Revise and update tourism policies to reflect current trends and priorities, with a focus on promoting cultural heritage beyond wildlife tourism.
- Invest in infrastructure that supports cultural tourism, such as improving road networks to cultural sites and developing visitor centres.
- Engage local communities in the preservation and promotion of their cultural heritage through training programs and economic incentives.
- Implement educational programs to raise awareness about the importance of cultural heritage and the benefits of cultural tourism.
- Collaborate with international organizations, NGOs, and other stakeholders to promote Tanzania's cultural heritage on a global scale.

- Establish a system for monitoring and evaluating the effectiveness of cultural heritage promotion efforts.
- View cultural heritage as dynamic, allowing for evolution while remaining relevant in a globalized world.
- Use technology to promote cultural heritage and reach a wider audience, ensuring those responsible for promotion possess the necessary skills.
- Advocate for legal protections for cultural heritage, such as copyright or intellectual property laws.

6. Limitations and Implications

6.1. Limitations

In terms of limitations, the study focused solely on two major cities that represent the majority of the two respective countries. Also, conducting this multiple case study was both time-consuming and resource-intensive, which required significant financial resources and coordination. Additionally, the researcher was concerned about the potential influence of her personal background and individual perspectives on the interpretation of the findings, which could introduce bias and subjectivity. Language was also identified as a limitation.

To address these limitations, the study employed a thorough comparative analysis and triangulation to derive transferable lessons and principles that represent the broader context of the countries. Moreover, the two cities served as benchmarks for comparison. Existing data, such as reports, was utilized, and digital technologies were leveraged for remote data collection, including email and phone calls. Also, the research plan-maintained flexibility, allowing for adaptation to evolving circumstances. The researcher as well engaged in self-reflection to recognize and critically examine personal biases, sought feedback from colleagues, ensured transparency in decision-making, and employed Google Translate and personal interpreters where applicable during data collection.

Along with those research design limitations, this study also faced other limitations such as difficult in data collection due to bureaucracy in some places where data was collected which resulted in additional time, energy, and financial costs for the researcher. However, having connections (individuals known to the researcher) in these data collection sites proved beneficial and facilitated the process.

Consequently, these limitations also present opportunities for future research, including: (a) expanding to other cities or regions within Tanzania and Indonesia to provide a more comprehensive understanding, (b) implementing longitudinal studies to provide insights into the dynamics of cultural heritage promotion in Tanzania, the impact of external factors on cultural heritage promotion practices, and the effectiveness of strategies at preserving and promoting cultural heritage. This can be done by collecting data from the same individuals or groups over an extended period to understand changes in their experiences, perceptions, or behaviors related to cultural heritage promotion in Tanzania and Indonesia.

Other future opportunities include; (c) exploring alternative methodologies to make research more efficient and employing a mixture of qualitative and quantitative methods to deepen insights and mitigate bias, (d) collaborating with diverse researchers from other disciplines, such as anthropology, sociology, and economics, to gain a comprehensive understanding of the socio-cultural and economic factors influencing cultural heritage promotion, and, (e) focusing on policy implications to inform decision-making.

6.2. Implications

This study makes significant contributions in policy, practice, and literature. In policy, it emphasizes the need for Tanzania to revise its tourism policies, moving beyond wildlife tourism to include cultural experiences. It highlights the importance of community involvement, infrastructure enhancement, and educational programs in shaping effective policies for cultural heritage promotion. The findings are valuable for practitioners in cultural tourism, providing insights for improved practices. The study also commends Indonesia for its efforts in promoting cultural heritage. In literature, it contributes by offering a detailed comparative analysis of cultural promotion strategies between Tanzania and Indonesia, enriching understanding and identifying areas for improvement. Overall, this study offers practical strategies and theoretical insights that can guide policymakers, practitioners, and researchers in developing more effective cultural heritage promotion strategies in Tanzania and beyond.

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Appendix A. Email Interview for Tanzania

Dear Participant,

I hope this email finds you well. My name is Maryness Patrick (With student’s registration number 222222116) pursuing my Master Degree of Management in International Tourism at Sanata Dharma University in Yogyakarta, Indonesia. I am conducting a research study titled "A study on promoting Tanzania's cultural heritage through the lens of Indonesia: A cross-cultural comparison." The purpose of this comparative case study is to explore and present a comprehensive approach for Tanzania to promote its cultural heritage as a valuable aspect of tourism. By comparing Tanzania's cultural heritage promotion with that of Indonesia, which is renowned for its cultural richness and successful selling of culture as a tourism product, this study seeks to facilitate cross-cultural learning and opportunities for Tanzania in the areas of culture promotion, preservation and diversification of its tourism offerings.

Your expertise and knowledge in the field of cultural heritage, tourism, or related areas would be invaluable for this research. I kindly request your participation in an email interview to gather your insights, opinions, and experiences. Your responses will provide valuable inputs to the study and contribute to a better understanding of the cultural promotion strategies employed in Tanzania and Indonesia plus the challenges, opportunities and provide a way forward for countries like Tanzania to do better in preservation and promotion of its cultural heritage and finally do better in cultural tourism as it is for wildlife tourism.

To ensure the success of this research, I would like to ask you a few open-ended questions. Please feel free to provide detailed responses, as this will greatly assist in capturing the nuances and complexities of the topic. Your permission will be sought to quote your responses, ensuring the authenticity of the findings. Below are the questions:

1. Based on your expertise, could you please share specific strategies that Tanzania has adopted to promote its cultural heritage as a tourism product? How effective have these strategies been?
2. From your perspective, what are the key challenges and opportunities that Tanzania faces in promoting its cultural heritage as a tourism product? How do you believe these challenges have/can be addressed, and how have/can Tanzania leverage the opportunities available?
3. In your opinion, what are the unique cultural aspects and traditions of Tanzania that have the potential to attract tourists? How have/can these aspects be effectively promoted to showcase the richness and diversity of Tanzania's cultural heritage?
4. Tanzania is known for its vibrant local communities and their involvement in preserving cultural traditions. How have/can the active participation and engagement of local communities' leverage to promote and sustain Tanzania's cultural heritage as a tourism product?
5. From your perspective, which type of tourism product is at most being intensively promoted in Tanzania? And in your opinion, do you think it is important for Tanzania to actively promote its cultural heritage as a tourism product? If Yes, what benefits can be derived from such promotion, both for the tourism industry and for the overall development of the country?

I believe your expertise and experiences will provide valuable insights into these questions, and your contribution will greatly enhance the findings of this study. Your responses will be treated with utmost confidentiality and will only be used for academic purposes.

Thank you in advance for considering my request. Your participation will be highly appreciated, and it will contribute significantly to the understanding of cultural heritage promotion in Tanzania as a valuable aspect of tourism. Should you have any questions or require further information, please do not hesitate to reach out to me.

Gratefully Yours,
Maryness Patrick
Student-Sanata Dharma University
WhatsApp No: +62 859-7321-2058
Email: marynesspatrick@gmail.com

Appendix B. Email Interview for Indonesia

Dear Participant,

I hope this email finds you well. My name is Maryness Patrick (With student's registration number 222222116) pursuing my Master Degree of Management in International Tourism at Sanata Dharma University in Yogyakarta, Indonesia. I am conducting a research study titled "A study on promoting Tanzania's cultural heritage through the lens of Indonesia: A cross-cultural comparison." The purpose of this comparative case study is to explore and present a comprehensive approach for Tanzania to promote its cultural heritage as a valuable aspect of tourism. By comparing Tanzania's cultural heritage promotion with that of Indonesia, which is renowned for its cultural richness and successful selling of culture as a tourism product, this study seeks to facilitate cross-cultural learning and opportunities for Tanzania in the areas of culture promotion, preservation and diversification of its tourism offerings.

Your expertise and knowledge in the field of cultural heritage, tourism, or related areas would be invaluable for this research. I kindly request your participation in an email interview to gather your insights, opinions, and experiences. Your responses will provide valuable inputs to the study and contribute to a better understanding of the cultural promotion strategies employed in Tanzania and Indonesia plus the challenges, opportunities and provide a way forward for countries like Tanzania to do better in preservation and promotion of its cultural heritage and finally do better in cultural tourism as it is for wildlife tourism.

To ensure the success of this research, I would like to ask you a few open-ended questions. Please feel free to provide detailed responses, as this will greatly assist in capturing the nuances and complexities of the topic. Your permission will be sought to quote your responses, ensuring the authenticity of the findings. Below are the questions:

1. Based on your expertise, could you please share specific strategies that Indonesia has adopted to promote its cultural heritage as a tourism product? How effective have these strategies been?
2. From your perspective, what are the key challenges and opportunities that Indonesia faces in promoting its cultural heritage as a tourism product? How do you believe these challenges have/can be addressed, and how have/can Indonesia leverage the opportunities available?
3. In your opinion, what are the unique cultural aspects and traditions of Indonesia that attract tourists? How are these aspects effectively promoted to showcase the richness and diversity of Indonesia's cultural heritage?
4. Indonesia is known for its vibrant local communities and their involvement in preserving cultural traditions. How is the active participation and engagement of local communities leveraged to promote and sustain Indonesia's cultural heritage as a tourism product?
5. Drawing from your experience and knowledge of Indonesia's cultural heritage promotion, what advice or recommendations would you give to other countries like Tanzania who are struggling to promote their cultural heritage as an important aspect of their tourism product while still maintaining the authenticity and uniqueness of the cultural offerings?

I believe your expertise and experiences will provide valuable insights into these questions, and your contribution will greatly enhance the findings of this study. Your responses will be treated with utmost confidentiality and will only be used for academic purposes.

Thank you in advance for considering my request. Your participation will be highly appreciated, and it will contribute significantly to the understanding of cultural heritage promotion in Tanzania and Indonesia. Should you have any questions or require further information, please do not hesitate to reach out to me.

Gratefully Yours,
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Appendix C: Interpretation on Appendix A

Correspondence of Appendix A to Strong Structuration Theory focusing on the duality of structure, external and internal structures, active agency, and outcomes.

Question 1: Based on your expertise, could you please share specific strategies that Tanzania has adopted to promote its cultural heritage as a tourism product? How effective have these strategies been?

- *Interpretation with Strong Structuration Theory:* This question focused on examining external structures, internal structures, active agency, and outcomes through an exploration of Tanzania's strategies to promote cultural heritage. The aim was to gain insights from the respondents to illuminate the societal and institutional factors that influence cultural heritage promotion in Tanzania.

Question 2: From your perspective, what are the key challenges and opportunities that Tanzania faces in promoting its cultural heritage as a tourism product? How do you believe these challenges have/can be addressed, and how have/can Tanzania leverage the opportunities available?

- *Interpretation with Strong Structuration Theory:* This question aimed to explore the intricate relationship between external structures, internal structures, active agency, and outcomes in Tanzania's efforts to promote its cultural heritage as a tourism product. The challenges and opportunities that were examined reflected the broader institutional, societal, economic, and cultural context in which these efforts were situated, highlighting the need for a multifaceted approach that considered the diverse perspectives and interests of the stakeholders involved.

Question 3: In your opinion, what are the unique cultural aspects and traditions of Tanzania that have the potential to attract tourists? How have/can these aspects be effectively promoted to showcase the richness and diversity of Tanzania's cultural heritage?

- *Interpretation with Strong Structuration Theory:* This question aimed to highlight the interplay between external structures, internal structures, active agency, and outcomes in promoting Tanzania's unique cultural aspects and traditions for tourism.

Question 4: Tanzania is known for its vibrant local communities and their involvement in preserving cultural traditions. How have/can the active participation and engagement of local communities' leverage to promote and sustain Tanzania's cultural heritage as a tourism product?

- *Interpretation with Strong Structuration Theory:* This question emphasized active agency; specifically, how local communities (agents) engage in preserving cultural traditions and how this engagement influence the promotion and sustainability of cultural heritage (outcomes).

Question 5: From your perspective, which type of tourism product is at most being intensively promoted in Tanzania? And in your opinion, do you think it is important for Tanzania to actively promote its cultural heritage as a tourism product? If yes, what benefits can be derived from such promotion, both for the tourism industry and for the overall development of the country?

- *Interpretation with Strong Structuration Theory:* This question examined the outcomes of structuration, focusing on what type of tourism product is predominantly promoted (outcomes) and emphasized the importance of actively promoting (agency) cultural heritage for both the tourism industry and overall development (outcomes).

Appendix D: Interpretation on Appendix B

Correspondence of Appendix B to Strong Structuration Theory focusing on the duality of structure, external and internal structures, active agency, and outcomes

Question 1: Based on your expertise, could you please share specific strategies that Indonesia has adopted to promote its cultural heritage as a tourism product? How effective have these strategies been?

- *Interpretation with Strong Structuration Theory:* This question sought to uncover the strategies and effectiveness of Indonesia's multifaceted approach to promoting cultural heritage as a tourism product. It aimed to showcase a strategic combination of external and internal structures, active agency, and resulting outcomes. The respondent's insights were expected to illuminate societal and institutional factors influencing cultural heritage and tourism in Indonesia.

Question 2: From your perspective, what are the key challenges and opportunities that Indonesia faces in promoting its cultural heritage as a tourism product? How do you believe these challenges have/can be addressed, and how have/can Indonesia leverage the opportunities available?

- *Interpretation with Strong Structuration Theory:* The question aimed to explore the complex interplay between external structures, internal structures, active agency, and outcomes in Indonesia's efforts to promote its cultural heritage as a tourism product. The challenges and opportunities which were expected to be identified aimed to reflect the broader institutional, societal, economic, and cultural context in which these efforts take place.

Question 3: In your opinion, what are the unique cultural aspects and traditions of Indonesia that attract tourists? How are these aspects effectively promoted to showcase the richness and diversity of Indonesia’s cultural heritage?

- *Interpretation with Strong Structuration Theory:* This question delved into the complex relationship between external structures, internal structures, active agency, and outcomes in the promotion of Indonesia's unique cultural aspects and traditions for tourism. It explored how these aspects are perceived and promoted within the cultural heritage sector to attract tourists.

Question 4: Indonesia is known for its vibrant local communities and their involvement in preserving cultural traditions. How is the active participation and engagement of local communities leveraged to promote and sustain Indonesia’s cultural heritage as a tourism product?

- *Interpretation with Strong Structuration Theory:* This question emphasized active agency, specifically how local communities (agents) engage in preserving cultural traditions and how this engagement influences the promotion and sustainability of cultural heritage (outcomes).

Question 5: Drawing from your experience and knowledge of Indonesia's cultural heritage promotion, what advice or recommendations would you give to other countries like Tanzania who are struggling to promote their cultural heritage as an important aspect of their tourism product while still maintaining the authenticity and uniqueness of the cultural offerings?

- *Interpretation with Strong Structuration Theory:* The question aimed to elicit advice or recommendations based on the experience and knowledge of Indonesia's cultural heritage promotion. It sought to understand how countries like Tanzania, struggling to promote their cultural heritage as a vital part of their tourism product while preserving its authenticity and uniqueness, could benefit from Indonesia's experience. The question addressed the outcomes of structuration, focusing on the strategies and actions (agency) that had contributed to Indonesia's success in promoting cultural heritage while maintaining authenticity.

EXAMINING THE COLLABORATION AMONG ACTORS IN MANAGING SUSTAINABLE TOURISM: A CASE STUDY OF KASONGAN TOURISM VILLAGE

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ABSTRACT

Striking a balance between external stakeholders' interests and local communities' needs is crucial for responsible tourism development. The vital to sustaining Kasongan tourism village lies in effective collaboration among various actors, aligning their interests for mutual benefits. This research examines the collaboration among actors in managing sustainable tourism through the lens of the Strong Structuration Theory (SST). A qualitative approach involved 39 respondents by utilizing interviews, focused group discussion, and open-ended questionnaires for data collection. Thematic data analysis was conducted with the assistance of NVivo version 12 software. The findings indicate strong collaboration between village leaders and the government in Kasongan tourism village while there is a weak collaboration between the government and other internal actors (i.e., artisans, households, business owners, and showroom workers. This implies less involvement of the low-level community members on the decision making. The findings suggest policymakers should educate the local community on the importance of collaboration and involving them in decision making. To the local community members results help to identify the key actors within and outside the community and collaborate with each other to manage sustainable tourism. For academics, this study extends research on community involvement of its different actors for sustainable tourism.

Keywords: *Actors, Collaboration, Local community, Sustainable tourism.*

1. Introduction

The idea of sustainable tourism has been recognized at many international levels, as an approach that should result in environmental, social-cultural and economic benefits to all types of tourism. Environmental, social-cultural and economic terms are now applied as the aspects or dimensions of sustainability, each of which involves specific practices and considerations. The World Tourism Organization described "sustainable tourism" as tourism that fully considers its present and future economic, social, and environmental effects while considering the needs of travellers, the tourism sector, the environment, and host communities (WTO, 2004). Achieving the sustainability requires different actors from within and outside the host community who comes with different interests. Sustainable tourism development requires a careful balancing between the interests of external actors and the needs of the internal actors (local communities). Various actors must effectively collaborate in order to align these interests for long-term sustainability and mutual gain.

Taking opportunities in assessing the Kasongan tourism village. Saputra and Rindrasih (2012), identified that Kasongan has a geographical position advantage to run the tourism activities. Kasongan tourism village is located in Bantul Regency in Yogyakarta Province. Tourism in Bantul is relatively famous because it is found in the old town and central heritage of Yogyakarta which is recognized as the second tourist attraction destination in Indonesia after Bali (Pradana et al., 2020). Because of its many colleges and universities that draw students from all across Indonesia and International students, Yogyakarta is frequently referred to as a student city. The potential for tourism extends to adjacent to Yogyakarta regencies, including Sleman, Kulon Progo, Gunungkidul, and Bantul. There are 72 artisan centres in Bantul, and the local government suggested that five of them serve as destinations for village tourism. Five village tourism centres are listed by the Bantul Tourism Board (2011): Pundong village, Kasongan village, Krebet village, Tembi village and the Village of Kebonagung. Kasongan tourism village was nominated as the most developed tourism village among the five listed villages. It attracted many people nationwide and internationally from a long time up to the eruption of pandemic disease (COVID 19). During the COVID-19 and after, the business has definitely dropped down (Asri, et al., 2022).

The Kasongan tourism village is well-known for its unique attractiveness, which is derived from its rich artistic and traditional heritage. Kasongan, known as "*the village of Artisans*," (Karmilah et al., 2014; Ismail, & Prajanti, 2020). It is distinguished by a large group of talented artisans who specialise in pottery, wood carving and other traditional arts. The hands-on experience that Kasongan offers its guests is what makes it unique; it lets them see the complex processes involved in creating handcrafted items, interact with local producers, and even take part in workshops where they can make their own products (Gustami et al., 2014). In Spite of its operation Kasongan tourism destination still sustainable tourism development is essential for the progression of tourism activities. Diverse actors from within and outside the operating village tourism destination, such as village leaders, government authorities, artisans, business owners, and community members, must work together to navigate this complex landscape and ensure that tourism has positive effects while minimizing its negative effects.

Since then, the Kasongan tourism village (Desa Wisata Kasongan) has gone through numerous histories, marked as the most visited village Tourism Attraction since the last five years (Utama et al., 2023). Whereas sustainability is a vital issue around the world, in tourism or else, most developing nations have yet to catch up with its concept and instead focused on the utilisation of social-cultural clays' product destinations for financial benefits. The Indonesian tourist town Kasongan (Desa Wisata Kasongan) serves as an excellent example of the benefits and difficulties involved in coordinating cooperative efforts to manage sustainable tourism.

Some of the research like Bahar, et al., (2023); Andjanie et al., (2023); and Sutawa, (2012) conducted in Kasongan and other areas lack cohesive collaboration between the stakeholders and leaves behind some important actors in sustainable tourism of the tourism village. Fostering stronger synergies and open communication channels between these diverse actors, the researcher intended to explore the important actors and the way they collaborate to manage sustainable tourism in Kasongan tourism village. Drawing upon the lens of the Strong Structuration Theory (SST) (Stones, 2005). This theory facilitates not only the exploration of local community collaboration in sustainable tourism, but also actors contributing to sustainability of their destination.

The researcher expected to examine the collaboration among actors in managing Sustainable tourism. In order to achieve this goal, the researcher set two specific objectives, (1) who are the actors in sustainable tourism? (2) how do they collaborate in managing their tourism destination?

2. Literature Review

2.1.Strong Structuration theory (SST)

In this exploration of sustainable tourism research, the researcher intended to employ the strong structuration theory (Sumarwan, 2022) in order to aid the interaction of different factors and showing the way in which local communities become integral participants, shaping and being shaped by the dynamics of sustainable tourism practices. The theory contributes the interactive concepts between structures and active agency (the local community) to produce the outcome of collaboration. The theory includes the quadripartite nature of structuration which are (1) external structure, (2) internal structure, (3) active agents' practices and (4) outcomes. All the quadripartite nature of structuration were applied as stated below.

According to Jack (2017), strong structuration is a development of Giddnes' structuration theory. The Structuration theory was much based on the duality of structure, that means it is concerned with social processes and events at a particular work. Simply, structuration theory has a bigger sense of being situated in the originality of ontology. Giddens began working on structuration theory in 1976, and his book The Constitution of Society (1984) provides the fullest statement of the idea at that time. Fundamentally, structuration theory explains the relationship between structure and agency in the evolution of social behaviour. Societies take the shape they have because of the ontology-in-situ (back-and-forth) between social structures and human actions.

By using the ideas of structure and agency and making them compatible with empirical research, Rob Stones (2005) developed Giddens' structuration theory. Stones proposes a quadripartite (four parts) cycle of structuration using Strong Structuration Theory (SST), which consists of action, outcomes, internal structures, and outward structures (Stones, 2005).

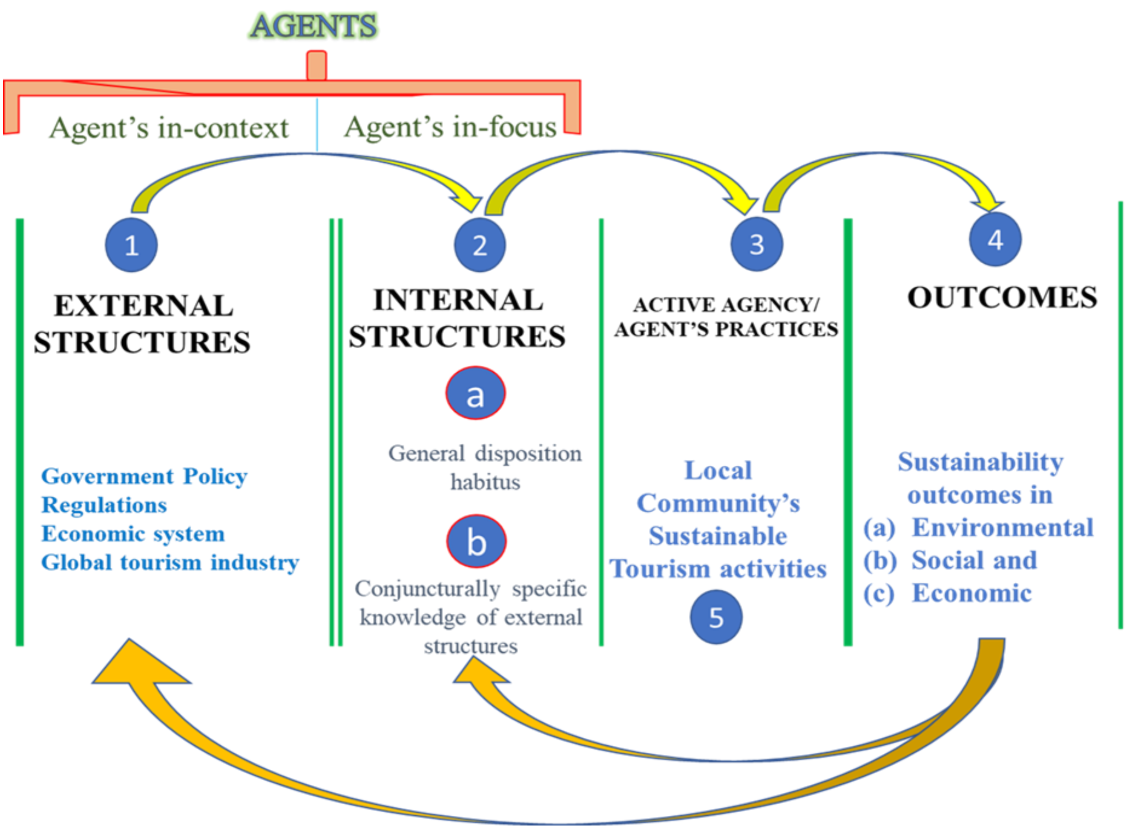

Figure 1: Quadripartite model of structuration
Source: Adapted from Stones, (2005); Sumarwan, (2022); and Kennedy, et. al., (2021).

The researcher decides to use the strong structuration theory to apply it in tourism and hospitality industry because most of the previous papers shows that the theory was applied in the sociology and accounting industry like Sumarwan, 2022; Hughes, et, al., 2022; Jack, 2017; Feeney & Pierce, (2016); Coad, et, al., 2015; Jack & Kholeif, 2007. Therefore, the researcher intends to use strong structuration theory (SST) in order to investigate the applicability of the quadripartite (the four components of the theory) in the tourism and hospitality industry.

In applying the strong structuration theory (SST) to local community collaboration in sustainable tourism, it is important to understand how these four elements interact and influence each other. Community members' actions are shaped by both external and internal structures, and the outcomes of these actions can, in turn, feed back into these structures, potentially reinforcing or challenging existing norms and practices.

External structures are conditions for action. They refer to the physical and economic context within which action is contemplated and enacted. Internal structures, also referred to as the "terrain of action," are social contexts such as laws, policies, rules, and directions. The situated agent's knowledge of the fundamentally interconnected components of structures is referred to as internal structures (Stones, 2005, p. 87). The term "active agency" describes how agents use their internal structures and adapt their understanding and awareness to the circumstances in which they find themselves. It captures the observable behaviour in which an agent decides to act in a way that opposes his outward structures, driven by his internal structures (Stones, 2005, p. 100).

Outcomes are the result of active agency. This condenses the effect of action and interaction. The outcomes resulting from the agency's action can either be positive or negative depending on the application of the knowledge and understanding to the situation they are acting upon.In the context of sustainable tourism, the researcher is expecting to apply the theory for examining structures as the external forces and systems that influence local communities. This includes government policies, regulations, economic systems, and the global tourism industry.

On the other hand, the internal forces (structures) rules can be the legal and ethical guidelines for environmental conservation and community participation within the community. General Dispositions or Habitus stands as tourism village habits or internal dispositions within the organisations, such as a commitment to insist on environmentally friendly activities or promoting sustainable tourism practices. It also includes resources such as funding, knowledge, and support available to the local community. These structures provide the framework within which local communities operate. The Conjunctural Specific Knowledge of External Structure aims to focus the specialised understanding within a tourism destination (like a village) and tourism organisations about external factors. This includes knowledge about government policies, regulations, the global tourism industry, and economic trends. That means the concept is discussing specialised knowledge within a tourism destination and organisations. It focuses on understanding external structures like government policies, regulations, global tourism industry, and economic trends, specifically within a village.

Active agencies are the local community individuals' practices within the local community. This includes community participation in decision-making, entrepreneurial activities, and cultural preservation.

Actions that were considered in this research were the practices and behaviours of local community individuals and groups within the community. In the context of sustainable tourism, actions included: social, environmental and economical friendly actions. These actions are the ways in which the community interacts with external and internal structures, and they are shaped by the interplay of these structures.

Outcomes represent the results and consequences of community actions in sustainable tourism. These outcomes included improved environmental conservation and preservation, increased economic benefits to the community, enhanced social cohesion and empowerment within the community, changes in the broader tourism industry towards more sustainable practices. The outcomes of community actions feed back into the internal and external structures, potentially influencing future practices and decisions.

Agents in this Strong Structuration Theory were grouped into two categories; The first group of agents were the agents' in-focus specifically in this study, were those who are local residents within the Kasongan tourism village such as village leaders, artisans, shop-owners, households and showroom workers. The second group of agents were the agents' in-context; this included groups specifically the stakeholders outside the local community who influence the tourism activities within the village to be performed or not by providing for instance, financial support, tourism policies and so forth. Such agents were non-government organisations, tourism boards (government), banks, media representatives, academicians or university agents and tourists.

The contribution of the findings will be aligned to the following responsible figures;- For policy purposes: This paper will help the Indonesian government to educate the local community on the importance of collaboration and accepting different actors to manage sustainable tourism in the village that conducts tourism activities For Practitioners: The findings will help the local community members to identify the key actors within the community and outside the community and the ways of collaborating to manage sustainable tourism and for Academic: It can be used as a reference for more research about the tourism sector.

3. Research Methods

This qualitative study adopted a constructivist paradigm and used a single case research design as well as the purposive sampling as a technique of selecting respondents. This research aimed to examine the dynamics of collaboration among actors involved in managing sustainable tourism in Kasongan. By exploring the interplay between these actors and their respective roles, interests, and power structures, this study focused to unlock the complexities and differences underlying effective collaboration for sustainable tourism development.

To achieve the intended research goal the following three basic questions were applied. (1) Who are the actors (both agents in focus and agents in the context of sustainable tourism in Kasongan? (2) What are the attitudes of local communities towards sustainable tourism? (3) How do they collaborate to manage sustainable tourism in Kasongan tourism village? Data were collected from 39 respondents in seven different groups which were (1) Private tourism organization workers, (2) Village leader (3) Artisans (4) Tourism board officers (5) Households (6) Showroom workers and (7) Individual shop owners using interviews, focus group discussions, and open-ended questionnaires as the techniques for data collection. The respondents were sorted as shown in the table 4.1 below:

Table 1: The categorization of respondents with the respective tools used to collect data

Private Tourism Organization worker	**Village head**	**Tourism board officer**	**Artisans**	**Shop owners**	**Households**	**Showroom workers**
R1-R2	R3	R4-R5	R6-R15	R16-R20	R21-R35	R36-R39
Interviews			FGD and Observation	Open-ended questionnaires		

Source: Field Data, 2024

This research delves into the perspectives and experiences of various actors. By analyzing the collected data using thematic analysis facilitated by NVivo software version 12, the study sheds light on the strengths and weaknesses of existing collaborative efforts, as well as potential avenues for improvement. Ethical issues, trustworthiness and limitation of the research were highly observed.

4. Research Findings and Discussion

The findings of this study have been arranged to describe the researcher's intended goal of examining the collaboration of different actors with the alignment of Strong Structuration Theory. The researcher based on the major theme on the research question *who , what and how* regarding members are aware to recognize the key actors and the way how they collaborate to sustain Kasongan tourism village. Respondents categorized the key actors in sustainable tourism as follows:

4.1. The actors (both agents in focus and agents in the context of sustainable tourism in Kasongan

Here the researcher asked questions to respondents to assess if the local communities are aware about the key actors internally and externally from the Kasongan village who should be or are involved for the success of sustaining the village for tourism purposes. Moreover, the researcher here intended to grasp the ideas from the respondents about the collaboration in sustainable tourism of the Kasongan tourism village. Based on the respondents' answers, the word cloud image below, presents the key actors that were identified by the respondents who are directly responsible for sustainability in Kasongan tourism village.

Figure 2: NVivo Word Cloud presenting Actors responsible for sustainable tourism identified by the respondent in Kasongan tourism village.

Source: Field Data, 2024

Figure 2, indicates that village officials and households as the internal actors who were highly recognized by the respondents confirmed are directly involved in sustainable tourism, while artisans, shop owners, and showroom workers were the second internal actors to be recognized. Moreover, community association, neighbourhood association, business owners and village citizen associations were mentioned by few numbers of respondents. On the other hand, external actors, government was highly recognized to be the main actors who contributed to sustainable tourism, while private tourism organizations, academicians or universities, media presenters, banks, non-government organizations, tourists, raw material suppliers, cooperatives and customers were recognized in less numbers of respondents.

4.1.1. Agent in Focus (internal actors)

The internal actors who have been recognized by the respondents from the field are Village officials, Village leader or village officials, Artisans, Showroom workers, Households, Business owners, Shop owners, Cooperatives, Neighbourhood, Village citizenship associations. These actors are directly part of the local community and are involved in the day-to-day operations, decision-making, and management of the tourism village from within. The internal actors are critical for maintaining the authenticity, cultural heritage, and sustainable practices within the village itself. They have a direct stake in preserving the local environment, traditions, and livelihoods.

4.1.2. Agents in the Context (External Actors)

The external actors who were recognized by the respondents from the field when the researcher collected data were; Government, Tourism board officers, Private tourism organizations, Media representatives, Universities or Academicians, Non-Government Organization, Raw material suppliers, Banks and Tourists. These actors are considered external as they are not part of the immediate local community but play a role in promoting, regulating, and influencing the tourism activities in the village. The external actors, while not directly part of the village, can provide valuable support, guidance, and resources for sustainable tourism development. They can help in marketing, setting industry standards, and raising awareness about the destination on a broader scale. Effective collaboration and coordination between both internal and external actors are essential for achieving long-term sustainability and responsible tourism management in the Kasongan Tourism Village.

The results of this study highlights the importance of identifying and recognizing the key actors, both internal and external, who play a crucial role in sustaining the tourism activities in the Kasongan village. The researcher has effectively categorized these actors based on the responses obtained from the participants. As per respondents' results village officials and the households were mostly recognized, while artisans, shop owners, and showroom workers were the second internal actors to be recognized as it was indicated in the study of Ndeche et al., (2021). Community association, neighbourhood association, business owners and village citizen associations were mentioned by a few numbers of respondents as internal actors. This indicates that local community members were aware of the internal actors who have roles to sustain the tourism village. For instance, Village officials and government provide leadership, policies, and regulations to guide sustainable practices (Tolkach, & King, 2015). This point was supported by Waligo et al., (2013). Artisans and showroom workers are responsible for preserving and promoting local crafts and cultural heritage (Ruhanen et al., 2022). Households and their family members contribute to maintaining the village's authentic character and hospitality. Business owners, including shop owners and cooperatives, adopt eco-friendly practices and offer sustainable tourism products and services.

Tourism board officers and tourism organizations oversee marketing, planning, and management of tourism activities in a responsible manner. Neighbourhood village associations encourage community participation and representation in decision-making processes. Media representatives help to raise awareness and promote sustainable tourism initiatives. By working together and balancing economic, environmental, and socio-cultural aspects, these key actors collectively ensure the long-term sustainability of the Kasongan Tourism Village as a destination.

Despite the fact that the local community shows an awareness of key actors in the sustainability of the tourism village, there is less awareness about the role of different actors rather than mentioning their daily activities as the role to sustain the village. The results showed that local community members were mostly aware of the village officials (internal actors) and the government (external actors) and mentioned the role that was required to be played by these actors.

4.2. Local Community's attitudes towards the sustainable tourism

Here the researcher asked questions to respondents to assess the attitudes of the respondents about sustainable tourism in Kasongan tourism village. The question intended to extract respondents' attitudes towards sustainable tourism in Kasongan tourism village. The following data presents the positive and negative attitudes gathered from the respondents. The findings from Kasongan tourism village respondents revealed a complex dynamic between positive and negative attitudes towards sustainable tourism development and preservation of the local pottery heritage. The findings were similar with the study of Khalifah et al., (2019) which revealed the tourism views as a source of economic growth and opportunity, while others raised concerns about its impact on the environment, local culture, and religious sites.

There were some community members who expressed their positive attitudes of willingness to collaborate, provide input, and work jointly to promote Kasongan's pottery and attract more visitors. They recognized the importance of sustaining tourism for future benefits and stimulating Kasongan's reputation as a vibrant pottery destination. Local community members went far by providing suggestions towards sustainability including encouraging active communication with customers, collaborating on pricing and work, cleaning the village, promoting Kasongan through government assistance, and opening up job opportunities for locals.

However, the data also highlighted several negative attitudes. Some producers prioritized quantity over quality focusing solely on sales without considering the broader impact on the community or environment. There was a lack of visible community involvement, with some merely providing jobs without further contribution. Social issues like jealousy and prejudice were mentioned as the factors that hindered some community members from collaborating with their community members. Additionally, the pollution caused by burning pottery is seen as a normal occurrence, indicating a lack of environmental consciousness. Decreasing customer numbers and inadequate marketing efforts are also mentioned as concerns. Significantly, some community members appear disengaged or unaware of sustainable tourism initiatives and the challenges faced by Kasongan, preferring to focus only on their individual businesses.

4.2.1. Positive Attitudes

4.2.1.1.General Disposition/Habitus for Internal Actors

The findings from the respondents reveals that local communities show willingness to collaborate and provide input for the management of building systems. The community members show that they are open to receiving input and collaborating with the government and other stakeholders for improvement on pricing, marketing and working together as a single entity rather than individually. Some suggest encouraging active communication and feedback from customers.

> The local community are willing to collaborate with the government in management of building systems and packaging for pottery (Tourism board officer 1, interview on 29th February, 2024)

4.2.1.2.The Conjunctural specific knowledge for Internal actors

The findings from the respondents reveals that local communities have an idea on the importance of collaborating with different stakeholders by building a joint pottery business and designing a reasonable packaging for pottery. There is also a desire to preserve and promote Kasongan's pottery heritage and make it famous again like before COVID-19. Some community members are showing the awareness or recognition of sustaining the destination for the better attraction and benefits for both tourists or customers and the present as well as future Kasongan local community generation. Some respondents suggest that, to improve cleanliness in the village, promote Kasongan, and open up job opportunities for the community. For example,

> There is a need of willingness to collaborate and provide input with the locals and NGOs, and a desire to preserve and promote Kasongan's pottery heritage and making Kasongan famous again like it was before COVID 19 (Village leader in Kasongan, interview on 29th February, 2024)

The findings indicated that there was a general recognition among some respondents about the importance of sustaining tourism in Kasongan for future benefits and preserving the village's pottery heritage. Some respondent's express willingness to collaborate and provide input with the local community, Non-government organizations, and the government. Some respondents provided suggestions such as active communication, feedback mechanisms, collaborative pricing, and working together as a tourist village. Moreover, making an effort towards village cleanliness, promotion, and job creation for the community.

These findings align with other studies for the positive attitudes on sustainable tourism development, which emphasizes the importance of stakeholder collaboration, community engagement, preservation of cultural heritage, and addressing environmental concerns (UNWTO Sustainable Tourism for Development Guidelines, 2021). Effective collaboration among local communities, businesses, non-government organizations, and government agencies are crucial for aligning interests, pooling resources, and developing cohesive strategies for responsible tourism growth (Waligo et al., 2013). Community-based tourism initiatives that prioritize local participation, capacity building, and empowerment have been advocated as pathways towards sustainable.

4.2.2. Negative Attitudes

4.2.2.1.The conjunctural specific knowledge

Some children tend to choose jobs other than pottery craftsmen. Some producers focus only on quantity and sales rather than quality of pottery products. There is a lack of visible community involvement in decision making, with some only providing jobs without considering other aspects. Social jealousy and prejudice exist among some community members. Some community members rarely contribute to environmental efforts or sustainable tourism initiatives, citing being too busy with work. For example

> Children tend to choose other jobs than pottery craftsmen and also some families they prevent their children for further studies to prosper their family business (Private tourism worker 1, interview conducted on 23rd February, 2024)
> I only focus on sales, I don't know about the quality of the product. (Individual shop owner 3, open-ended questionnaires on 8th March, 2024)
> We sell, just sell. If a friend provides input, please listen to it, we take an advice but no addition cost of the product (Individual shop owner 2, open-ended questionnaires on 8th March, 2024)

4.2.2.2.General Dispositions/habitus

On the other hand, some local community members argue that Burning pottery causes pollution, but it is considered normal and not addressed. There is a lack of collaboration and an isolation approach by some pottery producers. Some community members are unsure or unaware of sustainable tourism efforts or challenges in Kasongan. Decreasing customers and a lack of promotion or marketing efforts are mentioned as concerns. For example, "*Smoke from burning pottery has become common in the places here in Kasongan*" (Household 3, open-ended questionnaire on 24th February, 2024). Another group of respondents mentioned the same point that "*Burning smoke but that is normal in Kasongan*" (Households 7, 9, and 12, open-ended questionnaires on 24th February, 2024).

Generally, the findings suggest a mix of positive and negative attitudes towards collaboration, sustainable tourism, and the preservation of Kasongan's pottery heritage seen as the conjunctural specific knowledge. While some recognize the importance of these efforts and are willing to participate, others seem disengaged, focused solely on their individual businesses, or unaware of the challenges faced by the community are the general disposition of the local community in Kasongan. Concerns are raised about children choosing jobs other than pottery crafting and a lack of focus on product quality over quantity. Some respondents cited a lack of visible community involvement, social prejudices, and environmental pollution from pottery burning being considered normal. Disengagement, unawareness, or dismissal of sustainable tourism efforts and challenges are expressed by several respondents. Issues like decreasing customers, lack of promotion, and siloed approaches by individual producers are mentioned. Other studies highlighted the need to address environmental issues such as pollution and waste management in tourism destinations, particularly those with handicraft production (Su et al., 2020; Seow et al., 2020). Promoting eco-friendly practices (Manihuruk, & Pratomo, 2023)., raising awareness, and implementing sustainable production techniques can help mitigate negative impacts and preserve the cultural and natural assets that attract visitors.

4.3. Collaboration between the actors

The following are the findings that shows the outcome of collaboration between the key actors identified who play part in sustainable tourism in Kasongan tourism village in sustaining the destination

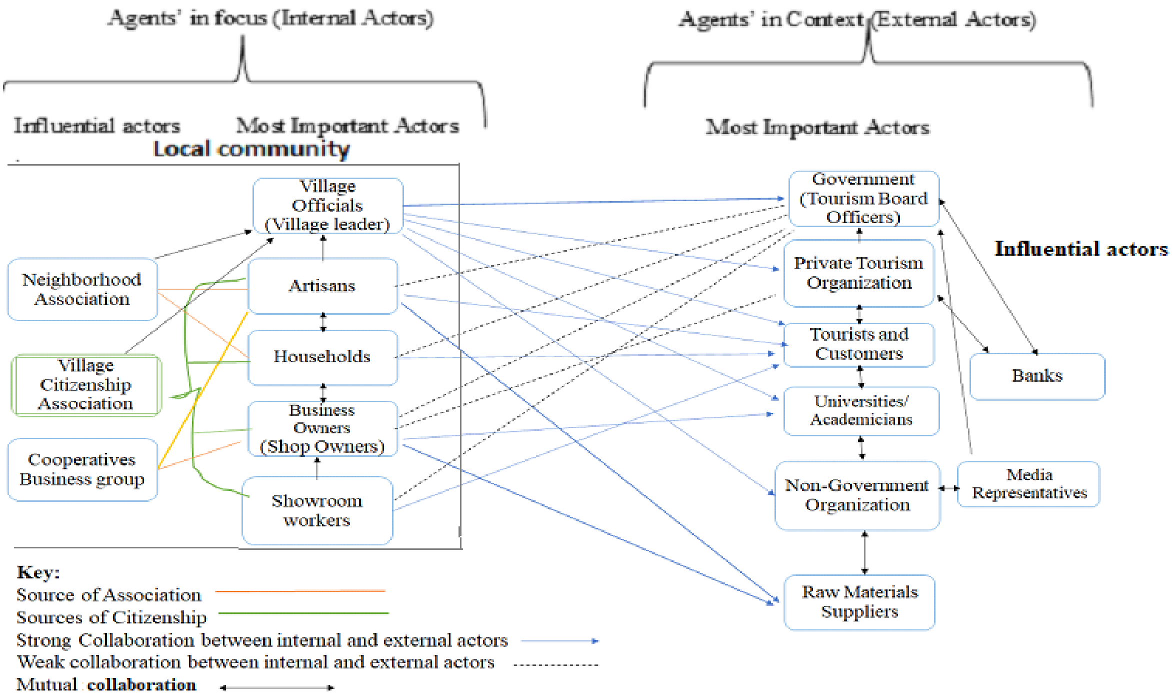

Figure 3: The diagram showing collaboration between actors

Source: Field Data, 2024

From Figure 3, the results indicate that there is a great collaboration between the village leader and the government while the other internal actors do not feel the sense of collaboration with the government as the result respondents don't see the contribution of the government. On the other hand, there is a diverse collaboration between internal stakeholders and other external stakeholders apart from the government. Perhaps this diversity is brought by the interest of each actor in creating a relationship. For instance, Shop owners and artisans collaborate with the raw material suppliers to continue producing and selling products.

> No Collaboration with local people but only village leader and those who needs assistance since some local people still want to work alone and not in group (Tourism board officer 5, interview on 29th February, 2024)
>
> There isn't any stakeholder who participate with us at all because we normally work alone (Artisans, Focused group discussion on 3rd March, 2024)

Another group of respondents argues that they don't know if there is a collaboration between the government and the local community. This group is occupied by the households, for example;

> I don't know that is there is a collaboration between the local community and the government in Kasongan (Household 1, open-ended questionnaires, 2024)
>
> I don't know the collaboration; village officials know this (Household 8, open-ended questionnaires, 2024)
>
> I don't know that the government help Kasongan (Household 11, open-ended questionnaires, 2024)

On the other hand, 28% of respondents stated that there is a collaboration between the government with the local community but it is not effective. Taking an example one of the artisans

> The Collaboration is not very effective between the artisans and government may be the village officials (Artisan 5, Focused group discussion, on 1st March, 2023)

Individual shop owners say;

> Occasionally the Tourism Department helps us but we mostly go alone (individual shop owner 5, open-ended questionnaire on 8th March, 2024)

Moreover, village leaders, tourism board officers and private tourism organization, some artisans and shop owners recognise the contribution or collaboration of the government with the local community, For example

> "There is a great collaboration between the government and the local community in Kasongan by Creating a tourist village as a legal entity and building systems and packaging for pottery" (Tourism board officer 1, interview on 29th February, 2024)

Table 2: The findings of the theme Collaboration of key actors to sustain the destination

Actors Position	**The Findings of the themes of Collaboration**	**Respondents' Code Names**	**Number of Occurrence**	**Percentage of Occurrence**
Internal Actors	There is a collaboration between government and local community/ There is a great collaboration by Creating a tourist village as a legal entity and building systems and packaging for pottery (R4)	R1, R2, R3, R4, R6, R11, R16	7	18%
	I Don't know that is there is a collaboration between the local community and the government in Kasongan/I don't know the collaboration; village officials know this (R28)/ I Don't know that the government help Kasongan (R31)	R21, R22, R23, R24, R25, R26, R27, R28, R29, R30, R32, R33, R34,	13	33%
	The Collaboration is not very effective between the artisans and government may be the village officials/Occasionally the Tourism Department helps us but we mostly go alone (R20)	R7, R8, R9, R10, R12, R13, R14, R15, R17, R18, R20	11	28%
	There isn't any stakeholder who participate with us at all/No Collaboration since some local people still want to work alone and not in group (R5)	R5, R12, R13, R14, R15, R21, R22, R25, R27, R29, R30, R31, R32, R34	14	36%

External Actors	There is a collaboration between government and other stakeholders to sustain Kasongan tourism village	R1, R2, R6, R7, R8, R9, R10, R11, R16, R18, R19, R28, R5,	13	33%
	The government only provides minimal attention to other stakeholders (R17)/ I only know that village officials are taking care of it. I don't know about the government (R33)	R17, R33,	2	5%
	I don't know if there is collaboration of other stakeholders /Nothing, because I don't pay attention to things like that to investigate collaboration (R26)	R23, R24, R3, R4	4	10%

Source: Field Data, 2024

These findings indicated in table 2, suggested a lack of consensus and clear communication regarding collaborative efforts among internal and external actors in sustaining Kasongan as a tourism destination. While some collaborative initiatives were reported by some respondents, a significant number of respondents seem unaware or not really feel about their involvement to collaborate with external stakeholders. From table 1, presents the collaboration of key actors who are needed to sustain the destination. The following were the discussion from the findings.

4.3.1. Internal Actors

There were mixed views among respondents about collaboration between the government and local community in Kasongan tourism village. As it was reported in table 2, that some respondents indicated that there is collaboration, with efforts like creating a tourist village legal entity and systems for pottery packaging. However, there is also information to some respondents stating that they didn't know if such collaboration exists, and some respondents felt the collaboration is not very effective. While a significant number of respondents claimed that there is no collaboration at all, with some local people preferring to work alone rather than in groups. The findings contrast with the suggestions of UNWTO Sustainable Tourism for Development Guidelines, 2021; Rasoolimanesh, et al., 2019 who insist on strong collaboration between the local community, government and non-government organizations as key actors in sustainable tourism.

4.3.2. External Actors

Some respondents acknowledged collaboration between the government and other external stakeholders to sustain Kasongan tourism village. While some respondents stated that the government provides minimal attention to other stakeholders. Moreover, other respondents expressed lack of knowledge about collaboration with external stakeholders. Some studies that emphasized the importance of stakeholder collaboration and community involvement in sustainable tourism development (example, Seyfi et al., 2023; Spadaro et al., 2023). Effective collaboration between government, local communities, businesses, and other stakeholders is crucial for aligning interests, pooling resources, and developing cohesive strategies for responsible tourism growth.

On the other hand, the findings in figure 3, indicates that the collaboration between actors, that local community members felt that they are not involved in collaboration with the government as the key external stakeholder except their village leader, as the result most of them confirmed that they didn't feel if there is a collaboration with the government and other stakeholders but local community members agreed that they collaborate each other within the community. For instance, Artisan 10, said "The Collaboration is not very effective between the artisans and government, maybe the village officials/Occasionally the Tourism Department helps us but we mostly go alone". Addressing the roles and interactions of internal and external actors in achieving sustainable tourist practices, particularly in the context of the Kasongan tourism village, local community members showed the awareness of the roles to be played by each actor. This is supported by other studies (Farmaki et al., 2020; Moscardo et al., 2021) states that maintaining a sustainable tourism destination requires collaboration and involvement from various stakeholders.

5. Conclusions

The results showed that important parties, such as the local community, the government, and other groups, were not effectively collaborating. Strategies to enhance these actors' cooperation, communication, and joint decision-making processes might have to be investigated in more detail. This can entail looking into and customizing best practices from other prosperous sustainable tourist locations. Examining the need for training and capacity-building: The results emphasized the necessity of developing the local community's skills and capacity in order to manage tourism sustainably. Subsequent investigations may pinpoint particular knowledge deficiencies and formulate customized educational initiatives to augment the community's comprehension and execution of sustainable practices. This could cover subjects like trash management, environmental monitoring, sustainable tourism planning, and eco-friendly pottery production methods.

One major issue that the research pointed out was a lack of financing and support. In order to assist sustainable tourism projects in Kasongan, more research might look into sustainable finance structures and investment prospects. Partnerships with governmental bodies, businesses, or international development agencies may be necessary for this.

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NAVIGATING INDONESIA'S BLUE ECONOMY: LESSONS LEARNED FROM LITERATURE

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ABSTRACT

This paper explores the connection between American literature and environmental issues, focusing on greed and pollution. It analyzes Jack London's The Sea Wolf to understand how it can highlight the negative effects of unchecked greed on natural resources. The findings can help Indonesia manage its marine resources. By understanding the dangers of greed and pollution, Indonesia can develop a sustainable approach to its ocean resources. From the perspective of Jesuit ecological justice, which emphasizes the preservation of delicate ecosystems and moral resource management, the exploitation of life in the ocean is abhorrent. The study suggests that literature can inform policy discourse and promote environmental stewardship in the Blue Economy context. The implications include promoting ecological awareness, interdisciplinary research, and leveraging literature for positive social and environmental change.

Keywords: *blue economy, overfishing, ecosystem*

1. Introduction

The Blue Economy (BE) concept, which emerged from the 2012 United Nations Conference on Sustainable Development, promotes sustainable ocean resource usage for economic growth and improved livelihoods. The Nawacita plan in Indonesia highlights the role of natural capital, including marine resources, climate change mitigation, and sustainable development. The World Bank estimates that Indonesia's BE is $1.34 billion, with earnings from coastal culture, fishing, shipwrecks, marine tourism, coral reefs, seagrass, and mangroves (Anna, 2023). Indonesia may allocate 10% of its marine economic production to ocean governance and health to solve such issues as population increase and tidal flooding. The COVID-19 pandemic has expedited Indonesia's BE adoption, focusing on sustainable economic growth and maritime resource management (Chapsos & Hamilton, 2019).

Despite the positive outlook for Indonesia's BE to generate long-term development, it is not without challenges. The challenges include overexploitation, pollution, habitat degradation, and unequal distribution of benefits. Responsible methods, such as reducing bycatch and preventing illicit fishing, are important for sustaining healthy fish populations and conserving marine ecosystems (Mackay, 2020; Gumilar, 2022).

Oceans are usually disregarded in multidisciplinary literary studies about sustainable development, particularly in Indonesia, a country with a diverse marine ecosystem. This article would argue that literature can provide valuable lessons for a sustainable future due to its universal themes like greed and respect for nature, which resonate across cultures and periods. It also allows for indirect exploration of complex sustainability issues through characters, narratives, and settings, and fosters empathy and emotional connection, motivating readers to consider their environmental impacts. Classic works often depict societies that collapsed due to unsustainable practices, highlighting the importance of learning from past mistakes. One example is *The Old Man and the Sea*. Scholars suggested that the novel provides valuable lessons (e.g., Sabudu, 2020; Li-juan, 2016)). Written in 1952, Ernest Hemingway's classic novella follows Santiago, an aged Cuban fisherman, who encounters a giant marlin and fights it alone. Despite his skill, the marlin weakens, and Santiago is forced to kill it. However, sharks attack the merlin, leaving only a skeleton. Santiago's struggle against the marlin symbolizes natural resource exploitations, with sharks representing opportunistic businesses and market manipulation. The stories resemble Indonesia's large-scale fishing operations that harm small fish farmers. Another example is *Moby Dick*, an iconic American novel that depicts the consequences of industrial expansion and natural resource exploitation, which mirrors Indonesia's geopolitical challenges. Captain Ahab's relentless pursuit of the white whale symbolizes the consequences of industrial expansion, highlighting the impacts of whaling on marine ecosystems. One can see that this novel written by Herman Merville in 1851 parallels Indonesia's geopolitical challenges today. It can be connected to the marine economy through themes of resource depletion and the destructive nature of obsession.

Exploring Indonesia's BE through the perspective of American novels and Jesuit beliefs provides a new and potentially enlightening research avenue. Sanata Dharma University, the only Jesuit college in Indonesia, aims to uphold Pope Francis' calls for protecting our common home which involves bringing the whole human family together for sustainable and integral development (Francis, 2015). The Universal Apostolic Preferences (UAP) emphasize ecological justice, care for creation, and collaboration for the common good. www.jesuit.id. (Booklet UAP Indonesia. 2017. www.jesuit.id). These values can serve as ethical and moral frameworks for navigating the development of Indonesia's BE responsibly and sustainably. Analyzing American 'ocean' novels can reveal sea exploitations in Indonesia's BE. Such an attempt thus potentially recommends sustainable economic practices in the context of UAP. In this way, this study contributes to contextual literary studies, understanding the sea's potential and human greediness in American literature. Fictive characters in the stories share real people's plights whose lives depend on the sea, emphasizing environmental exploitation and greed.

Given the possible similarities of ecological (in)justice in Indonesia's BE and imagination of oceans and people in American literature, this paper will examine how *The Sea Wolf* by Jack London explores the relationship between humans and nature and the implications thereof. It aims at showing the consequences of exploitation and the need for sustainable economic practices with which Indonesia's maritime economy can learn.

2. The Sea-Wolf: The Danger of Ruthless Exploitation

Numerous studies have been done on *The Sea Wolf* from character analysis, especially that of Wolf Larsen (Badal, 2008; Brophy, 2012), but contextualising the novel with the marine economy is scarce. This article is to show that while *The Sea Wolf* hardly directly offers a blueprint for sustainable maritime management, it provides cautionary tales and prompts reflection through contrasting themes.

The Sea-Wolf presents environmental issues through its portrayal of seal hunting, raising questions about the sustainability of hunting practices and their impact on animal populations. Published in 1904, the novel serves as a precursor to later works highlighting human actions' impact on the environment. It is a psychological adventure story about Humphrey Van Weyden. He is a refined intellectual who becomes the guest of Wolf Larsen, the brutal captain of a seal-hunting ship, the Ghost. After a ferry accident, Humphrey must adapt to the harsh reality of life at sea and grapple with Wolf Larsen's philosophy of ruthless individualism and amorality. The story explores themes of survival, nature, and the struggle between civilization and savagery. Humphrey and Maud Brewster face the dangers of the sea and Wolf Larsen's erratic behavior.

2.1.Balance of Power

When the story opens, Humphrey Van Weyden, the intellectual, and Maud Brewster, a poet are rescued from a shipwreck held captive on Wolf Larsen's ship, the Ghost. Maud, a resilient and independent character, bravely navigates the brutality of Wolf Larsen, maintaining her dignity and intelligence. She represents a civilized and compassionate character, advocating for human life and empathy. Maud's resourcefulness and adaptability are evident in her survival on the ship and even in using her skills to gain power with Wolf Larsen. Wolf and Maud symbolize power balance depicted as "two animals, each wary of the other, yet each recognizing in the other a foeman worthy of respect."

Likewise, the balance of people and nature is evident: The sea was master, and the Ghost was tossed like a chip, emphasizing its ultimate dominance. The ruthless individualism of Wolf Larsen contrasts sharply with a sustainable strategy. Maintaining a healthy ocean for future generations and managing shared maritime resources require cooperation and international agreements.

2.2.Unsustainable Practices

The novel's portrayal of ruthless seal hunting exemplifies the dangers of unchecked exploitation of marine resources. The focus on quantity over long-term survival foreshadows the need for quotas, regulations, and responsible fishing practices in the modern world. Humphrey is concerned about his guest's obsession with hunting seals. London writes:

> "Wolf Larsen," said Humphrey, hesitatingly, "isn't it a rather wasteful proceeding to kill all those seals?"

Larsen rejects the idea that the soul is everlasting. He believes that the only purposes of life are survival and pleasure, and has grown to detest and minimize all human life. For him, "life is killing" and he hardly sees the "difference between a man killing a steer and a seal killing a fish."

2.3.Consequences of Neglect

The decline of the seal population due to overhunting foreshadows the potential consequences of neglecting environmental factors in maritime activities. Sustainable management requires considering the impact on the entire ecosystem. In the novel, neglect is also further symbolized by the shipwreck. The Ghost, a ship under Wolf Larsen's care, suffered maltreatment, leading to leaks and a dangerous crack in its mainmast. The crew's hunger resulted from dwindling food supplies, highlighting the dangers of neglect. The story depicts the physical and emotional toll of neglect on the ship and the consequences of ignoring proper maintenance.

2.4.Respect for the Sea

The harsh realities and dangers that passengers of the Ghost face at sea highlight the power and importance of respecting the ocean's natural world. Sustainable practices require acknowledging the limitations and potential dangers of the maritime environment.

Despite his brutality, as a seaman, Wolf Larsen, nonetheless, shows a deep respect for the sea. He sees it amiably with an understanding of the sea's 'mood', violence, and playfulness. Larsen expresses a deep respect for the sea, viewing it with kinship and understanding its moods, tenses, ferocity, and playfulness. Comparably, Humphrey Van Weyden shows us how important resilience is in times of trouble. Indonesia's BE, likewise, must be resilient in facing such issues as ocean acidification and climate change, investing in eco-friendly methods and tools to adjust to a changing ecosystem. It is *The Sea Wolf*'s relevance to the ecological praxis in Indonesia that the discussion now turns.

3. Lessons Learned for Indonesia's Marine W/Health

Climate change threatens the marine ecosystem and economic potential in Indonesia, which has a vast fisheries potential worth IDR 3,000 trillion (Sari & Muslimah, 2020). Sustainable fisheries development should benefit present generations while considering sustainability for future generations. To encourage optimal utilization and exploitation of fisheries resources a model of blue economy-based policy aims to achieve sustainable national marine and fisheries management is required.

A recent study reported in *The Jakarta Post* claims that Indonesia is facing challenges in meeting its fisheries targets, with half of its wild fish stocks overfished and some marine ecosystems left out of the expanding marine protected areas (MPAs), according to a recent study by the World Resources Institute (WRI) Indonesia. The study found that wild-capture fish production has stagnated while aquaculture continues to grow. In 2019, wild-capture fisheries accounted for 7.5 million tonnes, while aquaculture was 16.3 million tonnes. To protect marine biodiversity, the government has continued to expand MPAs, from around 5 million hectares in 2002 to around 23 million hectares in 2019. However, Indonesia faces challenges in meeting its fisheries target study, as 84% of mangroves, 55% of seagrass, and 57% of coral reef ecosystems in 2019 were not included in protected areas. (https://www.thejakartapost.com/indonesia/2022/12/23/overfishing-looms-as-indonesia-struggles-to-meet-fisheries-target-study.html).

What we can learn from *The Sea Wolf* is the significance of managing marine resources responsibly and the risks associated with unrestrained exploitation. This can be a lesson for Indonesia's BE, which aims to balance financial gain and ecological health by enacting stronger laws to stop overfishing and environmental degradation. This novel also explores the power struggles between an oppressive authority and the marginalized. As such, it aligns with the need for Indonesia's BE to put first the welfare of the coastal communities, i.e., local fish farmers. Pope Francis speaks of global injustice in his encyclical letter Laudato si'. The Holy See highlights the severe impacts of climate change on developing countries, particularly the poor and marginalized, who rely on nature reserves and ecosystem stability for their livelihoods, such as agriculture, forestry, and fisheries (2015).

Jack London's novel underscores the importance of balance in a balanced world. Indonesia can learn from this by promoting cooperation with neighboring countries, ensuring fair regulations, and developing a robust marine economy strategy that prioritizes sustainability and community resilience.

4. Conclusion

This paper has shown that *The Sea Wolf* is a novel that highlights the dangers of unchecked marine resource exploitation, emphasizing the need for quotas, regulations, and responsible fishing practices. It also emphasizes the importance of respecting the ocean's natural world and the need for collaboration and international agreements for managing shared resources. The novel also highlights the consequences of neglecting environmental factors in maritime activities, such as the decline of the seal population due to overhunting, emphasizing the need for sustainable management that considers the entire ecosystem. Here, Jack London's novel serves as a cautionary tale for the modern world, emphasizing the need for responsible fishing practices and quotas. This study, therefore, aligns with the UAP's focus on social justice in that it creates Indonesia's BE that benefits all, not just a select few (Priority #2). The Jesuit principle emphasizes the importance of caring for the natural world. The Jesuit mission of reconciliation with Creation and the promotion of ecological justice (Priority #3) is consistent with this study's goal of navigating Indonesia's BE through a critical reading of American literature.

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THE MEDIATING EFFECT OF POSITIVE EMOTIONS ON MEMORABLE TOURISM EXPERIENCE AFFECT TOWARDS BEHAVIORAL INTENTIONS

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ABSTRACT
The objective of this study is to examine the influence of memorable tourism experiences on revisit intentions and recommendation intentions, as well as the role of positive emotions in this relationship. The focus of this research is the Bali destination. The study employs the S-O-R theory. The research was distributed to 248 respondents who had visited destinations in Bali. Sampling was conducted using the purposive sampling technique. Data collection was conducted using Google Forms, utilising social media and Kudata. The data was analysed using Structural Equation Modelling (SEM) with the help of Smart PLS software version 4.0.9.5. The results of this study indicate that memorable tourism experiences have an effect on positive emotions, but have no effect on revisit intentions and recommendation intentions. However, after adding positive emotions as a mediating variable, positive emotions are able to mediate the relationship between memorable tourism experiences on behavioural intentions. This study demonstrates that memorable tourism experiences contribute to sustainable tourism, which in turn can increase the revenue of the tourism sector through the intention to revisit and recommend destinations in Bali to others.
Keywords: *memorable tourism experience, positive emotions, revisit intention, recommendation intention.*

1. Introduction

Competition in tourism is getting tighter along with the development of current tourism trends. So, the tourism sector is also required to have a sustainable marketing strategy. Memorable Tourism Experience (MTE) is a powerful marketing strategy for tourists to make decisions in choosing the right tourist destination based on their past experiences.

If tourists have had a memorable tourism experience, it will influence a person's emotions and tourist satisfaction. The positive emotions tourists feel are obtained from a memorable tourist experience, which will influence their behavioral intention, namely, revisit intention and recommendation intention. So, with this research framework, we use the SOR (Stimulus-Organism-Response) theory to discuss the unified framework of variable formation (MTE-positive emotions-behavioral intentions). Apart from this theoretical gap, according to research conducted by Chandralal & Valenzuela, (2013); Keskin et al., (2022); Wong & Lai (2021) stated that MTE does not affect behavioral intentions (revisit intention and recommendation intention). Otherwise, many tourists only want to visit once because they are curious or because the location is far away.

Based on the empirical gaps above, this research wants to examine and test whether memorable tourism experiences can increase tourism sustainability through intention to revisit and intention to recommend to others. Apart from that, this research adds positive emotions which in the research conducted by Chen et al., (2020); Jang et al., (2020); Jiang (2020); Song et al., (2021); Tan et al., (2022) stated that positive emotions were able to mediate the influence between memorable tourism experiences on behavioral intentions. So, it is hoped that this research can fill the empirical gap where most tourists only visit the destination once, but with positive emotions in it, it can increase sustainable tourism. This is the case with tourist destinations in Bali. Bali is the best tourist city in Indonesia and even in the world, Bali has received awards at world level, and received an award through TripAdvisor, namely the Travelers' Choice Award For Destinations, which named the Island of the Gods as the most popular destination in the world in 2023 (Kemenparekraf.go. id). Apart from that, currently domestic tourists are also aware of Bali's existence as the best tourist city in Indonesia, which makes Bali the number one tourist city in Indonesia.

Bali not only offers the best tourist destinations, but what differentiates Bali from other provinces is according to news published in the 2022 Luxury Lifestyle Readers' Travel Awards Magazine which nominates Bali as one of two categories, namely the best island and the best honeymoon island in the world, which is Bali is suitable for memorable moments. Second, Bali is also famous for its natural tourism heritage and the strong traditions and culture in Bali. Famous tourist destination areas in Bali are Ubud, Canggu, Nusa Peninda, Jimbaran, Kintamani, Kuta Beach, Sanur Beach, Lovina Beach. Apart from that, Bali is a tourist destination that provides cultural experiences, refreshment, knowledge sharing, social interaction with the community, all of which are included in the MTE elements. (MTE Component: Kim et al., (2012).

2. Literature Review

2.1 SOR theory

S-O-R defines a stimulus (S) as a specific cue influencing an individual's internal state. Organism (O) refers to an individual's cognitive processes that begin immediately when an individual receives marketing stimuli/cues. Response (R) is the individual outcome of a stimulus and an organism.

2.2 Memorable Tourism Experience has a Positive Effect on Behavioral Intention

MTE is constructed selectively by tourists after evaluating their experiences, tourists usually regard past tourism experiences as reliable information and make tourism decisions based on these experiences, which has a great influence on tourists' behavioral intention. In addition, MTE has a good positive predictive effect on tourists' behavioral intention (Sharma & Nayak, 2019; Yang & Zhang, 2022; Zhang et al., 2021). Memorable tourism experiences can have a greater influence on people's intentions to recommend them to others. This is because people will be more able to voice their experiences to other people and tell them a lot about it, therefore formulating a hypothesis:
Memorable tourism experiences influence revisit intention (H1), recommendation intention (H3).

2.3 Memorable Tourism Experience has a Positive Effect on Positive Emotions

Based on research conducted by (Song et al., 2021; G. Zhou et al., 2023), the results show that experiences with positive emotions make it easier to form memories. This is because the passage of time in the past has a substantial influence on positive emotions during the evaluation of the experience. memorable past. So hypothesis 2 was formulated, namely, MTE has a positive effect on positive emotions (H2).

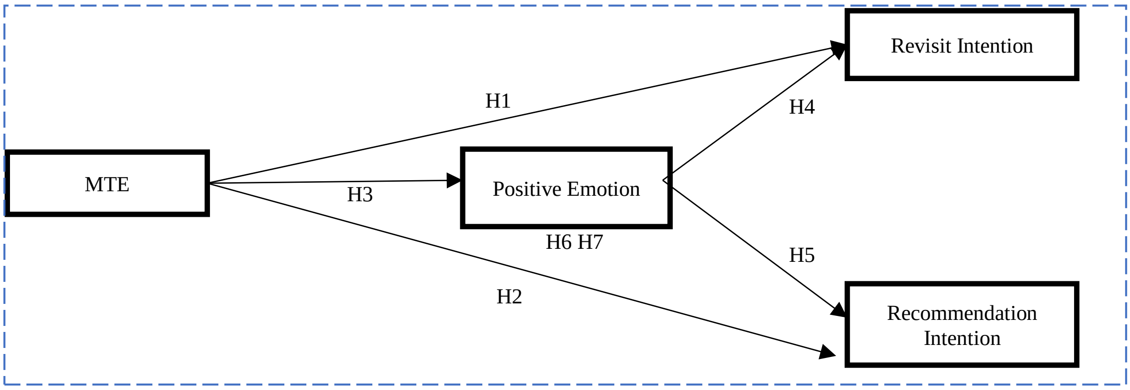
2.4 Positive emotions Have a Positive Effect on Behavioral Intention

Based on research conducted by Chen et al., (2020); Jang et al., (2020); Jiang (2020); Song et al., (2021); Tan et al., (2022) the results show that positive emotions influence the revisit intention and recommendation intention. When customers have positive feelings based on the results of their evaluation of the quality of the experience provided by the service provider, this can increase the customer's intention to revisit the place, and tourists will want to share their experiences. So a hypothesis is formulated: Positive emotions have a positive effect on revisit intention (H4), and recommendation intention (H5).

2.5 Positive Emotions Mediate the Influence of Memorable Tourism Experience on Behavioral Intentions

Based on research conducted by Chen et al., (2020); Jang et al., (2020); Jiang (2020); Song et al., (2021); Tan et al., (2022) the results show that positive emotions influence the revisit intention and recommendation intention. When customers have positive feelings based on the results of their evaluation of the quality of the experience provided by the service provider, this can increase the customer's intention to revisit the place, and tourists will want to share their experiences. So, a hypothesis is formulated: Positive emotions positively affect revisit intention (H6) and recommendation intention (H7).

Research Model



Source : Modification : (Chen et al., 2020b; Zhang et al., 2021)

3. Research Methods

This research uses a quantitative research design that focuses on numbers and measures something objective by testing hypotheses and variables (Neuman, 2014, p. 176). This research uses a survey with a questionnaire, and collecting questionnaire data will be managed online using a Google form link to obtain respondents' answers. The population in this research is all consumers who have visited tourist attractions in Bali. The population is unknown in this research, so this sampling was carried out using non-probability sampling techniques. The criteria for respondents in this study are domestic tourists aged at least 18 years (Chen et al., 2020b; X. Zhou et al., 2022) who have visited tourist attractions in Bali at least once (Stavrianea & Kamenidou, 2022; Zhang et al., 2021) in the last two years (Jiang, 2020).

According to the Book, Hair et al., (2019) p. 133) states that the sample size is acceptable if 10 times the total measurement items are used in this study. In this study, the total number of measurement items was 21 items, so the required sample size was minimal at 210 respondents. After obtaining respondents, they were analyzed using PLS-SEM with the help of Smart PLS 4.0.9.5 software.

3.1 Operational Definition

The instrument used in this research refers to measuring variables from previous research, which were measured using a Likert scale and coding. This study used a five-point Likert scale, where 1 = strongly disagree, 5 = strongly agree. This research has five variables, each with an item to measure that variable. Instrument tests ensure that the measurement items can measure the appropriate concept, namelyvalidity and reliability tests for each measurement item. This research distributed to 248 respondents.

Table 1
Criteria analysis

Testing	Criteria	Note (Hair et al., 2019)
Outer model	Discriminant Validity	HTMT < 0,9, Fornell-Larcker root AVE > other constructs, cross loading value > other loading
	Convergent Validity (outer loading, AVE)	0,5 - 0,7, AVE (≥ 0,5)
	Reliability analysis	CR and CA > 0,7
Colinearity	Inner VIF	VIF < 5
Inner model	R square	0,75, 0,50, 0,25 (substantial, moderate, and weak)
	F square	0,02, 0,15, 0,35 (small, medium, and large)
	Q square	Q^2 predict > 0
Hypothesis	Beta	A positive coefficient means a positive relationship
	P value	< 0,05

Notes: Criteria Analysis
Source: Hair et al., (2019)

4. Research Findings and Discussion

In this research, data collection is linked via a Google Form questionnaire. The distribution of questionnaires was carried out via several social media such as WhatsApp, Instagram, Twitter, Facebook, TikTok and the Kudata website on 20 January – 20 February 2024. The questionnaires distributed to 248 respondents. However, the questionnaire that met the researchers' criteria was 248 respondents (92%) and the remaining 20 respondents (8%) did not meet the researchers' criteria.

4.1 Demographic Profile

Table 2
Demographic Profile (N = 248)

Demographic	Frequency	Percentage
Gender		
Male	72	29
Female	176	71
Age		
18-25	186	75
26-35	45	18,1
36-50	5	2
>50	12	4,8
Income		
<1.000.000	80	32,3
1.000.001 – 2.000.000	67	27
2.000.001 – 3.000.000	35	14,1
3.000.001 – 4.000.000	29	11,7
>4.000.001	37	14,9
Status		

Student (>18)	12	4,8
Bachelor's degree	144	58,1
Employee	52	21
Housewife	10	4
Enterpreneur	18	7,3
Other	12	4,8

Notes: Respondent Characteristic
Source: Primary Data Processed Results (2023)

Based on the table above, it can be concluded that the majority are dominated by women, aged 18-25 years, with income < 1,000,000, student status.

4.2 Desctiptive Statistics

Table 3
Descriptive Statistics

Indicator	Standard Deviation	Indicator Mean	Variable Mean	Min value	Max Value
Memorable Tourism Experience					
I really enjoyed the experience of traveling to tourist attractions in Bali/DI Yogyakarta	0,588	4,71	4,62	1	5
I came back refreshed and renewed after traveling to tourist attractions in Bali/DI Yogyakarta	0,631	4,62		1	5
I learned something new from the experience of traveling to tourist attractions in Bali/DI Yogyakarta	0,661	4,51		1	5
I had the opportunity to experience the local culture of Bali/DI Yogyakarta	0,606	4,62		1	5
I experienced something new such as new tourist experiences, new culinary delights, and new culture while traveling to tourist attractions in Bali/DI Yogyakarta	0,586	4,67		1	5
Positive Emotions					
I feel happy after traveling to tourist attractions in Bali/DI Yogyakarta	0,508	4,72	4,62	1	5
I feel comfortable after traveling to tourist attractions in Bali/DI Yogyakarta	0,633	4,56		1	5
I feel happy after traveling to tourist attractions in Bali/DI Yogyakarta	0,582	4,66		1	5
I feel satisfied after traveling to tourist attractions in Bali/DI Yogyakarta	0,605	4,65		1	5

Indicator	Standard Deviation	Indicator Mean	Variable Mean	Min value	Max Value
I feel my heart is full of love after traveling to tourist attractions in Bali/DI Yogyakarta	0,673	4,50		1	5
Revisit Intention					
If I could, I would come back to this tourist attraction in Bali/DI Yogyakarta	0,623	4,66	4,52	1	5
I will always consider this tourist attraction in Bali/DI Yogyakarta as my first choice of destination	0,718	4,40		2	5
I have a strong intention to visit tourist attractions in Bali/DI Yogyakarta	0,661	4,52		2	5
Recommendation Intention					
I would recommend tourist attractions in Bali/DI Yogyakarta to anyone who is interested in traveling	0,633	4,61	4,55	2	5
I will tell my relatives, friends and colleagues about tourist attractions in Bali/DI Yogyakarta	0,635	4,54		2	5
I would be happy to recommend tourist attractions in Bali/DI Yogyakarta to my relatives, friends and colleagues	0,647	4,54		1	5
I will share my experiences traveling in Bali/DI Yogyakarta on social media	0,709	4,50		1	5

Notes: Descriptive Statistics
Source: Data processed using SPSS software

Based on the descriptive statistics table above, it can be concluded that all the indicators in this study have an indicator average of 4 or the equivalent of the agree scale. Meanwhile, the variable mean has a variable mean of 4 or equivalent to the agree scale. Meanwhile, the maximum and minimum values for each indicator in this study have a minimum value of 1 and a maximum value of 5.

4.3 Outer Model

4.3.1 Convergent Validity

Table 4
Outer Loading

Indikator	MTE	EP	RI	IR	AVE	Ket
MTE1	0,812				0,625	Valid
MTE2	0,805					
MTE3	0,801					
MTE4	0,766					
MTE5	0,767					
EP1		0,760			0,609	Valid

EP2		0,784				
EP3		0,831				
EP4		0,761				
EP5		0,763				
RI1			0,813		0,692	Valid
RI2			0,784			
RI3			0,874			
IR1				0,822	0,679	Valid
IR2				0,872		
IR3				0,863		
IR4				0,766		
IT X EP						

Notes: Outer Loading
Source: Data processed using Smart PLS software

Based on the table above, it can be seen that for all items in the four variables in this study, the outer loading value is ≥ 0.70. It was also concluded that all variables in this study had an AVE (Average Variance Extracted) value ≥ 0.50.

4.3.2 Discriminant Validity
4.3.2.1 Fornell-Larcker

Table 5
Fornell-Larcker

Variabel	**Criteria Fornell-Larcker**				
	MTE	**EP**	**IR**	**RI**	**KET**
Memorable Tourism Experience (MTE)	0,791				Valid
Positive Emotions	0,801	0,780			Valid
Recommendation Intention	0,621	0,703	0,832		Valid
Revisit Intention	0,608	0,662	0,724	0,824	Valid

Notes: Discriminant Validity Fornell-Larcker
Source: Primary Data Processed Results (2024)

It has been proven in the table above that this research has good discriminant validity because the AVE square root value of each variable is greater than the value of the other constructs. However, the variable relating MTE to positive emotions has a value greater than the value of the variable itself, so there are symptoms of multicollinearity in the variable MTE on positive emotions. This means that respondents filled in the MTE statement and had the same positive emotions. However, if you look at the cross-loading, it meets the criteria so that it can be continued in further analysis.

4.3.3 Reliability Analysis

Table 5
Reliability Analysis

Variable	**Composite Reliability**	**Cronbach's Alpha**	**Note**
Positive Emotions	0,839	0,842	Reliable
MTE	0,850	0,851	Reliable
Revisit Intention	0,766	0,783	Reliable
Recommendation Intention	0,851	0,857	Reliable

Notes: Reliabilty Analysis

Source: Primary Data Processed Results (2024)

Based on the results of the reliability test in the table above, show that all the variables in this study are declared reliable because the Composite Reliability and Cronbach's Alpha values for each variable have a value of > 0.70. So based on the reliable test results in this research, it can be continued for subsequent analysis.

4.4 Collinearity Among Predictor Constructs

Table 6
Collinearity

Variabel	VIF
Positive Emotions -> Revisit Intention	2,795
Positive Emotions -> Recommendation Intention	2,795
MTE -> Positive Emotions	1,000
MTE -> Revisit Intention	2,795
MTE -> Recommendation Intention	2,795

Notes: Collinearity Analysis
Source: Primary Data Processed Results (2024)

Based on the table shown in table above, to test collinearity between each variable relationship, it can be concluded that the VIF value is <5 or below 5, meaning that all variables and their relationships in this study do not have collinearity problems between predictor constructs.

4.5 Inner Model

4.5.1 Coefficient of Determination Analysis

Table 7
Coefficient of Determination Analysis

Variable	Nilai R-Square	Keterangan
Positive Emotions	0,641	High
Revisit Intention	0,451	High
Recommendation Intention	0,499	High

Notes: Coefficient of Determination Analysis
Source: Primary Data Processed Results (2024)

Based on the table above, it can be concluded that the variables positive emotions, revisit intention, and recommendation intention have a high category value of 64%, 45%, and 49%, respectively. After testing the coefficient of determination, the influence of the effect size is tested, and it can be concluded that those with a low effect size value or small category in the MTE variable is recommendation intention.

4.5.2 Predictive Relevance

Table 8
Predictive Relevance

Variable	Q^2predict
Positive Emotions	0,368
Revisit Intention	0,295
Recommendation Intention	0,340

Notes: Predictive Relevance
Source: Primary Data Processed Results (2024)

Based on the table above, it can be concluded that the variables positive emotions, revisit intention, and recommendation intention each have a Q^2predict value of 0,368, 0,295, and 0,340. So, based on the Q^2predict value, it can be concluded that the value is greater than 0, meaning it has a predictive relevance value or the observation value is good and good.

4.6 Hypotesis Testing

Table 9
Path Coefficient

Hypothesis	Path Coefficient	Original Sample (O)	Mean (M)	STDEV	T Statistics (|O/STDEV|)	P value	Note
H1	MTE → Revisit Intention	0,217	0,212	0,126	1,718	0,086	Not Support
H2	MTE → Positive Emotions	0,801	0,797	0,053	14,984	0,000	Support
H3	MTE → Recommendation Intention	0,160	0,163	0,090	1,783	0,075	Not Support
H4	Positive Emotions → Revisit Intention	0,489	0,491	0,119	4,109	0,000	Support
H5	Positive Emotions → Recommendation Intention	0,575	0,568	0,093	6,200	0,000	Support
H6	MTE →Positive Emotions → Revisit Intention	0,392	0,393	0,105	3,742	0,000	Support
H7	MTE → Positive Emotions→ Recommendation Intention	0,461	0,454	0,085	5,392	0,000	Support

Notes: Path Coefficient
Source: Primary Data Processed Results (2024)

Based on the table above, it can be concluded that if the p-value is less than 0.05, it is significant. The relationship direction is positive if the beta coefficient value is positive. MTE does not affect revisit intention and recommendation intention, but MTE have a positive effect on positive emotions. These results are shown in the results of a p-value of 0,086 and a beta coefficient of 0,217 (revisit intention), a p-value of 0,000 and a beta coefficient of 0,801 (positive emotions), a p-value of 0,075 and a beta coefficient of 0,160 (recommendation intention), so that h2 accepted, while hypothesis 1,3 is rejected.

Positive emotions have a positive effect on behavioral intentions, which can be shown in the results of a p-value of 0,000 and a beta coefficient of 0,489 (revisit intention), the p-value of 0,000 and a beta coefficient of 0,575 (recommendation intention), so it can be concluded that h4 and h5 are accepted.

After testing the direct effect, the next step is to test the mediating effect of positive emotions on MTE and behavioral intentions. The results of this study can conclude that positive emotions mediate the relationship between MTE and behavioral intentions (revisit intention and recommendation intention). These results can be confirmed from the p-value of 0,001, a beta coefficient of 0,392 (revisit to intention), a p-value of 0,000, and a beta coefficient of 0,461 (recommendation intention), so it can be concluded that h6 and h7 are accepted.

4.7 Discussion

The results of this study confirm the S-O-R theory, which states that MTE has a positive effect on positive emotions and revisit intention. MTE is the most significant factor for future behavior because of meaningfulness, local culture, novelty, and social interaction so that tourists who experience memorable experiences will increase return visits to the destination. It is also confirmed that this stimulus or external factor will influence a person's internal state or emotions, so it is concluded that MTE positively affects positive emotions.

MTE does not affect the recommendation intention and revisit intention because MTE is a subjective experience. Tourists have their preferences and motivations for making recommendations and intention to revisit again. Based on their preferences and motivations, tourists also recommend to other people, not just depending on the preferences of those who want to be recommended. Apart from that, there is also an element of perceived crowding or overtourism in a destination, which can reduce tourists' experiences and impact their satisfaction, tourist no recommendation no other people, and tourist not visit again on destination (Milman et al., 2020).

Positive emotions have a positive effect on behavioral intentions. This is because tourists who visit memorable destinations in Bali and DIY feel satisfied, enjoyed, and happy, so they invite their family and friends to visit these memorable destinations again. This is because if there is excitement generated when visiting a tourist destination, it will tell other tourists (Chen et al., 2020b; Jiang, 2020).

These positive emotions can mediate the relationship between MTE and behavioral intentions. This supports the SOR theory, where a memorable tourism experience is a stimulus that can influence the internal state of a person or organism in the form of positive emotions and will have an impact on the final result that arises after receiving the stimulus and the organism, namely the tourist's intention to behave in recommending others and visiting again. These memorable tourist destinations (Chen et al., 2020b; Zhang et al., 2021).

5. Conclusions

MTE has a positive effect on positive emotions. However, MTE does not affect recommendation intention and revisit intention. Positive emotions have a positive influence on behavioral intentions. Positive emotions mediated the relationship between MTE and behavioral intentions. The results of this study support the SOR theory, MTE as a stimulus, positive emotions as an organism, and behavioral intentions as a response. The theoretical implication is to strengthen the SOR theory, which can be used as a theoretical basis for tourists. Apart from that, this research also proved and deepened the importance of research on positive emotions, which is rarely researched because most research is on satisfaction. The practical implications for tourism managers are to increase memorable tourism experiences and positive emotions to increase tourism sector income.Firstly, it has limitations in only testing the variables in this research. It can use other variables, such as consumer preferences (Prentice et al., 2020) Second adding with the CAT Theory for analyzing cities other than Bali. Third, this research is only limited to domestic tourists, so the next research is to analyze foreign tourists.

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ANALYSIS OF PERCEIVED USEFULNESS, PERCEIVED CONVENIENCE, AND PERCEIVED TRUST ON CUSTOMER LOYALTY WITH CUSTOMER SATISFACTION AS A MEDIATING VARIABLE STUDY ON BCA MOBILE

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ABSTRACT
This study aims to determine: 1) The effect of perceived usefulness on customer loyalty. 2) The effect of perceived convenience on customer loyalty. 3) The effect of perceived trust on customer loyalty. 4) The effect of perceived usefulness on customer loyalty which is mediated by customer satisfaction. 5) The effect of perceived convenience on customer loyalty mediated by customer satisfaction. 6) The effect of perceived trust on customer loyalty mediated by customer satisfaction. The sampling technique uses nonprobability sampling. Data was obtained through distributing online questionnaires to active BCA Mobile users and using its service features at least twice in the last three months, for data analysis using Partial Least Square (PLS) with SmartPLS 4.1.0.1 software. The results of this study show that: 1) Perceived usefulness has no effect on customer loyalty. 2) Perceived convenience has no effect on customer loyalty. 3) Perceived trust has an effect on customer loyalty. 4) Customer satisfaction does not mediate perceived usefulness on customer loyalty. 5) Customer satisfaction does not mediate perceived convenience on customer loyalty. 6) Customer satisfaction mediates perceived trust on customer loyalty.
***Keywords**: Perceived Usefulness, Perceived Convenience, Perceived Trust, Customer Loyalty, and Customer Satisfaction.*

1. Introduction

The banking world is one of the fields that is required to keep up with technological developments because consumers' needs for various transaction activities want to be facilitated so that mobile banking appears as an answer to these needs. The intense competition to provide the best service through mobile banking has made banks launch various specific services for every human need, including BCA Mobile, where specific services are made to accommodate these various needs. The many service features provided provide various perceptions of the use of BCA Mobile, for example, with so many service features, can it really meet various human needs that are so complex or precisely with so many service options that make customers confused in choosing and using them, resulting in not maximizing the performance of each service feature. According to Tjiptono & Chandra (2017), based on a behavioral perspective, only a few consumers are 100% loyal to certain brands.

Many things continue to be built and maintained in maintaining customer comfort in using it. Building an attitude of loyalty to the use of BCA Mobile is also an effort by BCA as an effort to maintain the existence and sustainability of mobile banking. According to Griffin 2002 in Karyose et al. (2017), customer loyalty is a form of loyalty to the use of a product by consumers in a certain period of time. Therefore, referring to this definition, it is known that maintaining the loyalty of BCA Mobile users means that there will be an opportunity to increase the volume of customer transactions. BCA Mobile's ability to maintain customer loyalty is an indicator that they have felt satisfaction with the various service features available. This is in line with the definition of customer satisfaction, namely the extent to which a product's performance exceeds the buyer's expectations (Kotler & Armstrong, 2020). PT Bank Central Asia Tbk has successfully maintained customer satisfaction to date and this is shown by the award obtained by BCA in the "Satisfaction, Loyalty, & Engagement Awards 2023" event (Nisaputra, 2023). The awards obtained are inseparable from various supporting factors in the performance of BCA Mobile with its various service features, for example by providing various usefulness service features, BCA Mobile which offers convenience to use and learn, and by continuing to maintain customer trust by providing protection for various transactions in its use.

The results of research conducted by Suryatenggara & Dahlan (2022) show that perceived usefulness has a positive and significant effect on customer satisfaction and affects customer loyalty through customer satisfaction positively and significantly. The results of this study are different from the research of Adeliani & Soenhadji (2022) which found that usefulness has no effect on customer loyalty. The results of research conducted by Ismi & Abdilla (2020) show that convenience has a positive or significant effect on customer loyalty mediated by customer satisfaction. The results of this study are different from research conducted by Natalia & Br Ginting (2018) based on the results of the Second Path Determination Coefficient obtained Adjusted R Square obtained 0.504 which means 50.4% simultaneous influence of convenience variables and other variables on customer loyalty, the remaining 42.8% is influenced by other variables not examined in this study so that there is potential for this study to refine the research by adding other variables. Perceived trust is one of the factors of customer loyalty that must be maintained and considered. Based on research by Sumarauw et al. (2015) has results in the form of trust affecting customer loyalty through customer satisfaction, but does not have a significant effect because the effect is only 0.132. This research is inversely proportional to research by Laely (2016) by finding that the trust variable has no significant effect on customer loyalty through customer satisfaction.

This research will be used as reference material to continue to be able to make evaluations and improvements so as to increase customer satisfaction and customer loyalty consistently with various technological innovations through BCA Mobile. This research can add research material in developing new material or knowledge related to the banking world through the science of customer loyalty, and customer satisfaction. This research can also be a source of knowledge about the influence of satisfaction that drives customer loyalty so that it can help those who want to build a business.

The purpose of this study is that the variables of perceived usefulness, perceived convenience, and maximum perceived trust make an optimistic step to be able to maintain customer loyalty of its customers so as to provide customer satisfaction which makes them feel that BCA Mobile is something that will continue to be used in all future transaction activities. The high interest of customers in using BCA Mobile is an attraction for conducting a study in order to find out what factors are the emergence of customer satisfaction that encourages customer loyalty in its use. In addition, this research can also help BCA to maintain performance and compete competitively through its mobile banking. Some research questions that arose after knowing the previous background prompted the researcher to formulate research-related questions. Therefore, the main questions that are the focus of this research are: Do perceived usefulness, perceived convenience, and perceived trust have a significant effect on customer loyalty for BCA Mobile users? Do perceived usefulness, perceived convenience, and perceived trust affect customer loyalty of BCA Mobile users mediated by customer satisfaction?

2. Literature Review

2.1. Mobile Banking

Mobile banking is a facility provided from financial institutions by utilizing a communication device called a smartphone. This mobile-based banking technology innovation is considered one of the most significant breakthroughs in the banking industry, as it allows customers to independently conduct financial transactions (Kumar & Sharma, 2020). Users of mobile banking services generally utilize it for online transactions with modern devices, especially for business purposes. Mobile banking involves the use of technology that combines business information with advances in information technology. Research by Wulandari et al. (2017) said that mobile banking services can be grouped into three categories, namely: providing information, communicating, and making transactions.

The development of the banking sector today allows customers to conduct transactions more easily through smartphone devices, which can indirectly create a positive image among the public. Users of mobile banking services can access and perform transactions from anywhere, including checking balances without having to go to a bank or ATM machine, paying bills, and checking transaction history, in addition to getting a number of other benefits.

2.2. Perceived Usefulness

According to Wangsa (2020) in his research which says that perceived usefulness is a perception where a step to provide great benefits when using a technology so that it improves performance in its activities. If someone believes that an information system provides benefits, then he will adopt it. Conversely, if someone feels that the information system does not provide sufficient benefits, then he is less likely to use the system. Software developers are now paying great attention to building systems that are easy to use so that a form of renewal of an information system can be accepted, trusted, and used easily. According to Lee & Wan 2010 (in Susanti et al., 2021) provides an overview of the various indicators of perceived usefulness as follows: reducing the duration of time required, simplifying services in various aspects, simplifying the user experience on the trip, contributing to financial savings, maximizing group and individual performance, maximizing efficiency, and maximizing the benefits obtained.

Perceived usefulness is the perception of customers who feel that after using BCA Mobile has increased productivity in financial terms because they can quickly and easily make various desired transactions.

2.3. Perceived Convenience

According to Kotler & Armstrong (2020) products that offer convenience are products that are usually purchased and used can be operated as often and as soon as possible without requiring great effort. According to Ratna Sari 2009 (in Darmawan & Mardikaningsih, 2020) explains that perceived convenience is the effectiveness of an information system depending on the extent to which it is easy to implement the information system, especially for users. According to Davis 1989 (in Susanti et al., 2021) provides several indicators of perceived convenience, namely: digital fintech products are very easy to understand (easy to learn), digital fintech products are very easy to run (understandable), digital fintech products allow users to easily do what they want, and flexible (flexible).

Perceived convenience is the perception that using the BCA Mobile system is easy to learn and operate because the display is simple and the main functions of each service are tailored to user needs.

2.4. Perceived Trust

Perceived trust according to Kenneth 2018 (in Triandewo & Yustine, 2020) is a perception when customers have confidence in the efficacy and reliability of a brand.

According to Kumar & Sharma (2020) perceived trust emphasizes the security of user data or privacy data related to mobile banking application providers in the implementation of online shopping. The indicators of perceived trust according to Putri & Hidayat (2017) to measure whether trust is good or bad include: having good perceived trust in the integrity of BCA Mobile, having good perceived trust in the reliability of the mobile banking service security system, having good perceived trust in privacy guarantees, and having good perceived trust in the device used to access these services.

Perceived trust is the user's perception that they feel safe related to privacy data when making transactions on BCA Mobile so that they do not feel worried about various risks of data loss.

2.5. Customer Loyalty

According to Griffin 2002 (in Karyose et al., 2017), customer loyalty can be defined as a purchase action that occurs regularly, which is decided by several decision makers over a period of time. This definition shows that customer loyalty refers to behavior that shows repeated purchases and is based on decisions made by a number of decision makers. According to Kotler & Keller (2017: 160) customer loyalty indicators can be measured through three aspects, namely: repeat purchases, retention, and referrals.

Perceived customer loyalty is a manifestation of customer loyalty in using BCA Mobile for a long period of time because they feel that BCA Mobile can meet human needs in terms of transaction effectiveness and efficiency.

2.6. Customer Satisfaction

Engel et al. 1995 (in Karyose et al., 2017) say that customer satisfaction is an after-sales assessment where the chosen alternative is at least equal to or exceeds customer expectations, while dissatisfaction arises when the results do not match expectations. This is in line with the definition of customer satisfaction according to Kotler & Armstrong (2020), namely the extent to which a product's performance exceeds the buyer's expectations. According to Kotler & Keller (2017: 74) customer satisfaction can be measured through three indicators, namely: service quality, price, and promotion.

Perceived customer satisfaction is the customer's feeling in measuring the extent of satisfaction in using BCA Mobile for the various services available.

2.7. Hypothesis Development

2.7.1. The effect of perceived usefulness on BCA mobile banking customer loyalty

According to Latief & Dirwan (2020) regarding perceived usefulness, which is a building of individual confidence that the technology used can be used easily so that it can help improve performance in various activities. BCA Mobile is also present as an answer to the needs of the community in making transactions easily and quickly, thus encouraging customer loyalty because their needs have been met. Maryanto & Kaihatu (2021) in their research also found that perceived usefulness positively affects customer loyalty. Based on several previous reasons, it can be seen that the increasing perceived usefulness of a technology will affect the level of reliability of customer loyalty.

H_{a1}**: Perceived usefulness has a significant effect on customer loyalty.**

2.7.2. The effect of perceived convenience on customer loyalty of BCA mobile banking users

Research conducted by Onsardi & Putri (2021) found that perceived convenience has a significant effect on customer loyalty. The availability of various features and services with uncomplicated appearance and use is very helpful for customers in using BCA Mobile, the higher the perceived convenience of BCA Mobile, the more customer loyalty will increase.

H_{a2}**: Perceived convenience has a significant effect on customer loyalty.**

2.7.3. The effect of perceived trust on customer loyalty of BCA mobile banking users

BCA's ability to maintain customer trust in BCA Mobile is important because perceived trust is one way to maintain customer loyalty (Kuusik & Varblane, 2009). In the research of Supertini et al. (2020) found that the perceived trust variable has a significant effect on customer loyalty. BCA Mobile in an effort to build and maintain customer loyalty can be through perceived trust which can be created through security in transactions and customer data security so that the higher the perceived trust of consumers, the higher customer loyalty.

H_{a3}**: Perceived trust has a significant effect on customer loyalty.**

2.7.4. The effect of perceived usefulness on customer loyalty mediated by customer satisfaction of BCA mobile banking users.

In research by Suryatenggara & Dahlan (2022) this study proves that customer satisfaction is able to mediate the relationship between perceived usefulness and customer loyalty. Based on this, it is known that customer satisfaction provides an indirect influence between perceived usefulness on customer loyalty.

H_{a4} **: Perceived usefulness affects customer loyalty with customer satisfaction as a mediating variable.**

2.7.5. The effect of perceived convenience on customer loyalty mediated by customer satisfaction of BCA mobile banking users

Ismi & Abdilla (2020) show that perceived convenience of use has a positive or significant effect on customer loyalty mediated by customer satisfaction. Based on this, it is known that customer satisfaction provides an indirect influence between perceived convenience and customer loyalty.

H_{a5} **: Perceived convenience affects customer loyalty with customer satisfaction as a mediating variable.**

2.7.6. The effect of perceived trust on customer loyalty mediated by customer satisfaction of BCA mobile banking users

Products or services that can be trusted and can be used in the long term without reducing their benefits will support good customer satisfaction, the more consumers feel satisfied with products and services, the more customer loyalty will increase. According to Hidajat & Fahlevi (2020) customer satisfaction is able to indirectly influence perceived trust on customer loyalty. Based on this, it is known that customer satisfaction provides an indirect influence between perceived trust and customer loyalty.

H_{a6}**: Perceived trust affects customer loyalty with customer satisfaction as a mediating variable.**

3. Research Methods

The type of research that will be applied in this study is descriptive research which according to Hermawan & Yusran (2017: 54) the definition of descriptive research is a type of research that will explain the characteristics of a variable with the aim of providing various aspects from various perspectives that are relevant. The research approach applied in this study is a quantitative approach. A quantitative approach is a research method in which data collection and processing are carried out in the form of numbers using statistical analysis, aiming to test the hypothesis that has been formulated (Sugiyono, 2021: 16).

3.1. Population and Sample

The population in this study was determined in terms of using BCA Mobile Banking, so the population that has been determined to support the sustainability of the research is BCA Mobile customers / users. This study uses a sample in the form of BCA Mobile users or customers who have used it at least twice in the last three months. The unit of analysis of this research is the individual respondent. In the implementation of sampling, the technique used is nonprobability sampling, where the sampling process considers various elements of difference so that each member of the population does not have the same opportunity to become a research sample. This study specifically applies purposive sampling technique, which is a simple approach in the sampling process with specific considerations (Sugiyono, 2021: 131).

3.2. Research Data

The sources and types used in this study come from various sources and have the type of primary data. According to Sugiyono (2021: 296), primary data is a data collection method that obtains information directly from respondents or research objects. In this context, this study utilizes primary data through the use of online questionnaires that will be distributed to BCA Mobile users.

3.3. Data Analysis Technique

3.3.1. Validity Test

Validity test is an instrument test to understand how accurate the questionnaire (questionnaire) that has been collected with the actual data in measuring a variable that you want to study (Sugiyono, 2021: 175). The construct validity test can use several instruments that can be used, namely: Convergent Validity (Rule of thumb for convergent validity includes outer loading> 0.7, communality> 0.5, and Average Variance Extracted (AVE)> 0.50 (Abdillah & Hartono, 2015: 195). And Discriminant Validity (AVE Root > Latent Variable Correlation and cross loading value > 0.7).

3.3.2. Reliability Test

Reliability test is how reliable and consistent a data is at the same level in different time periods (Sugiyono, 2021). The rule of thumb for decision making in the reliability test is the Cronbach's alpha value> 0.6 and composite reliability> 0.7 (Abdillah & Hartono, 2015: 207).

3.3.3. Partial Least Square (PLS)

The data analysis technique in this study used Partial Least Square (PLS) analysis technique with SmartPLS 4 as the tool. PLS is a multivariate statistical method that compares multiple dependent variables with multiple independent variables (Abdillah & Hartono, 2015: 161).

3.3.4. Outer Model

The outer model testing stage is a phase in testing the measurement model which aims to show the validity and estimate the reliability of indicators and constructs. Some of the criteria that need to be met are: Loading factor indicators must be> 0.7, AVE reflective constructs and communality> 0.5, AVE root must be greater than the latent variable correlation.

3.3.5. Inner Model

The use of the R^2 value serves as an indicator to measure the extent to which the variation in the independent variable can explain the variation in the dependent variable. The higher the R^2 value, the better the predictive ability of the model from the study.

3.3.6. Hypothesis Testing

In the PLS model, hypothesis testing uses the p-value as a basis for decision making. The confidence level applied in this study is 0.05 or 5%. The decision-making principle is based on: p-value> 0.05 then H_0 is accepted and H_a is rejected; p-value ≤ 0.05 then H_0 is rejected and H_a is accepted.

3.3.7. Testing the Mediation Hypothesis

According to Zhao et al. (2010) testing the mediation hypothesis uses the following decision-making flow: Complementary (partial mediation) if the indirect effect is significant, the direct effect is significant, and both exist and have the same direction; Competitive (partial mediation) if the indirect effect is significant, the direct effect is significant, but the indirect effect & direct effect both exist and have the opposite direction; Indirect-only (full mediation) if the indirect effect is significant, the direct effect is significant, but the direct effect is not significant; Direct-only (no mediation) if the indirect effect is not significant, but the direct effect is significant, and No effect (no mediation) if the indirect effect is not significant, the direct effect is not significant.

4. Research Findings and Discussion

4.1. Validity test

4.1.1. Loading Factor Value

Table 1
Loading Factor Value After Second Deletion

No	Statement Item	Loading Factor Value	Status
1	X1.1	0,731	Valid
2	X1.2	0,790	Valid
3	X1.5	0,789	Valid
4	X1.6	0,796	Valid
5	X1.7	0,817	Valid
6	X2.2	0,730	Valid
7	X2.3	0,717	Valid
8	X2.4	0,835	Valid
9	X2.5	0,860	Valid
10	X2.6	0,785	Valid
11	X2.7	0,818	Valid
12	X2.8	0,761	Valid
13	X3.1	0,750	Valid
14	X3.2	0,749	Valid
15	X3.3	0,766	Valid
16	X3.4	0,839	Valid
17	X3.5	0,817	Valid
18	X3.6	0,752	Valid
19	X3.7	0,810	Valid
20	X3.8	0,715	Valid
21	M.1	0,777	Valid
22	M.3	0,821	Valid
23	M.4	0,800	Valid
24	M.5	0,756	Valid
25	M.6	0,748	Valid
26	Y.1	0,904	Valid
27	Y.2	0,841	Valid
28	Y.3	0,819	Valid

(Source: Data Processed, 2024)

All statement items can be declared valid because the loading factor value of all statement items is > 0.7

4.1.2. Outer Model

Table 2
Average Variance Extracted (AVE) Value

No	Variable	AVE	Status
1	PU	0.616	Valid
2	PC	0.621	Valid
3	PT	0.602	Valid
4	CS	0.610	Valid
5	CL	0.732	Valid

(Source: Data Processed, 2024)

The Average Variance Extracted (AVE) value of each variable is valid because the AVE value > 0.5.

4.1.3. Discriminant Validity Test

Table 3
AVE Root Value and Latent Variable Correlation

	PU	PC	PT	CS	CL
PU	0.785				
PC	0.771	0.788			
PT	0.586	0.725	0.776		
CS	0.540	0.653	0.725	0.781	
CL	0.413	0.514	0.628	0.641	0.855

(Source: Data Processed, 2024)

The AVE root value and latent variable correlation above, all variables are declared valid because the AVE root value > the Latent Variable Correlation.

4.2. Reliability Test

4.2.1. Cronbach's Alpha and Composite Reliability Values

Table 4
Cronbach's Alpha and Composite Reliability Values

No	Variable	*Cronbach's Alpha*	*Composite Reliability*	Status
1	PU	0.845	0.889	Reliable
2	PC	0.898	0.920	Reliable
3	PT	0.905	0.923	Reliable
4	CS	0.842	0.886	Reliable
5	CL	0.816	0.891	Reliable

(Source: Data Processed, 2024)

Cronbach's alpha and composite reliability values can be declared reliable because Cronbach's alpha and composite reliability values all variables > 0.7, so that each variable used can be said to be accurate, consistent, and precise.

4.2.2. Outer Model

Table 5
R^2 Value

No	Variable	R^2
1	*Customer Satisfaction*	0.561
2	*Customer Loyalty*	0.467

(Source: Data Processed, 2024)

It is known that the customer loyalty variable has an R^2 value of 0.467 which means that the ability of the variables perceived usefulness, perceived convenience, perceived trust, and customer satisfaction in explaining the customer loyalty variable is 46.7%. This means that the remaining 53.3% of the influence is explained by other variables outside the discussion in this study. The R^2 value of the customer satisfaction variable is 0.561 which means that the ability of the perceived usefulness, perceived convenience, and perceived trust variables in explaining the customer satisfaction variable is 56.1%. This means that the remaining 43.9% of the influence is explained by other variables outside the discussion in this study.

4.3. Hypothesis Testing

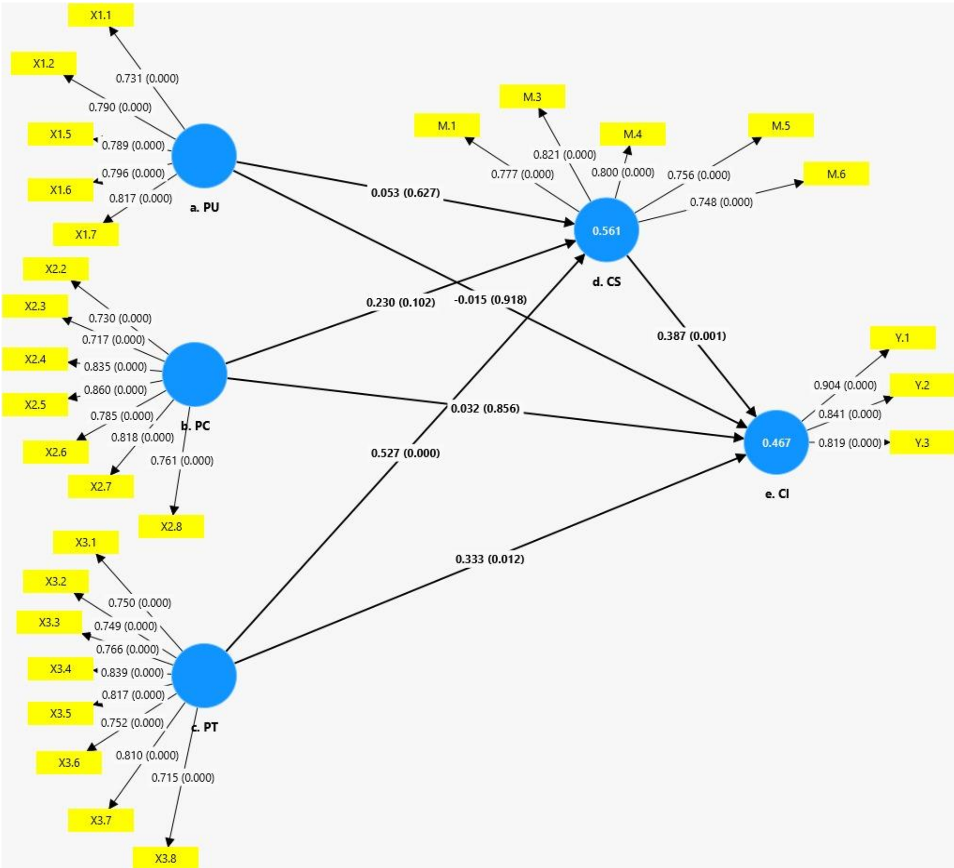

Figure 1. Research Model Testing with SmartPLS 4.1.0.1

Testing in the proposed hypothesis is seen from the magnitude of the p-value. If the p-value ≤ 0.05 then H_0 rejected, H_A accepted and there is a significant effect. If the p-value > 0.05 then H_0 accepted, H_A rejected and there is no significant effect. While the path coefficient to test the strength of influence between each variable by explaining the firmness of the relationship between variables can be seen in the following table processed using SmartPLS 4.1.0.1.

Table 6
Direct Effect Estimation Results

No	Variable	Path Coefficient	P-value	Description
1	PU → CL	-0.015	0.918	Insignificant
2	PC → CL	0.032	0.856	Insignificant
3	PT → CL	0.333	0.012	Significant

(Source: Data Processed, 2024)

Table 7
Results of Indirect Effect Estimation

No	Variable	Path Coefficient	P-value	Description
1	PU → CS → CL	0.021	0.632	Insignificant
2	PC → CS → CL	0.089	0.096	Insignificant
3	PT → CS → CL	0.204	0.020	Significant
4	PU → CS	0.053	0.627	Insignificant
5	PC → CS	0.230	0.102	Insignificant
6	PT → CS	0.527	0.000	Significant

(Source: Data Processed, 2024)

- The p-value perceived usefulness of customer loyalty is 0.918 which means > 0.05 then H_{01} accepted, H_{A1} rejected. This shows that perceived usefulness has no effect on customer loyalty. This means that the better (worse) perceived usefulness of a product, the higher (lower) customer loyalty of BCA Mobile users.
- The perceived convenience p-value of customer loyalty is 0.856 which means > 0.05 it H_{02} accepted, H_{A2} rejected. This shows that perceived convenience has no effect on customer loyalty. This means that the better (worse) perceived convenience of a product, the higher (lower) customer loyalty of BCA Mobile users.
- The perceived value of p-value trust towards customer loyalty is 0.012 which means ≤ 0.05 then H_{03} rejected, H_{A3} accepted. This shows that there is an influence of perceived trust on customer loyalty. This means that the better the level of BCA Mobile security, the more customer loyalty will increase by BCA Mobile users.
- The result of the direct effect PU – CL is positive insignificant with a p-value of 0.918 while the result of the indirect effect PU – CS – CL is positive insignificant with a p-value of 0.632. The relationship shows that there is no mediating effect so it falls into the category of no effect (no mediation). Therefore, it can be concluded that H_{04} accepted and H_{A4} rejected with a cusoimer satisfaction statement does not mediate perceived usefulness towards customer loyalty of BCA Mobile users.
- The result of the direct effect PC-CL was positively insignificant with a p-value of 0.856 while the result of the indirect effect PC-CS – CL was positively insignificant with a p-value of 0.096. The relationship shows that there is no mediating effect so it falls into the category of no effect (no mediation). Therefore, it can be concluded that H_{05} accepted and H_{A5} rejected with a statement of customer satisfaction does not mediate perceived convenience for BCA Mobile users' customer loyalty.
- The result of the direct effect of PT – CL is positively significant with a p-value of 0.012 while the result of the indirect effect of PT – CS – CL is a significant positive with a p-value of 0.020. The relationship shows that there is a mediating effect so that it falls into the complementary category (partial mediation). Therefore, it can be concluded that the H_{06} is rejected and H_{A6} accepted with a customer satisfaction statement mediating perceived trust in the customer loyalty of BCA Mobile users.

5. Conclusion

Based on the results of research that has been done, the purpose of this study is to understand whether customer satisfaction mediates perceived usefulness, perceived convenience, and perceived trust in customer loyalty. In addition to the study obtained data from respondents which was disseminated through google form in the form of questionnaires, after that researchers processed the data and obtained the following results: Perceived usefulness does not affect the customer loyalty of BCA Mobile users; Perceived convenience does not affect the customer loyalty of BCA Mobile users; Perceived trust affects the customer loyalty of BCA Mobile users; Customer satisfaction does not mediate perceived usefulness towards BCA Mobile users' customer loyalty or no effect (no mediation); Customer satisfaction does not mediate perceived convenience for BCA Mobile users' customer loyalty or no effect (no mediation); and Customer satisfaction mediates perceived trust in the customer loyalty of BCA Mobile users with complementary mediation (partial mediation).

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THE EFFECT OF ZAKAT, INFAQ, AND SADAQAH (ZIS), TAXES, AND SUBSIDIES ON REDUCING POVERTY LEVELS IN INDONESIA

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ABSTRACT

This study aims to see the effect of zakat, infaq, and sadaqah (ZIS), taxes, and subsidies on reducing poverty levels in Indonesia. The data used in this study are secondary data in the form of panel data obtained from the annual report of the Central Statistics Agency (BPS), the financial statements of the Directorate General of Fiscal Balance (DJPK), and the National Amil Zakat Agency (BAZNAS), from 2018 to 2022, consisting of 34 provinces in Indonesia. The dependent variable in this study is the poverty rate, while the independent variables are ZIS (zakat, infaq, sadaqah), taxes, and subsidies. To determine the effect of zakat, infaq, and sadaqah (ZIS), taxes, and subsidies on poverty reduction in Indonesia using panel data regression analysis method. The results showed that one of the three independent variables studied had a partial effect on reducing poverty in Indonesia, namely the variable zakat, infaq, and sadaqah (ZIS), which had a positive and significant effect. Meanwhile, the tax and subsidy variables have a negative but insignificant effect in Indonesia. Simultaneously, zakat, infaq, and sadaqah (ZIS), taxes, and subsidies affect poverty reduction in Indonesia.
***Keywords**: Poverty, ZIS, Taxes, Subsidies.*

1. Introduction

In developing countries, there are many complex problems that need to be addressed. This problem becomes an obstacle for a developing country to become a more developed country. One thing that is still a big problem and is still a priority for the government is the problem of poverty in various countries, including Indonesia. Poverty can weaken the foundations of life in Indonesian society. Based on the Central Statistics Agency (BPS) for 2023, although poverty shows a decreasing trend, the figure of 9.54% is still relatively high. Multidimensional poverty which not only includes material deprivation, but also access to education, health and other basic services will further worsen the situation (Chriswardani Suryawati, 2010).

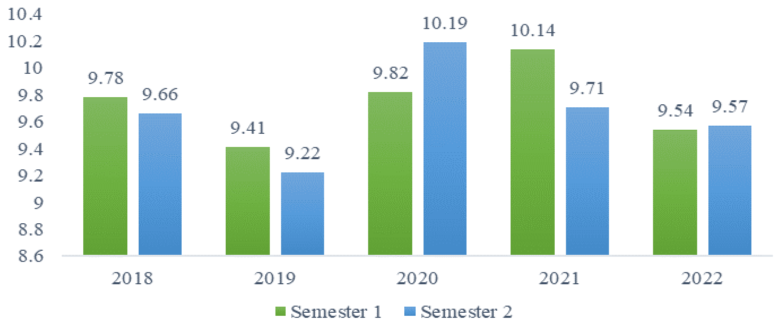

Figure 1.1 Percentage of Poor Population in Indonesia 2018 – 2022
Source: BPS, data processed in 2024

Figure 1.1 shows the percentage of poor people in Indonesia over the last 5 years from 2018 - 2022 which has experienced a fluctuating trend. The World Bank (2019) reports that Indonesia can reduce the trend of poverty levels by reaching below 10 percent in 2019. However, during the Covid-19 pandemic which caused a decrease in productivity and limited people's movement, the number of poor people increased in 2019. 2020 amounted to 9.82 percent in the first semester and further increased by 10.19 percent in the second semester. The Indonesian government has implemented many policies to restore the economy during the Covid-19 pandemic, so that the percentage of poor people in Indonesia managed to decrease until March 2022. However, the percentage of poor people increased again in September 2022 due to the increase in fuel oil (BBM), which resulted in increasing prices of basic commodities and layoffs (Shafarani et al., 2023).

Poverty is getting worse with the increase in prices of basic commodities, while people's income has not increased significantly. The government has taken various steps to tackle poverty, which aims to reduce the level of poverty in Indonesia.In Islam there is an instrument that can help overcome the problem of poverty, namely zakat. Islam makes zakat an instrument to ensure income balance in society. This means that not everyone is economically capable, because some of them are poor or needy. Expenditures from zakat are minimal expenditures to make income distribution more equal. With zakat, poor and needy people can get out of the circle of poverty (RatnaSari & Firdayetti, 2019).

Distribution of zakat funds is one method that can be implemented to reduce the level of poverty in Indonesia. This cannot be separated from the existence of good zakat management, where zakat management according to Law no. 23 of 2011 article 3 paragraph 2 aims to increase the benefits of zakat to be able to overcome poverty. So, with this goal, it is hoped that zakat management institutions can improve zakat services effectively (right on target) and can be used to encourage the programs of zakat amil institutions to further develop and improve the welfare of the community (Septiani et al., 2022).

Based on the results of research on the influence of zakat, infaq and alms (ZIS) conducted by (Lapopo, 2012), it has a negative and significant effect on reducing poverty levels, but the effect is still small. This small influence is due to the inefficient collection and distribution of zakat. In contrast to research results (Beik, 2009) showing that ZIS has a positive impact on reducing poverty, because if zakat is not distributed, the depth of poverty will not decrease and may even increase. Meanwhile, research conducted (Ramadhan & Mariyanti, 2013) shows that ZIS does not have a significant effect on reducing poverty levels in Indonesia, this is due to the distribution of funds not being on target, lack of coordination and synergy between ZIS management institutions, and poor institutional capacity limited.

The next indicator that can reduce poverty is local taxes. Taxes are the country's main source of income, used to fund various needs such as health services, education, infrastructure and other public services. This is expected to reduce poverty in Indonesia. The central and regional governments are working together to increase the effectiveness of tax management. (Shafaraniet al., 2023). In several studies examining the effect of taxes on reducing poverty levels, it shows that tax revenues by the state influence the reduction in the number of poor people, this is because increasing tax revenues give the government more space to implement social security policies that improve the welfare of its citizens. (Akhadi, 2022; Matitaputty et al., 2021; Shafarani et al., 2023). Meanwhile, research results (Prasetiyoet al., 2012) shows that regional taxes do not significantly influence poverty levels. This is due to the possibility that regional taxes and regional levies have not been fully focused as poverty reduction activities.

Apart from that, other steps taken by the government to reduce poverty levels in Indonesia are by providing subsidies in the form of direct cash assistance and in the form of basic food items, as well as school operational assistance to overcome poverty both in urban and rural areas. The government carries out its duties as a mediator for the allocation of taxes and subsidies (Ramadhan & Mariyanti, 2013). In research conducted (Carolina, 2022), the research results show that subsidies have a positive and significant effect on poverty, meaning that when subsidy spending increases, poverty increases. This shows that the subsidy budget provided by the government is not well targeted, whereas research conducted by (Kristinawatiand hasl., 2018) said that subsidies have a negative and significant effect on reducing poverty levels in Indonesia. This is because with subsidies it is hoped that people, especially those with low incomes, can reach basic needs. In contrast to research conducted by (Misdawita & Sari, 2018), it does not have a significant effect, because the distribution of subsidies from the government to the community is not effective in reducing poverty.

Zakat, Infaq and Alms (ZIS), taxes and subsidies have an important role in helping to overcome poverty in Indonesia. The combination of ZIS, taxes and subsidies can be an effective instrument in poverty alleviation. However, its effectiveness depends on the efficiency of fund distribution, coordination and synergy between related parties, and the involvement of poor communities. With good and targeted management, ZIS, taxes and subsidies can help achieve sustainable development goals, namely poverty alleviation. It is hoped that this research can contribute to understanding the influence of Islamic economic instruments and fiscal policy instruments in overcoming poverty in Indonesia. It is hoped that the results of this research can help the government and related institutions in formulating policies and as work material for more effective poverty alleviation programs.

2. Literature Review

Poverty is still a crucial problem in various countries, including Indonesia. Poverty is a condition caused by a system that is unable to make automatic adjustments, giving rise to an imbalance between consumption and production in society, which has an impact on the emergence of inequality among marginalized groups of society (Shafaraniet al., 2023). Efforts to reduce poverty levels require strategymulti-faceted, including through fiscal policies, such as taxes and subsidies, as well as instrumentsphilanthropy such as Zakat, Infaq and Alms (ZIS) (Ramadhan & Mariyanti, 2013). Among the many challenges faced in alleviating Indonesia's poverty rate, the development of research regarding the analysis of the influence of taxes, subsidies, and zakat, infaq, alms (ZIS) has been widely carried out, because it has an importance that can help formulate more effective policies and programs. The results of this research It is hoped that it will be useful for various parties in efforts to reduce poverty (RatnaSari & Firdayetti, 2019).

From an Islamic perspective, there are indicators that can help reduce poverty, namely zakat, infaq and alms (ZIS). Zakat According tosect Maliki defines zakat as giving out a portion of special assets that have reached the nisab (minimum quantity limit).required zakat) to people who are entitled to receive it. Zakat is one of the pillars of Islam, for a Muslim it is an obligation that must be carried out solely as a servant's devotion to the Almighty Almighty. Zakat is an obligation that must be fulfilled by every capable Muslim (muzakki) to be distributed to other less fortunate Muslims (mustahik). Etymologically, zakat means the word development (an-man), sanctify (at-thaharatu) and blessing (al barakatu). Meanwhile, terminologically, zakat means giving away part of one's assets with certain conditions to be given to certain groups (Mustahik) with certain conditions (Munandaret al., 2020).

According to research (Aghustin & Cahyono, 2020; Bouanani1 & Belhadj2, 2012; Islamiyati, 2020; Putriet al., 2020; Kholid, 2020; Julianaet al., 2020) ZIS has a negative and significant influence in reducing poverty, which is because the higher the zakat funds distributed will reduce the level of poverty and inequality, this condition is supported by public awareness to fulfill the obligation to pay zakat as ordered by the Islamic religion. Research (Nafi'ah, 2021; Tamimi & Syarbaini, 2023) shows that ZIS has a positive and significant influence on reducing poverty levels, this is because the distribution of ZIS is not evenly distributed and is not on target. Meanwhile, in other research, ZIS does not have a significant effect on poverty, this is due to the unequal distribution of ZIS and also that most poor people feel that they have enough to depend on other people's gifts for their needs without making any effort to rise from poverty (Islami & Fitrianto, 2023; Novaliaet al., 2020; Widiastuti & Kosasih, 2021; Wulandari & Pratama, 2022).

Viewed from the regional revenue side, tax is one indicator that can influence the reduction in levelspoverty. According to Law Number 6 of 1983 concerning General Provisions and Procedures for Taxation as stated in Law Number 16 of 2009 in article 1, which states that tax is a mandatory contribution to the state that is owed by an individual or entity that is coercive based on Law. Invite without receiving direct compensation and use it for state needs for the greatest prosperity of the people. Taxes have a very vital role in a country, without taxes the life of the country would not be able to run well. Infrastructure development, education costs, health costs, fuel oil (BBM) subsidies, payments for state employees and construction of public facilities are all financed from taxes. The more taxes collected, the more facilities and infrastructure will be built (Law No. 6, 1993).

There are several studies that examine the effect of taxes on reducing poverty levels. According to research conducted by (Goderis & Vlekke, 2023; Lisnaet al., 2013a; Lustig et al., 2013) research results show that taxes have a significant impact in reducing poverty. According to (Goderis & Vlekke, 2023; Lustiget al., 2013) this is because direct taxes tend to be progressive in all countries, so they can help reduce income gaps and provide additional income for those in need. Meanwhile, according to (Lisnaand hasl., 2013) because regional taxes can increase regional fiscal revenues, which can then be used to finance development programs that have a direct impact on improving the welfare of the community, especially those in conditions of poverty. Then research on the relationship between taxes and people's prosperity was carried out by (Vatavuet al., 2019) which shows that tax revenues influence the level of welfare of a country's residents. In research (RatnaSari & Firdayetti, 2019) import taxes have a significant influence on poverty with a positive relationship. Meanwhile at (Effendiet al., 2006) said that taxes do not have a significant effect on reducing poverty levels because taxpayer compliance is still low.

Another indicator that can influence the reduction of poverty levels is the distribution of subsidy funds to the community on target. Subsidies are a form of encouragement given by the government to some citizens which can reduce the price paid by consumers for an object because the government helps reduce production costs. The purpose of subsidies is to help market mechanisms run better with methods provided by the government for the poor and underprivileged and by correcting market failure mechanisms by producing efficient allocation of goods and services (Triest, 2009). Subsidy policy is currently part of fiscal policy because the government always allocates the state budget for subsidy programs. The subsidy budget consists of two, namely energy subsidies and non-energy subsidies. The subsidy policy is also in the Regional Revenue and Expenditure Budget (APBD). The government needs to provide subsidies carefully and on target so that the objectives of the subsidies are achieved for equitable development (Carolina, 2022).

According to research (Dartanto, 2013; Safitri et al., 2022; Sari & Marissa, 2023; Khairi & Aidar, 2018) subsidies have a negative and significant effect on poverty, which means that if subsidies increase, poverty will decrease, on the other hand research(Bakar et al., 2023; Delvia & Aliasuddin, 2020; Paramita et al., 2020; Prasetyo & Cahyani, 2022) found that subsidies do not have a significant impact because the distribution of subsidies from the government is not evenly distributed so it is not effective in reducing poverty.

3. Research Methods

In this research, the method used to analyze the influence of Zakat, Infaq, Alms Tax (ZIS), taxes and subsidies on reducing poverty levels in Indonesia is using an explanatory and descriptive approach. Explanatory research is research that aims to test a theory or hypothesis in order to strengthen or perhaps reject the theory or hypothesis from existing research results. Meanwhile, the descriptive approach according to Kotleret al. (2006), states that descriptive research is research whose aim is to explain (describe) a phenomenon.

This research uses secondary data in the form of panel data obtained from the annual reports of the Central Statistics Agency (BPS), financial reports of the Directorate General of Financial Balance (DJPK), and the National Zakat Amil Agency (BAZNAS), from 2018 to 2022, consisting of 34 provinces. In Indonesia. The dependent variable in this research is the poverty level, while the independent variables are ZIS (zakat, infaq, alms), taxes and subsidies. In this research, the panel data regression analysis method is used to determine the influence of zakat, infaq and alms (ZIS), taxes and subsidies on reducing poverty levels in Indonesia. The stages in linear regression using panel data are as follows:

3.1. Model Estimation Test

In panel data regression, three (3) tests are used to determine the estimation model, namely common effect, fixed effect dan random effect. To choose the most appropriate model, several tests can be carried out, including (Widarjono, 2009): testchow that is, it is a test to determine what the model is Common Effect or Fixed Effect which is most appropriate to use in estimating panel data. Then testhausman namely statistical testing to choose whether the modelFixed Effect orRandom Effect the most appropriate one to use. As well aslagrange multiplier (LM), namely, a test to find out whether the modelRandom Effect better than methodCommon Effect which will be used.

3.2. Classical Assumption Tests

The classical assumption test according to Gujarati (2013) aims to ensure that the research results are valid with the data used in theory is unbiased, consistent and efficient estimation of the regression coefficient (Febriana & Yulianto, 2017). The classic assumption test in panel data regression includes a multicollinearity test which is said to be passes the test if all dependent variables <0.85, and heteroscedasticity test where all independent variables must have a probability value <0.05Table 1

3.3. Significance Test

The results of the significance test are obtained from testing the statistical criteria as measured by the value of the partial test (t-Statistic), simultaneous test (F test), test the coefficient of determination (R2). The t-statistic test is carried out to test the research hypothesis regarding the effect of each independent variable partially on the dependent variable by making a decision by looking at the significance value in the probability table, with a significance level of 5% ($\alpha = 0.05$). Then the simultaneous test (F test) shows whether all independent variables in the model have a joint influence on the dependent variable with a significance of 5% ($\alpha = 0.05$). While the coefficient of determination (R2) test is to see how much the proportion or percentage of the influence of the independent variable on the dependent variable is seen from the Adjusted R-Square value.
The Regression Model used in this study is as follows:

$$\mathbf{Pov_{it} = \beta_0 + \beta_1 ZIS_{it} + \beta_2 Tax_{it} + \beta_3 Sub_{it} + \mu_{it}}$$

Pov : Poverty (thousands)

ZIS : Zakat, Infaq, and Sadaqah (billion Rupiah)
Tax : Tax (billion Rupiah)
Sub : Subsidy (billion Rupiah)
µ : Period t error
It : Panel data

4. Research Findings and Discussion

4.1 Model Estimation Test Results

The regression model estimation method using panel data can be done using three approaches, namelyCommon Effect Model, Fixed Effect Model (FE), danRandom Effect Model (RE). To choose the most appropriate model, there are several tests that can be carried out, namely the Chow, Hausman and Lagrange Multiplier tests.

Table 4.1. Test results Chow

Effect Test	Statistic	d.f.	Prob.
Cross-section F	280.848949	(33,133)	**0.0000**
Cross-section Chi-squere	723.898054	33	**0.0000**

Source: Data processed by the author, 2024

Based on the test results it can be seen that the test*chow* has a probability outcome*chi-square* smaller than 0.05 (prob. 0.000 < 0.05) so it can be said that the best model test is the model*fixed effects models*.

Table 4.3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section Random	107.617736	3	**0.0000**

Source: Data processed by the author, 2024

Based on the table above, the tests that have been carried out produce probability values*Cross Section Random* < 0.05. Thus, the correct model to use is*fixed effect model*. After test*chow* and*hausman* done, it is known that*fixed effect model* was chosen to be the most appropriate model for this research, so there was no need to carry out tests*lagrange multiplier*.

4.2 Classic Assumption Test Results

The classical assumption tests that are commonly used are the normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. In this research, the classical assumption tests used are, multicollinearity test, and testheteroscedasticity just because of the dataused in this research is panel data.

Table 4.3. Multicollinearity Test Results

ZIS	Tax	Subsidy
0.704092	**1.000000**	**0.583804**
0.723731	**0.583804**	**1.000000**
1.000000	**0.704092**	**0.723731**

Source: Data processed by the author, 2024

The multicollinearity test is carried out to test whether there is a correlation between the independent variables or independent variables in the regression model. The correlation coefficient of ZIS (x1), tax (x2), subsidies (x3) must be <0.85, so based on table 4.4 all independent variables pass the multicollinearity test.

Table 4.4. Test resultsHeteroscedasticity

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.144620	18.16541	0.118061	**0.9062**
ZIS	1.29E-11	1.02E-11	1.258422	**0.2104**
Tax	0.004589	0.003036	1.511596	**0.1330**
Subsidy	-0.032454	0.016479	-1.969432	**0.0510**

Source: Data processed by the author, 2024

Based on the probability value in table 4.4 where the probability of the independent variable must be > 0.05, then table 4.4 above shows that the variables ZIS, taxes, subsidies do not show symptoms of heteroscedasticity.

4.3 Data Regression Analysis ResultsPanel

The panel data regression model is a regression model used to determine the influence of one or several predictor variables on a response variable with a data structure in the form of panel data. Panel data is a combination of cross-section data and time series data.

Table 4.5. Results of Panel Data Regression Analysis Using Fixed Effect Models

Variables	Coefficient	Std. Error	t-Statistic	Prob.
C	**823.9625**	36.01975	22.87530	**0.0000**
ZIS	**7.4E-11**	2.03E-11	3.659003	**0.0004**
Tax	**-0.010907**	0.006020	-1.811651	**0.0723**
Subsidies	**-0.041012**	0.032675	-1.255138	**0.2116**
R Squared	**0.996100**	Mean Dependent Var		768.1471
Adj.R-S	0.995045	S.D. Dependent Var		1068.366
F-statistic	943.6777	Durbin-Watson stat		1.935060
Prob(F-statistic)	**0.000000**			

Source: Data processed by the author, 2024

4.3.1 Partial Test (t-Statistics)

Based on the regression results from table 4.5 above with a significance level of $\alpha = 5\%$, the results obtained show that ZIS has a significant positive influence with a probability value of 0.0004. The coefficient value is 7.43, indicating that when ZIS increases by 1 log, it will cause an increase in the poverty rate of 7.4%.

Then the tax variable has a negative influence but is not significant with a probability of 0.07. The coefficient value - 0.010907, shows that every 1 log increase in local taxes will cause a decrease in the poverty rate by 1% in Indonesia.

Subsidies have a negative and insignificant effect with a probability of 0.2116 on reducing poverty levels.Mark The coefficient is -0.041012, indicating that every 1 log increase in subsidies will cause a decrease in the poverty rate by 1% in Indonesia.

4.3.2 Simultaneous Test (F Test)

The results of the research panel data regression analysis in table 4.5 produce an F statistical value of943.6777 with value*Prob(F-statistic*) 0.000000 < 0.05. This means that the variables taxes, subsidies, zakat infaq and alms influence the reduction in poverty levels in Indonesiasimultaneous or together.

4.3.2 Coefficient of Determination Test

The results of the regression analysis in table 4.5 show the coefficient of determination which is known through the value at*Adjusted R-Square*, that is, as big as0.995045 which means that the independent variables tax, subsidies, zakat, infaq and alms influence the dependent variable, namely poverty by 99.6%, while the other 0.4% is influenced by other variables not included in the research model.

4.4 Discussion

Based on the test results carried out by the author, it shows only one out of threevariable researched which has a significant influence on reducing poverty levels in Indonesia, namely the zakat, infaq and alms (ZIS) variables. Zakat, infaq and alms (ZIS) have a positive and significant influence on reducing poverty in Indonesia. This is in line with research conducted by (Nafi'ah, 2021; Tamimi & Syarbaini, 2023) showing that ZIS has a positive and significant influence on reducing poverty levels, this is because the distribution of ZIS is not evenly distributed and is not on target.

The ZIS variable has an important role in helping the government eradicate poverty in Indonesia. With targeted distribution and effective empowerment programs, ZIS can help the poor and mustahik improve their standard of living and get out of the poverty line. However, the influence of ZIS on reducing poverty levels can have a positive and significant relationship. There are several possibilities why ZIS can have a positive and significant influence on poverty levels, which means that if ZIS rises, then poverty also rises. These possibilities include ZIS distribution that is not on target, multiplication of poverty (poverty trap), economic crisis, natural disasters, and low economic growth. It is important to ensure that ZIS is distributed in an appropriate manner and used productively so that it can provide maximum benefits for the poor. The relationship between ZIS and poverty levels is complex and multidimensional. Further research is needed to understand how ZIS can be used optimally to achieve poverty alleviation goals.

Meanwhile, the tax variable has a negative and insignificant effect on reducing Indonesia's poverty level. This is in line with the results of research conducted by (Prasetiyo, 2004).shows that local taxes do not significantly affect poverty levels. There are several factors that cause taxes to not have a significant impact on reducing poverty levels, firstly, high income inequality means that most taxes only come from the upper middle or rich groups, so their impact on poverty alleviation is very limited. The second factor is leakage and inefficiency in tax collection and use, causing the tax's potential for poverty alleviation to be limitedoptimized apart That's the third factor, namely that the programs implemented in the context of poverty alleviation are not evenly distributed and are still not well targeted and effective (Ministry of Finance, 2023).

Similar to taxes, the subsidy variable in this study also has a negative and insignificant effect on reducing poverty levels. This is in line with research conducted by (Bakar et al., 2023; Delvia & Aliasuddin, 2020; Paramita et al., 2020; Prasetyo & Cahyani, 2022) which states that subsidies do not have a significant impact because the distribution of subsidies from the government is not evenly distributed so that not yet effective in alleviating poverty. According to the author's analysis, the reason subsidies have not had a significant impact is because the subsidies distributed are not on target, resulting in subsidies being enjoyed by groups of people who are not poor, such as energy subsidies which are enjoyed by all groups. In addition, inefficiencies resulting from inappropriate subsidy pricing and lack of supervision, as well as large fiscal burdens for the government can hamper other development programs. The unsustainability of subsidies in the long term is also a factor in the ineffectiveness of subsidies in alleviating poverty due to fluctuations in commodity prices and limited government resources (Hantoro, 2019).

5. Conclusion

Based on the research results described above, it can be concluded that one of three variablesindependent. The research studied partially influences the reduction of poverty rates in Indonesia, namely the zakat, infaq and alms (ZIS) variables, which have a positive and significant influence. This is due to well-targeted distribution and effective empowerment programs, ZIS can help the poor and mustahik improve their standard of living and get out of the poverty line. Meanwhile, the tax and subsidy variables have a negative effect, but are not significant in Indonesia. This is because high income inequality means that most taxes only come from the upper middle or rich groups, so that their impact on poverty alleviation is still very limited. Apart from that, there are subsidieschanneled not on target, resulting in subsidies being enjoyed by non-poor groups of people. Simultaneously, zakat, infaq and alms (ZIS), taxes and subsidies influence the reduction of poverty rates in Indonesia.

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THE EFFECT OF INVESTMENT ON ECONOMIC GROWTH IN EAST KALIMANTAN DURING THE COVID-19 IMPACT

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ABSTRACT
Economic growth is a measure of the economic progress of a country or region and one of the drivers of economic growth is investment. The purpose of this study is to analyze the effect of investment on economic growth in East Kalimantan Province during the Covid-19 impact, starting from 2019-2021. The method used in this study is multiple linear regression. The results showed that the FDI variable had a significant effect on economic growth while PMDN had no effect on economic growth in East Kalimantan. This research is expected to provide useful information for making policies to increase economic growth in East Kalimantan Province through investment.
Keywords: *Economic Growth, Investment, PMA, PMDN.*

1. Introduction

Economic growth is a measure of the economic progress of a country or region, especially in increasing the production of goods and services. This increase in production is expected to have an impact on improving community welfare (Pangiuk, 2017). Economic growth measures the results of a level of development by increasing the production capacity of goods and services in physical form within a certain period of time (Nadzir & Kenda, 2023). One source of increased economic growth is investment (Adi & Dewi, 2020). The government aims to improve the economy by attracting funds or investment from both foreign investment (PMA) and domestic investment (PMDN) (Danisa, 2018). Investment is one of the drivers of economic growth. PMA and PMDN are the most important elements in financing infrastructure development in a country (Yuliani et al., 2023). In addition, increasing investment determines the level of income and employment opportunities, thereby increasing income and the level of national welfare (Danisa, 2018). PMDN and PMA funding sources are widely used to build infrastructure in developing areas. PMA is the most stable source of capital compared to other sources of capital. This is because FDI tends to be influenced by the social, political and economic situation of a country (Yuliani et al., 2023). East Kalimantan Province borders Malaysia and is an area for the construction of a new capital city so it will have strategic importance. Apart from that, East Kalimantan has adequate infrastructure, minimal social conflict between communities, land is considered sufficient and is considered to have minimal natural disasters (Adi & Dewi, 2020). Data on GRDP growth rates in 10 districts in East Kalimantan Province are as follows:

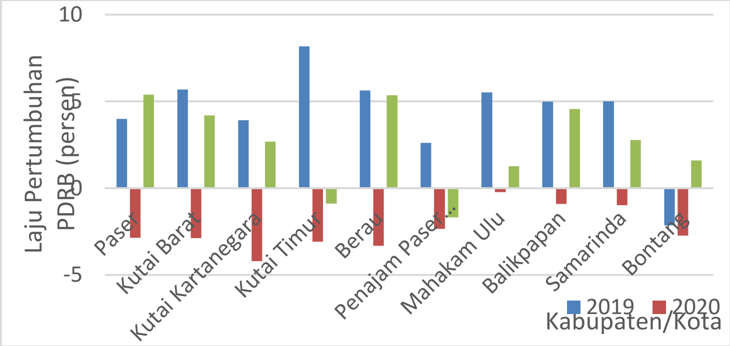

Figure 1. Economic growth rate (percent) in districts/cities East Kalimantan Province in 2019-2021.
Source: Central Statistics Agency, (2023)

From the picture above, it can be seen that the one experiencing increased economic growth from 2019 to 2021 is Paser district. Paser Regency initially obtained a percentage of 3.99% in 2019 but experienced an increase in 2021 of 5.39%. Meanwhile, East Kutai district only received the highest percentage in 2019 compared to other districts, namely 8.17%, but there was a decline in economic growth in 2021 of -0.89%. The district that experienced a slight increase from 2019 to 2021 was Bontang district. With economic growth of -2.15% in 2019 to 1.60% in 2021. And it can be seen in the picture that in 2020 the average district in East Kalimantan experienced economic growth. This is because the impact of the pandemic in 2020 has affected Indonesia's economic growth. Apart from that, this also has an impact on decreasing the amount of investment in various industries (Akbar et al., 2022).

Indonesia has the potential to become an economically competitive country (Kurniawati & Islami, 2022). East Kalimantan is one of the largest provinces and is rich in natural resource potential, most of which has not been utilized optimally. Most of the natural resources and production results are exported, making the East Kalimantan region a large foreign exchange earner, especially from the mining, forestry and other sectors (Danisa, 2018).

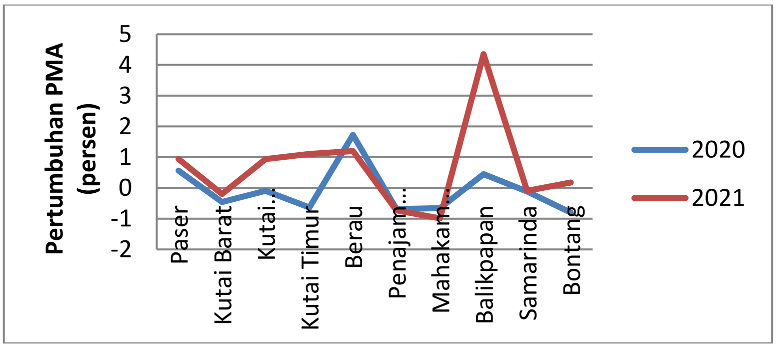

Figure 2. FDI investment growth (percent) in Regencies/Cities of East Kalimantan Province in 2019-2021
Source: Central Statistics Agency, (2021)

From the picture above, it can be seen that the development of FDI realization over the 3 years from 2019-2021 experienced ups and downs. COVID-19 has changed the way people view the economy in terms of investment. Economic downturns change investment risk preferences. In fact, Keynes' classical theory of goods market balance states that increasing investment will result in an increase in national income (Ersyafdi, 2021). It can be seen in the picture that there has been a significant increase from 2020, namely 0.56% to 0.94% in 2021, indicating that there has been an increase in foreign investment in Paser district. Meanwhile, the district that experienced a fairly large increase from 2020 to 2021 was Balikpapan district with a percentage increase from 0.45% to 4.35% in 2021.

The district that experienced a contraction in foreign investment was Samarinda with a percentage of -0, 12% in 2020 to -0.09% in 2021. Mahakam Ulu district also experienced quite a large contraction with the PMA percentage of -0.66% in 2020 to -0.99% in 2021. In Bontang district initially experienced a negative decline but there was a significant increase in the percentage from -0.80% in 2020 to 0.17% in 2021. The district that experienced a slight increase from 2020 to 2021 was North Penajam Paser district with a foreign investment percentage of -0.69% in 2020 to -0.73% in 2021.

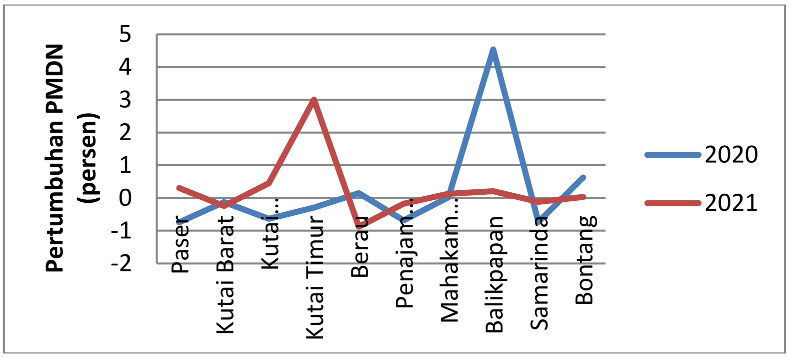

Figure 3. Growth of PMDN investment (percent) in Regencies/Cities of East Kalimantan Province in 2019-2021
Source: Central Statistics Agency, (2021)

From the picture above, it can be seen that there was a significant change in decline in Paser Regency in 2020 amounting to -0.74% and an increase in 2021 amounting to 0.31%. Balikpapan Regency initially obtained a percentage of 4.54% in 2020 but experienced a decrease in 2021 of 0.21%. Meanwhile in East Kutai Regency there was a very large jump from -0.29% in 2020 to 3.01% in 2021. This shows that East Kutai Regency experienced a significant increase in domestic investment. The district that experienced a slight increase from 2020 to 2021 was Mahakam Ulu District. With a percentage of 0.02% in 2020 to 0.13% in 2021. East Kalimantan opens the door for foreign investors to accelerate infrastructure development to further increase economic growth in East Kalimantan (Daniah, 2014). A study conducted by Ratna et al (2017), shows that PMA and PMDN have positive value on economic growth.The higher economic growth in Indonesia, resulting in higher growth rates in PMA and PMDN(Shafwah et al., 2019). Eliza's (2015) study shows that investment has a significant effect on economic growth in West Sumatra Province. This is due to a conducive increase in investment in West Sumatra Province.

Agustini & Kurniasih's (2017) study regarding the influence of PMDN investment, PMA and labor absorption on economic growth and the number of poor people in districts/cities in West Kalimantan Province shows that PMA and PMDN investment has a positive effect on economic growth in West Kalimantan. Therefore, investment is able to spur economic growth and increase the active role of society in economic activities as well as expand job opportunities and employment opportunities. Sinulingga Study (2021), found the same findings. Thisbecause foreign investors increase investment in activities that result in increased economic and production results.

Lumbantobing Study (2017), shows that PMA and PMDN do not have a significant effect on DKI Jakarta's GRDP. This is because incoming investment causes a decline in GRDP in DKI Jakarta Province. Kambono & Marpaung's (2020) study found that foreign investment had an effect on economic growth, while domestic investment had no significant effect on economic growth. This is because foreign investment can increase economic growth in Indonesia, while domestic investment cannot increase economic growth in Indonesia. Astuti et al's (2017) study shows that investment has a negative and significant effect on economic growth. This is because incoming investment only focuses on the processing industry, so the profits obtained are not significant in Pelalawan Regency. Prasasti's study (2022), shows that investment (PMA & PMDN) has a negative and insignificant effect on economic growth in South Sulawesi. This is due to the lack of investors entering as a result of the Covid 19 pandemic.

Hastin's (2022) study shows that investment does not have a significant influence on the economic growth of Jambi Province. This shows that the investment factor as a driver of economic growth in Jambi Province is still low. The results of the study by Alice et al (2021) show that foreign investment does not have a significant effect on GDP growth in Indonesia, while domestic investment has a significant positive effect on GDP growth in Indonesia. This is because foreign investment cannot increase GDP for the better, while domestic investment can increase GDP growth in Indonesia.

With the description above, this research aims to analyze the influence of investment on economic growth in East Kalimantan Province during the impact of Covid-19, starting from 2019-2021.

2. Literature Review

Investment is the second component that influences the level of aggregate expenditure and is one of the important and main factors in economic development. In economic theory, investment is defined as expenditure to purchase capital goods and production equipment with the aim of replacing and especially increasing capital goods in the economy which will be used to produce goods and services in the future (Nujum & Rahman, 2019). According to Kamaruddin Ahmad, investment is placing money or funds in the hope of obtaining additional or certain profits. In this investment concept, the placement of funds or money is very important. Earning a profit is the goal of this investment. This is related to investment in the capital market. According to Salim HS and Budi Sutrisno, investment is investment made by investors, both foreign and domestic, in various business sectors that are open to investment with the aim of making a profit (Sudirman & Alhudori, 2018).

Investment in simple terms is placing money in one or more assets for a certain period of time with the hope of making a profit or increasing the value of the investment (Gwijangge et al., 2018). Investment plays a very important role in macroeconomics, namely that it can influence aggregate demand. Apart from that, investment can also influence the business cycle and capital formation (Buana et al., 2019). Investment based on financing is investment based on its source. This investment consists of two types, namely (PMA) investment originating from foreign capital and (PMDN) investment originating from domestic capital (Pangiuk, 2017). According to Law no. 25 of 2007 concerning Capital Investment, foreign capital (PMA) is raw materials owned by an Indonesian company, either in whole or in part, by a foreign country or foreign company. Foreign companies (PMA) deliberately provide raw materials for development in the territory of the Republic of Indonesia. Meanwhile, according to Law no. 25 of 2007 concerning Capital Investment, state capital (PMDN) is investment owned by the Unitary State of the Republic of Indonesia or individuals who are invested in the Republic of Indonesia. State investment means that state investors provide raw materials for business activities in the Republic of Indonesia (Kurniawati & Islami, 2022).

Basically, economic growth is defined as a process in which gross real income (GDP) or real income per capita increases continuously as a result of increasing per capita productivity. According to Kuznets, economic growth is defined as an increase in the long-term capacity of a country to provide its population with various economic goods. The existence of technological, institutional (institutional) and ideological progress towards various demands of the current situation determines or enables capacity increases (Kosali, 2021). According to Solow & Swan, economic growth depends on increasing the supply of production factors, namely the accumulation of capital, labor and population, as well as the level of technological progress. In other words, how long the economy will develop depends on the level of technological progress, capital accumulation, and population increase (Eliza, 2015). According to Sukirno, economic growth is an indicator of successful development and is a process of consistent increase in per capita output in the long term. Thus, the higher the economic growth, the higher the welfare of society, although there are other indicators, namely income distribution (Sudirman & Alhudori, 2018). Economic growth can be defined as an increase in living standards as measured by real total output per capita. Therefore, economic growth occurs if the increase in real total output per capita is greater than the increase in population.

On the other hand, economic growth occurs if the increase in population is faster than the increase in real total output per capita (Buana et al., 2019). Stunted investment will cause economic growth to slow down or stagnate. Slowing or stagnation of the economy is an indication that a country's economy is experiencing depression. The effects of depression on a country include reduced employment opportunities, even loss of employment if the depression is very severe (Rofik et al., 2018). According to Iskandar, to calculate the level of economic growth of a country, national income is the information that is needed and used. Developing countries usually use (GDP) Gross Domestic Product, while developed countries usually use (GNP) Gross National Product (Halim, 2020).

The research results show that incoming investment does not make a profit and does not contribute to economic growth in Pelalawan Regency. This research uses a qualitative approach with data collection techniques using secondary data types. The location of this research was in Pelalawan Regency, Riau Province in 2006-2015 (Astuti et al., 2017). The results of the second research conducted in Jambi Province using quantitative descriptive research methods in 2019 to 2020 stated that investment in Jambi Province was still low to drive economic growth (Hastin, 2022). The third research conducted in South Sulawesi Regency using quantitative research methods from 2012 to 2021 stated that the lack of investor interest due to Covid 19 caused investment in South Sulawesi Regency not to increase economic growth (Prasasti, 2022). The results of the fourth research were conducted in DKI Jakarta. This research uses time series data from 1999 to 2014 located in DKI Jakarta. The data analysis techniques used in this research are descriptive and inferential. The findings from this research show that investment has a negative impact on economic growth. Where increasing investment will reduce the economic growth of DKI Jakarta Province (Lumbantobing, 2017).

The research results further state that there is a relationship between investment and economic growth in Central Kalimantan. Having investors come in can result in an increase in the economy and production results. This research uses quantitative methods with data collection techniques using secondary data types. The data used in this research is panel data with a combination of time series data and cross section data. The location of this research is in Central Kalimantan. The model used in this research is the Path Analysis model (Sinulingga, 2021). Subsequent research shows that there is a relationship between investment and economic growth in the city of Surabaya. Investment can play an important role in the circulation of funds and structural transformation. This research uses two types of approaches, namely a quantitative approach and a qualitative approach. The data collection technique in this research is secondary data. The location of this research was in the city of Surabaya in 2010-2019 (Buciarda et al., 2021).

3. Research methods

The data source used in this research is secondary data. Secondary data is data obtained indirectly through intermediary media, namely the results of research, books, articles, various publications and related institutions related to the problem being discussed (Rawung et al., 2022). The data source used in this research is the Central Statistics Agency of East Kalimantan Province. This research uses dependent variables and independent variables. Dependent variables are types of variables that are explained or influenced by independent variables, while independent variables are types of variables that explain or influence other variables (Jufrida et al., 2017). The dependent variable used in this research is Economic Growth (GRDP) on the basis of constant prices, while the independent variable used in this research is investment in the form of PMA and PMDN. The method used to analyze is multiple linear regression. The form of data used is panel data. Panel data is a combination of time series and cross section data. Time series data is data collected over time on one individual or object, while cross section data is data collected at one time on many individuals or objects (Ahmaddien & Susanto, 2020). The time series data used in this research is from 2019 to 2021, while the cross section data used in this research is 10 regencies/cities in East Kalimantan Province. The regression model can be written as follows:

Yit = β0it+ β1itX1it + β2itX2it+ eit

Information:
Y = PDRB; X1= PMA; X2 = PMDN; e = Error Term; it = 10 Regencies/Cities of East Kalimantan Province in 2019-2021.

The model interpretation technique is carried out using CEM, FEM, and REM and the best model is selected through tests such as the Chow test, Hausman test, and Lagrange Multiplier (LM). The Chow test was carried out to determine the appropriate regression method for panel data between FEM and CEM. The Hausman test was carried out to select a panel data regression model between FEM and SEM. Meanwhile, the LM test is used if the Chow test results show CEM and REM shows Hausman results. To determine the significance between variables, hypothesis testing is carried out, namely the T test, F test and R2. The classic assumption tests used in this research are the multicollinearity test and heteroscedasticity test. The purpose of the multicollinearity test is to test whether the regression model finds a correlation between independent variables (Rawung et al., 2022). The way to find out if there is multicollinearity in a model is to look at the VIF (Variance Inflation Factor) and Tolerance values. If the VIF value < 10 and Tolerance > 0.1 then there is no multicollinearity. Conversely, if the VIF value is > 10 and Tolerance < 0.1, then there is multicollinearity (Muryanto et al., 2022). The purpose of the heteroscedasticity test is to see whether the variance in the regression model is not the same from one observation to another (Rawung et al., 2022). In this research, heteroscedasticity was tested using the Glejser method, namely by looking at the probability values. If the probability value is > 0.05 then heteroscedasticity does not occur. On the other hand, if the probability value is <0.05 then heteroscedasticity occurs (Buciarda et al., 2021).

4. Research Findings and Discussion

The statistical description and logistic regression test results form the basis for the description of the results of this research. This description is depicted in the following table:

Table 1. Statistical Description of Research Data

Variable	Obs	Average	Std. Deviation	Min	Max
PMA	30	66210.56	85341.48	123.9000	324294.3
PMDN	30	2630181	3760050	404886.0	16773017
GRDP	30	48078195	38542269	1763933	1.2600000

Source: Central Statistics Agency, processed by the author, 2024

Table 1 above shows that the number of variables used in this research was 30. Meanwhile, the average PMA used in this research was 66,210 thousand and the maximum reached 324,294 thousand. The average PMDN used in this research was 26,301.81 million rupiah and the maximum reached 16,773,017 million rupiah. Apart from that, the average GRDP in this study reached 48,078,195 million rupiah and the maximum reached 1,26,000 million rupiah.

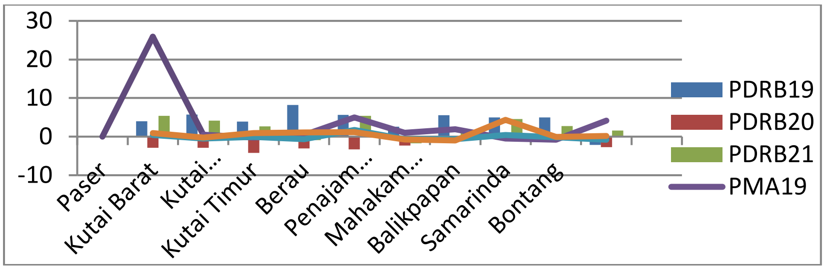

Figure 4. Relationship between FDI and GRDP in 2019-2021
Source: Central Statistics Agency, (2019)

From Figure 4, it can be seen that the relationship between FDI and GRDP has a close relationship. Judging from the data, the decline in the amount of foreign investment in several regions could affect the economy of East Kalimantan, such as in 2020 due to the influence of the Covid-19 pandemic. And it can also be seen that, in 2021 the GRDP in East Kalimantan has started to rise and is starting to grow due to the increase in foreign investment in several areas of East Kalimantan Province. So, with foreign investment, it can cause economic growth in an area.

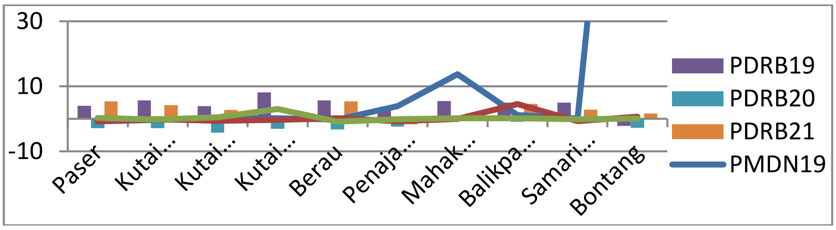

Figure 5. Relationship between PMDN and GRDP in 2019-2021
Source: Central Statistics Agency, (2019)

From Figure 5, it can be seen that the impact of the Covid-19 pandemic can cause the economy and domestic investment in a region to fluctuate. Seen in the picture, during the 3 years from 2019 to 2021, the average Domestic Investment in the Districts of East Kalimantan Province experienced a drastic decline and this resulted in the economy in the districts of East Kalimantan Province also being disrupted. This means that there is a significant relationship that can influence domestic investment.

Classic assumption test

The classical assumption tests used in this research are multicollinearity and heteroscedasticity. The Classical Assumption Test can be depicted in the following table.

Table 2. Classic Assumption Test

Multicollinearity Test		
	PMA	PMDN
PMA	1,000000	0.261220

PMDN	0.261220	1,000000
Heteroscedasticity Test		
	Coefficient	Prob
PMA	187.56	0.1320
PMDN	3,728	0.2790

Source: Processed data from eviews 12, (2024)

Looking at table 2, the results of the multicollinearity test can be concluded that there are no symptoms of multicollinearity in this research model because the correlation value between independent variables is 0.261 and the heteroscedasticity test results from the table above show that the prob value is >0.05, meaning there are no symptoms of heteroscedasticity.

Table 3. Correlation and Regression Results

Variable	**PDRB**		
	(1) Fixed Effects	(2) Random Effects	(3) Common Effects
PMA	**9.882689**** (0.0442)	**10.15243**** (0.0347)	**187.5655**** (0.0132)
PMDN	**0.057671** (0.5928)	**0.063541** (0.5534)	**3.728148**** (0.0279)
Statistical t test			
PMA		2,163	2,224
2,653			
PMDN		0.544	0.600
2.323			
R Test	0.99	0.16	0.38
F Statistics	2721,501	2.643066	8.404283
Total Obs	30	30	30

Note: Significance level 1% (<0.01)***,5% (<0.05)**,10%(0.1)*
Source: Processed data from eviews 12,(2024)

From table 4, it can be seen that the results of the fixed effect regression, the coefficient value of variable X1 is 9,882 with a Prob value of 0.0442 (<0.05). It can be concluded that variable of 0.057 with a Prob value of 0.5928 (>0.05) it can be concluded that variable X2 has no effect on variable Y. The results of the random effect regression show that the coefficient value of variable towards Y. Meanwhile, the coefficient value of variable X2 is 0.0635 with a Prob value of 0.05534 (>0.05), it can be concluded that variable.

The results of the common effect regression coefficient value for variable selected, namely Fixed Effect. From the regression results above, there is a multiple linear regression equation as follows:

GRDP = 4727 + 9,882 (PMA) – 0.057 (PMDN) + e

From this equation, it can be concluded that the constant is positive and this shows that when PMA and PMDN increase, GRDP also increases. From the Fixed Effect regression results, it can be concluded that variable X1 (PMA) has more influence on GRDP in East Kalimantan compared to X2 (PMDN). The reason why PMDN has not yet developed in East Kalimantan is the complicated licensing bureaucracy faced by investors(Adi & Dewi, 2020). The results of this research are also supported by previous research by Kambono & Marpaung (2020) with the research title The Influence of Domestic Foreign Investment on Indonesia's Economic Growth. The results of this research show that foreign investment has a significant effect on economic growth in Indonesia. And also supported by previous research by Kornita & Wardani (2015), the results of their research stated that the PMA variable had a positive and significant influence on the GRDP of Siak Regency in 2003-2012.

5. Conclusions

From the results of this research, it appears that foreign investment is more dominant in improving or growing the economy in East Kalimantan. Meanwhile, domestic investment is not dominant in improving the economy in East Kalimantan. The East Kalimantan Provincial Government must pay more attention to domestic investment so that it can make a greater contribution to increasing economic growth, especially in East Kalimantan Province. For further research, it is hoped to expand research and studies on investment with special emphasis on foreign investment and domestic investment, especially in East Kalimantan. And the research results will provide a better picture of the actual investment situation in East Kalimantan Province.

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ANALYSIS OF THE EFFECT OF ECONOMIC GROWTH, HUMAN DEVELOPMENT INDEX, STUNTING PREVALENCE AND OPEN UNEMPLOYMENT ON POVERTY IN YOGYAKARTA

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ABSTRACT

Poverty is a multidimensional problem with unique characteristics in each region. The province of Yogyakarta Special Region, consistently reports the highest poverty rate from 2015 to 2022 compared to other provinces on the island of Java. This study explored the relationship between Economic Growth (GRDP), Human Development Index (HDI), Stunting Prevalence, Open Unemployment Rate, and poverty in Yogyakarta Special Region. Using a quantitative approach with multiple linear regression and the Ordinary Least Square (OLS) method, this study evaluated the partial and simultaneous impact of these factors on poverty. The results showed that GRDP and HDI have a negative and significant effect, while stunting prevalence and open unemployment rate have a positive and significant effect on poverty. Together, these variables have a significant influence on the poverty rate in Yogyakarta. This study contributes to understanding the complex dynamics of poverty and shows that addressing economic growth, human development, stunting, and unemployment can be a key strategy in poverty alleviation efforts in Yogyakarta.

Keywords: *Poverty, Economic Growth, Human Development Index, Stunting Prevalence, Open Unemployment.*

1. Introduction

Poverty alleviation is one of the main goals of national development. Poverty is a financial problem that must be addressed or minimized. Poverty is a complex problem that has many dimensions besides a lack of income. These include insufficient financial resources, social exclusion, poor health, limited education, inadequate housing, and environmental degradation (World Bank, 2020). Additionally, poor communities often face political marginalization, discrimination, mental health challenges, limited personal development, and a higher vulnerability to violence and exploitation. Overcoming poverty requires a holistic approach that improves living conditions, provides equal opportunities, and ensures social justice in all dimensions (UNDP, 2020). Therefore, poverty alleviation efforts must be comprehensive, cover all aspects of community life, and be well coordinated and organized.

Many factors contribute to poverty in Indonesia, including below-average salary levels, weak resource development, high unemployment rates, low economic growth, and others. The vicious circle theory of poverty developed by Nurkse in 1953 is the root cause of poverty (Kuncoro, 1997). According to this theory, there are three main causes of poverty, namely (1) low income, (2) market imperfections and underdevelopment of human resources, and (3) lack of capital resulting in low productivity. Low gross domestic product per capita is caused by low labor productivity, which results in low income. Low income will lead to low levels of investment and savings. Low investment leads to little capital accumulation, which in turn leads to little employment growth.

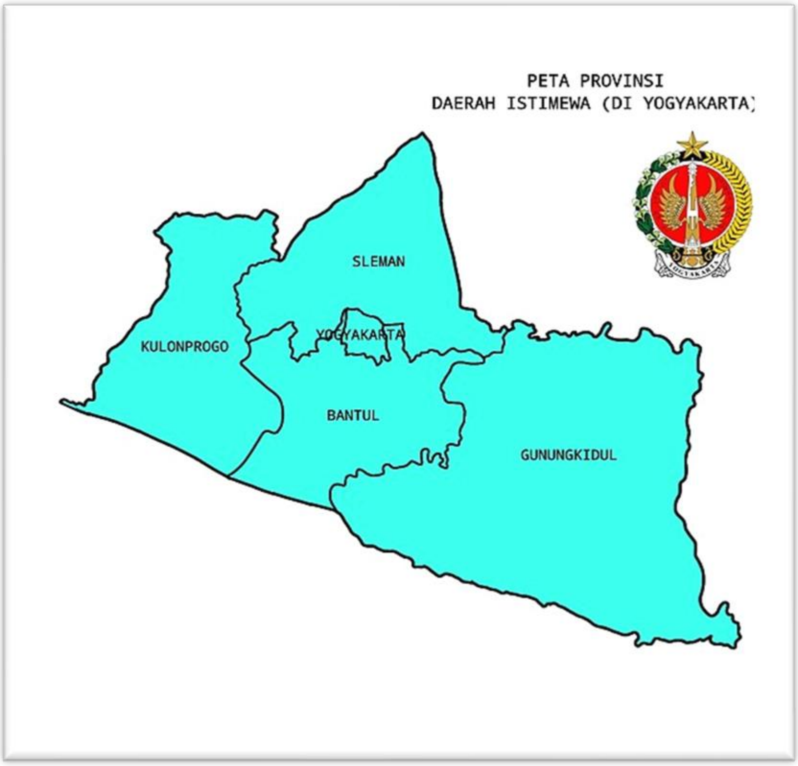

Figure 1. Administrative Map of Yogyakarta Special Region Province
Source: Wikipedia, 2021

The province of Yogyakarta Special Region (DIY) is located in the southern part of Java Island, Indonesia. With an area of 3,185.80 km2, the province consists of one municipality, Yogyakarta City, and four regencies, Bantul, Kulon Progo, Gunung Kidul, and Sleman. Although the Special Region of Yogyakarta (DIY) is known as the center of education and culture in Indonesia, poverty remains a challenging issue in Yogyakarta. The poverty rate in Yogyakarta is still relatively high compared to the poverty rate in Java or the national poverty rate. The average poverty rate in Yogyakarta from 2015 to 2022 is 12.47 percent, while the national average is 10.10 percent (Badan Pusat Statistik, 2023).

Effective poverty reduction is a top priority in formulating development strategies and instruments that must be implemented by the government, both at the central and regional levels. This study aimed to analyze the relationship between economic growth, human development index, stunting prevalence, and open unemployment rate to poverty. This study sought to examine the effect of each variable individually on poverty, as well as evaluate the overall impact of all variables on poverty.

2. Literatur Review

2.1 Economic Growth

Economic growth is the long-term process of increasing productivity per capita. There are three main focuses in economic growth: process, per capita production, and long-term. Countries that experience high economic growth can have a significant impact on other sectors because economic growth increases a country's national income, which can then be used to fund the development of economic infrastructure (Boediono, 1981). Therefore, economic growth is the main goal of a country to improve the welfare of its citizens. Economic growth is defined as the development of economic activities that result in increased production of goods and services, as well as improved public welfare. There are several factors that influence growth, namely natural resources, capital accumulation, technological progress, human resources, division of labor and specialization (Bayu, 2020). Then there are non-economic factors that affect economic growth, among others, social and cultural, political and administrative considerations (Arsita, 2019).

2.2 Human Development Index

The Human Development Index (HDI) is a measure of development achievement based on several key components of quality of life. Human development is determined by four factors, namely productivity, equality, sustainability and empowerment (Lestari, 2021). The human development index consists of three main variables that have an important influence in improving the quality of life of the community. The three major dimensions are long and healthy life, knowledge, and a reasonable standard of living. Each dimension has an indicator as a measuring tool where the dimension of longevity and health, a projection of the average length of life of a person during his life (Bappeda, 2020).

In principle, the better one's health, the higher the chance of survival. Then, the dimension of education, aims to develop the nation's generation and also improve the quality of human resources. The education dimension is still divided into two, namely the expected length of schooling where the government policy is a compulsory education program and the average length of schooling seen from the average number of years spent by people aged 25 years and over at all levels of formal education. Then the third dimension is the decent standard of living dimension, this refers to the level of welfare enjoyed by the community as a result of economic development. Per capita expenditure describes the level of community welfare as a result of economic development, which is measured through per capita expenditure and community purchasing power (Trihastono, 2021).

2.3 Prevalence of Stunting

Stunting is a condition of growth failure in children caused by chronic malnutrition from the womb to 24 months of age. This condition not only inhibits physical growth, but also has an impact on children's cognitive development (Adila, 2019). Growth disorders due to stunting can cause permanent cognitive developmental disorders, accompanied by suboptimal motor and intellectual development, which ultimately affects children's educational achievement. Stunting is caused by multifactors, including economic, social, educational, and environmental factors (Aprillia, 2021).

Low family economic conditions led to low purchasing power, making it difficult to fulfill basic needs such as food, clothing, shelter, and education, which contributes to stunting. Poor families are at risk of stunting due to their inability to provide adequate nutritional support for children's health. In addition, poor residential areas also contribute to low community access to health services, which causes difficulties in obtaining quality health services (Notoatmodjo, 2003).

2.4 Open Unemployment

Open unemployment is defined as the condition of individuals who have entered the labor market but have not yet found a job and are looking for work, preparing to get a job, or already have a job but are looking for another job. The open unemployment rate is influenced by economic factors such as slow or even negative economic growth, which causes businesses to reduce the number of employees or delay hiring new employees. Social factors such as the level of education and skills of the labor force also play a role, where individuals with relevant skills and higher education tend to have a greater chance of finding a job (Sukirno,2011). Open unemployment can also be caused by an imbalance between the growth of the labor force and available job opportunities (BPS, 2022).

2.5 Poverty

Poverty is a condition of inability to achieve a normal standard of living, characterized by limitations in meeting basic needs and daily living standards such as food, clothing, shelter, health, and education, which is exacerbated by low income capacity. Poverty is a multidimensional concept that includes dimensions of poverty, hopelessness, vulnerability to emergencies, dependence, isolation, poor health and education conditions, unfair legal treatment, vulnerability to the threat of crime, and the absence of power to determine one's own life.

The vicious circle theory of poverty proposed by Ragnar Nurkse (1953) explained that low productivity is caused by low income, market failure, and low investment. Low income led by the low savings and investment, which in turn hinders development and exacerbates low productivity. Nurkse concluded that poor countries are trapped in a poverty cycle that is difficult to break because of poverty itself.

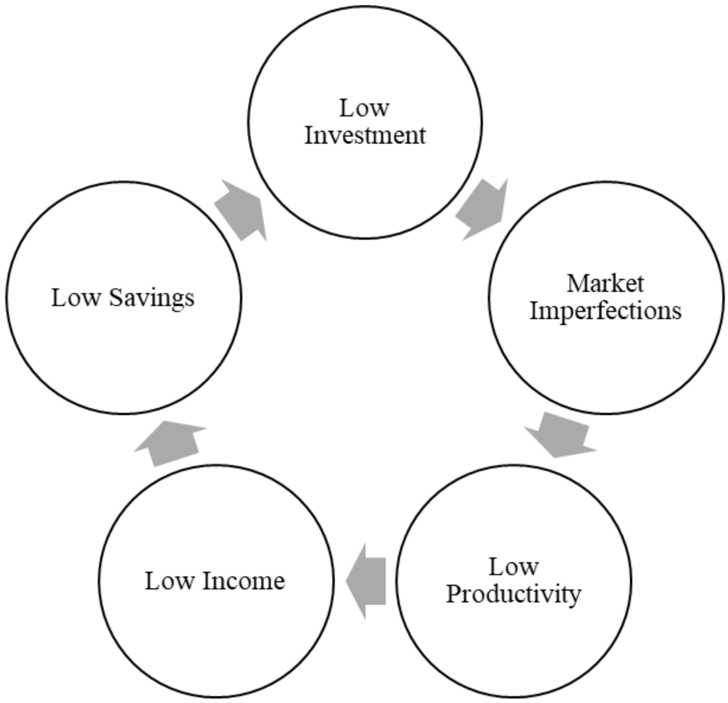

Figure 2. The Vicious Circle of Poverty
Source: Nurkse in Kuncoro, 1997

The poverty cycle refers to a series of factors that influence each other, creating conditions in which the country is trapped in poverty and faces difficulties in achieving a better level of development.

2.6 Relationship between Variables

High economic growth has the potential to increase people's overall income, thereby reducing the number of poor people (Bourguignon, 2003). Meanwhile, a low Human Development Index (HDI) indicates poor quality human development, which in turn can increase poverty in a region (Tampubolon, 2016). Meanwhile, high prevalence of stunting is associated with poverty, limited access to clean water, sanitation, and health services (Headey et al., 2016). Comprehensive measures, such as improved nutrition, sanitation and access to health services, can help break the cycle of poverty associated with stunting (Suwoyo, 2021). High levels of unemployment, on the other hand, can reduce people's incomes and levels of prosperity, thereby increasing poverty. In addition, high unemployment can also trigger socio-political turmoil and hamper long-term economic development (Made, 2010).

3. Research Methods

This research used a quantitative descriptive approach by utilizing secondary data obtained from the Central Bureau of Statistics of Yogyakarta Special Region Province. The data used was quarterly data for the period 2015-2022, which is the average of each quarter taken from each year in that time period. In one year there are four quarters, each representing a three month period including Gross Regional Domestic Product (GRDP) as a proxy for economic growth, Human Development Index (HDI), stunting prevalence (PVS), open unemployment rate (PGTBK), and percentage of poverty (PVR). By using time series data, the analytical method applied in this study is multiple linear regression. Data processing was conducted using SPSS 10 software. Model estimation was conducted using the Ordinary Least Square (OLS) method. Meanwhile, to evaluate the effect of the independent variables, F test (simultaneous), t test (partial), and coefficient of determination (R2) were used.

3.1 Classic Assumption Test

The classical assumption test or diagnostic test was carried out to ensure that there were no deviations from the basic assumptions in linear regression analysis. Fulfillment of classical assumptions is a prerequisite for obtaining efficient and consistent parameter estimates, where violation of classical assumptions can reduce the validity of regression estimation results. The following was the classic assumption test:

3.1.1 Multicollinearity Test

Multicollinearity test was used to identify high correlation between independent variables in multiple linear regression models. High multicollinearity disrupted the relationship between the independent variable and the dependent variable and caused the problems in determining the standard error limit of the regression coefficient. Testing was done by looking at the Variance Inflation Factor (VIF) and Tolerance values. If the VIF value < 10 or Tolerance > 0.01, then was no multicollinearity. Conversely, if the VIF value> 10 or Tolerance < 0.01, then there was multicollinearity (Ghozali, 2016).

3.1.2 Heteroscedasticity Test

The heteroscedasticity test was used to detect variance inequality of the residuals in the regression model. A good regression model had a constant residual variance or homoscedasticity. One method that was used, was the Glejser Test, which is by regressing the absolute value of the residuals on the independent variables. If the probability value <0.05, then there is a heteroscedasticity problem. Conversely, if the probability value> 0.05, then there was no heteroscedasticity problem (Ghozali, 2016).

3.1.3 Autocorrelation Test

The autocorrelation test was used to determine whether there was a correlation between residuals on one observation and other observations in the regression model. In this study, the Durbin-Watson test was used to detect autocorrelation. The decision-making criteria based on the Durbin-Watson (d) value are: (a) if $d < dL$ or $d > 4\text{-}dL$, then there is positive autocorrelation; (b) if $dU < d < 4\text{-}dU$, then there is no autocorrelation; (c) if $dL < d < dU$ or $4\text{-}dU < d < 4\text{-}dL$, then the results cannot be concluded (Sujarweni, 2016).

3.1.4 Normality Test

The normality test was carried out to detect the distribution of data on the research variables whether normally distributed or not. Good data was normally distributed data. In this study, the normality test used the Kolmogorov-Smirnov test. Data is considered normally distributed if the significance value of the Kolmogorov-Smirnov test is greater than 0.05 (Sugiyono, 2013).

3.2 Multiple Linear Regression Analysis

This study used multiple linear regression analysis with the Ordinary Least Squares (OLS) method to estimate the effect of independent variables on the dependent variable. The OLS approach was chosen because it is technically robust, easy to calculate, and understand (Gujarati, 1995). The regression model was used to estimate the effect of Economic Growth, Human Development Index, Stunting Prevalence, and Open Unemployment Rate on Poverty. It is functionally denoted as follows:

Y= f (X1 X2 X3 X4)

The above model was then transformed into an econometric model, the regression equation is as follows:

PVR = b0+b1(PDRB)+ b2(IPM)+ b3(PVR)+ b4(PGTBK)+ e

Information:
PVR : Poverty
b0 : Constant
b1b2b3b4 : Partial regression coefficient
PDRB : Economic Growth
IPM : Human Development Index
PVR : Stunting Prevalence
PGTBK: Open Unemployment Rate
E : Error term

3.3 Simultan Test (Uji F)

The F statistical test determines whether all independent variables of the model have a simultaneous impact on the dependent variable (Ghozali, 2016). The F value is calculated as follows:

$$F = \frac{\mathrm{R2}/\,(\mathrm{k}\,-\,1\,)}{1\,-\,R2\,/\,(\,N\,-\,1)}$$

Description:
K = Number of variables estimated including constants.
N = Number of observations.

At a significance level of 5 percent, the test criteria used are if the significance value <0.05, then the independent variable has a significant effect on the dependent variable, while if the significance value> 0.05, then the independent variable has no significant effect on the dependent variable.

3.4 Partial Test (t Test)

The individual parameter significance test (t test) is conducted to see the significance of the independent effect on the dependent variable individually and considers other variables constant (Ghozali, 2016). The t-count value can be found by the formula:

$$t = \frac{\mathrm{bbb}\,-\,\mathrm{bbb}\,*}{SE\,(bbb)}$$

Description:
bbb = The estimated parameter.

$bbbb*$ = Hypothesis value of bbb (Ho :bbbb = $bbb*$)
SE ($bbbb$) = Standard deviation of $bbbb$

At the 5 percent significance level, the test criteria used are: if the significance value < 0.05 or t-count > t-table, then the independent variable has a significant effect on the dependent variable, while if the significance value > 0.05 or t-count < t-table, then the independent variable has no significant effect on the dependent variable.

3.5 Coefficient of Determination (R2)

The coefficient of determination (R2) is used to measure how well the independent variable can explain the dependent variable in the regression model. The independent variables in the model where 0 < R2 < 1 can fully explain the R2 value. A small R2 value or close to 0 indicates that the ability of the independent variables to explain the variation in the dependent variable is limited, while an R2 value close to 1 means that the independent variables provide almost all the information needed to predict the dependent variable (Ghozali, 2016).

4. Research Findings and Discussion

4.1. Classical Assumptions Test

4.1.1 Normality Test

Table 1. Normality Test Results

Kolmogorov Smirnov	Criteria
0,053	>0.05

Source: Processed Data from SPSS 10

Based on Table 1. the Kolmogorov Smirnov value of 0.053 can be said to be greater than 0.05, so it can be said that the data is normally distributed.

4.1.2 Multicollinearity Test

Table 2. Multicollinearity Test Results

Variable	***Tolerance***	**VIF**
PDRB	0,675	1,480
IPM	0,944	1,060
PVS	0,662	1,511
PGTBK	0,790	1,266

Source: Processed Data from SPSS 10

Based on the results of Table 2. shows that both GRDP, HDI, PVS, and PGTBK variables have a tolerance value of less than 1 and VIF less than 10, it can be said that there is no multicollinearity.

4.1.3 Autocorrelation Test

Table 3. Autocorrelation Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.972[a]	0,945	0,936	0,26238	1,841

Source: SPSS 10

The table above uses the Durbin-Watson (DW) test on the obtained dU value is 1.732, the d value is 1.841 while the 4-dU value is 2.268. If the dU value is smaller than d and the d value is smaller than 4-dU, then there is no autocorrelation. Based on the Durbin-Watson (DW) test, value in this study 1.841 so that no autocorrelation occurs.

4.1.4 Heteroscedasticity Test

Table 4. Heteroscedasticity Test Results

Variable	T-Calculate	Sig.
PDRB	-0,997	0,328
IPM	-1,339	0,192
PVS	0,257	0,799
PGTBK	0,205	0,839

Source: Processed Data from SPSS 10

The table above shows testing using the Glejser test whose value can be seen from the amount of t sig. In the GRDP, HDI, PVS, PGTBK variables have a sig value greater than 0.05 therefore it can be said that the data does not occur heteroscedasticity.

4.2 Hypothesis Test

Table 5. Hypothesis Test Results

Variable	**t calculate**	**sig**	**Description**
PDRB	-2,336	0,027	Significant
IPM	-20,848	0,000	Significant
PVS	2,287	0,030	Significant
PGTBK	2,255	0,032	Significant
F count	122,487	**R**	0,945
F Sig.	0,000	**Adj R Square**	0,936

Source: Processed Data from SPSS 10

4.2.1 Simultaneous Test (F test)

The variables used in this study are gross regional domestic product (X1), human development index (X2), stunting prevalence (X3), open unemployment (X4) simultaneously or together on the dependent variable, which is poverty (Y). By calculating the 95 percent confidence level (α = 5 percent), the F-table is 2.728.

Based on Table 5, the calculated F value is 122.487 with F sig. 0.000, where F. sig 0.000 is smaller than 0.05 and F-count is bigger than F-table, then Ho is rejected. From the above results, it can be interpreted that the variables of gross regional domestic product (X1), human development index (X2), stunting prevalence (X3), open unemployment (X4) have a simultaneous and significant effect on poverty (Y).

4.2.2 Partial Test (t test)

Based on the regression results of the effect of economic growth, human development index, stunting prevalence, and unemployment on poverty in 2015-2022 with a confidence level of 95 percent (α = 5 percent), the t-table is 2.04841. The t-test results show that individually, the variables of GRDP (t=-2.336, sig=0.027), HDI (t=-20.848, sig=0.000), stunting prevalence (t=2.287, sig=0.030), and open unemployment (t=2.255, sig=0.032) have a significant effect on the poverty rate.

4.2.3 Coefficient of Determination (R2)

Based on the test results in Table 3, the adjusted R square value of 0.945 indicates that 94.5 percent of the poverty rate can be explained simultaneously by the variables of gross regional domestic product, human development index, stunting prevalence, and open unemployment, while the remaining 5.5% is influenced by other factors outside the test variables.

4.2.4 Multiple Regression Analysis

Multiple regression analysis is a hypothesis testing method used to examine the degree and direction of the relationship between the independent variable and the dependent variable. This analysis will produce an equation that can explain the following results:

Table 6. Multiple Regression Test Results

Variable	Coefficient ß	Std. Error
Konstanta	91,531	3,785
PDRB	-0,039	0,017
IPM	-0,988	0,047
PVS	0,074	0,032
PGTBK	0,122	0,054

Source: Processed Data from SPSS 10

Based on the table above, it shows that the form of the regression equation can be calculated as follows:

$$Y = a + b1.x1 + b2.x2 + b3.x3 + b4.x4$$
$$= 91.531 - 0.039\ X1 - 0.988\ X2 + 0.074\ X3 + 0.122\ X4\ e$$

From the regression equation above, the constant is positive 91.531, indicating that if there is no economic growth, HDI is zero, all children are stunted, and all workers are unemployed, the poverty rate is 91.531%. The coefficients of GRDP -0.039 and HDI -0.988 mean that a 1% increase in GRDP and one point of HDI will reduce poverty by 0.039% and 0.988% respectively. Meanwhile, the positive coefficients of stunting prevalence of 0.074 and open unemployment of 0.122 indicate that a 1% increase in these two variables will increase poverty by 0.074% and 0.122%, respectively.

4.3 Discussion

4.3.1 The Effect of Economic Growth on Poverty

The estimation results showed that economic growth has a significant effect on poverty in Yogyakarta during the 2015-2022 period with a t-statistic probability value (0.027 <0.05). Economic growth, which was reflected in the increase in GRDP, is a key indicator and prerequisite in poverty alleviation efforts. An increase in GRDP reflects a long-term increase in the capacity of a region to provide economic products for its people, which is also driven by technological advances, changes in economic conditions, and institutional and ideological reforms. Hermanto Siregar and Dwi Wahyuniarti (in Achmad Khabhibi, 2010: 46) emphasize the importance of encouraging economic growth to minimize poverty. The higher the GRDP of a region, the lower the poverty rate in the region.

4.3.2 Effect of Human Development Index on Poverty

The estimation results showed that the Human Development Index (HDI) has a significant effect on poverty in Yogyakarta during the 2015-2022 period with a t-statistic probability value (0.000 <0.05). Increased access to social services such as education, health, and nutrition is assumed to improve the quality of human resources. Quality human resources are the foundation of economic growth (Puspasari, 2020). An educated, skilled, intelligent, and physically and mentally healthy workforce will be more productive, innovative, and competitive in the world of work, resulting in higher production and ultimately reducing poverty in the Special Region of Yogyakarta. Therefore, an increase in the Human Development Index (HDI), which reflects the quality of human resources, can be used as an indicator to reduce the poverty rate. The higher the HDI, the lower the poverty rate.

4.3.3 The Effect of Stunting Prevalence on Poverty

The estimation results show that stunting prevalence has a significant effect on poverty in Yogyakarta during the 2015-2022 period with a t-statistic probability value (0.030 <0.05). Stunted toddlers are at risk of reduced intelligence, susceptibility to disease, and lower productivity in the future, which can limit economic progress and increase poverty. The problem of stunting is influenced by factors such as the health budget, fiscal autonomy, and the level of poverty itself. Poverty leads to low family purchasing power to fulfill basic needs including nutrition, thus increasing the risk of stunting. Therefore, a high prevalence of stunting can be used as an indicator of the high level of poverty in a region.

4.3.4 The Effect of Open Unemployment on Poverty

The estimation results show that open unemployment has a significant influence on poverty in Yogyakarta during the 2015-2022 period with a t-statistic probability value (0.032 <0.05). Open unemployment has a positive and significant impact on the poverty rate. A person who has not found a job or is looking for employment does not have enough income to meet the high and diverse demands of life, thus forcing him to work harder to meet these needs (Ningrum, 2017). As the poverty rate increases, the number of poor people joining the labor force also increases (Khamilah, 2018).

4.3.5 Effect of Gross Regional Domestic Product, Human Development Index, Stunting Prevalence and Open Unemployment on Poverty

The estimation results show that Gross Regional Domestic Product, Human Development Index, Stunting Prevalence and Open Unemployment have a joint or simultaneous effect on poverty in Yogyakarta during the 2015-2022 period with a probability of f significance (0.000<0.05). An increase in regional economic growth accompanied by an increase in the quality of human resources reflected in a higher Human Development Index (HDI) can encourage community productivity. People with better productivity are able to develop innovations to build businesses or companies that generate higher income and expand their business. The more companies that grow, the more labor that can be absorbed, thus reducing unemployment. Furthermore, with increased purchasing power, family needs including nutrition can be better met, which in turn reduces the prevalence of stunting. Government efforts to improve access to health services also play an important role in reducing stunting.

5. Conclusion

Higher economic growth and Human Development Index led to a decrease in the poverty rate in Yogyakarta during 2015-2022. Meanwhile, the high prevalence of stunting and open unemployment contributed to the increase in poverty during the period. This is because economic growth increases production, income, and employment, while a better human development index reflects improvements in the quality of human resources through better education, health, and living standards. On the other hand, stunting reduces children's physical and cognitive development, which can reduce future productivity, while unemployment limits the source of income needed to make ends meet.

In conclusion, to alleviate poverty in Yogyakarta, improving economic growth and the quality of human resources are important. Effectively solving the problem of stunting and open unemployment is crucial to alleviating poverty in a sustainable manner. Therefore, policies that focus on these areas are crucial to achieving the goal of poverty alleviation in Yogyakarta.

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THE EFFECT OF POVERTY AND ECONOMIC GROWTH ON THE HUMAN DEVELOPMENT INDEX BENGKULU PROVINCE

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ABSTRACK
This study aims to find out how economic growth and poverty impact the Human Development Index (HDI) in Bengkulu Province. For analysis, this research uses panel data. Data taken from 2018 to 2020 from all districts and cities of Bengkulu Province. Panel data regression calculations show that poverty has a negative influence on the Human Development Index (HDI) and economic growth has a negative influence on HDI. From 2018 to 2020, the variables of poverty and economic growth have a simultaneous and significant influence on the Human Development Index of Bengkulu Province
Keywords: *Economic Growth, Poverty, Human Development Index (HDI)*

1. Introduction

The human development index is a measure used to see the level of success of a country's development. An increase in HDI shows an increase in various aspects such as welfare, improved education and improved quality of health (Zulham , Seftaria , 2017). However, the COVID-19 pandemic has had an impact on various aspects of people's lives and put heavy pressure on macroeconomic indicators (Trisno *et al* , 2022).

HDI functions as a guide for determining priority scales in development . (Susanti , 2013). The government as the implementer of development certainly needs quality people (Prameswari *et* all, 2021). Therefore, economic development needs to be considered so that it leads to improving human quality (Dewi, 2017). So that it can raise people's standard of living, and expand people's choice options in terms of income, education and health (Amelinda & Rachmawati , 2022). A high level of human development also illustrates the population's ability to manage sources of economic growth (Utami, 2020).

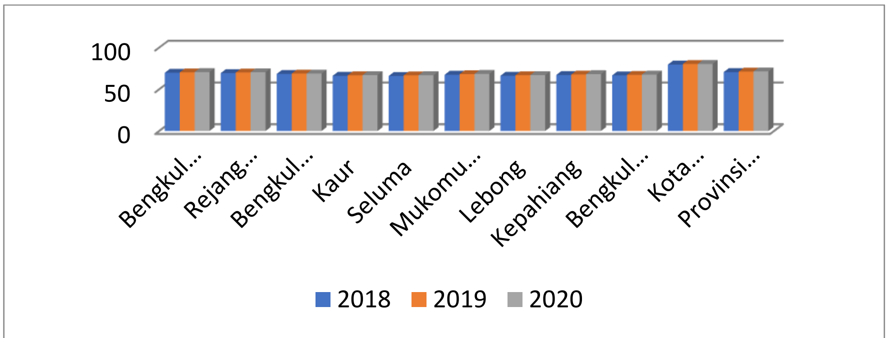

Figure 1. Human Development Index
Source: Central Statistics Agency (BPS)

Judging from Figure 1. The Human Development Index for Bengkulu Province is in the high category with an average of 70 percent, the highest HDI in 2020 was in Bengkulu City which reached 80.36 percent, while the lowest HDI was in Seluma Regency at 66.89 percent.

By increasing the HDI, it is hoped that it will be able to improve prosperity and free people from the trap of poverty (Diba *et all,* 2018). Poverty is always related to meeting basic food and non-food needs based on expenditure (Zuhdiyati , 2017) so that the big challenge faced by many countries, especially in developing countries like Indonesia, is poverty (Leonita & Sari, 2019). The problem of poverty is a very complex problem that is influenced by many factors, such as income level, health and unemployment. Poverty is not only limited to economic failure but also failure to fulfill the basic rights of life (Martini & Woyanti , 2022).

There are still gaps in the plan to achieve the poverty reduction program because it is more oriented towards sectoral programs so there is a need for a strategy to overcome the vicious circle of poverty problem that is integrated and synergized so that the problem of poverty can be overcome (Aziz *et al,* 2016).

How high and low the level of poverty is in a region will of course greatly influence many aspects of that region, the problems that exist in Indonesia such as the level of poverty, so this must be immediately addressed by the government in order to reduce poverty (Fahmi *et all.* 2018 *)* . Based on a previous study conducted by Dewi entitled "The influence of poverty and economic growth on the human development index in Riau Province", it shows that poverty has a significant and influential effect on the Human Development Index in Riau Province, and a study conducted by Ningrum *et all,* 2020. It also shows the same thing that the poverty variable has a significant influence on the Human Development Index in Indonesia.

Apart from that, one of the indicators to see the success of development is to look at the gross regional domestic product (GRDP). The impact resulting from equitable development is accompanied by an increase in income from the goods or services production sector. (Diba *et al.* 2018). An increase in GRDP is an indication of increasing economic growth in a region, therefore, the ability of the community to fulfill their needs is also influenced by GRDP (Zainudin , 2015). As a measure of the added value of a region, GRDP can also be used as a benchmark for prosperity in a region. Access to education, health and a decent standard of living will be more easily accessible in prosperous areas. Regions that have a high level of welfare will strive to improve quality in all aspects of needs, especially basic needs, based on this, the higher the GRDP value will make the HDI value higher (Sania *et all ,* 2021).

Based on the results of a previous study conducted by Trisno *et all* , (2022). Shows that poverty has a negative and significant influence on HDI in South Sumatra Province and a study conducted by Martini, (2022) also shows the results that GRDP has a significant and significant influence on poverty, a study conducted by Prasetyoningrum (2018). Shows that there is a negative and significant influence of poverty on HDI in districts/cities in Papua Province. Based on this problem, the author will conduct research in Bengkulu province which aims to find out whether poverty has a significant influence on the Human Development Index in Bengkulu Province and to find out whether Gross Regional Domestic Income has an influence on HDI in Bengkulu Province in 2018-2020.

2. Literature Review

2.1 Human Development Index (HDI)

The Human Development Index (HDI) is a single composite indicator that can measure human development, although it cannot measure all dimensions of development, but can measure three main dimensions of human development which are considered capable of reflecting the basic capabilities of the population. The three basic abilities are a long and healthy life , education , and access to resources as a way to achieve a more decent life (Setiawan & Hakim, 2013). To see categories of high or low HDI, there are 4 categories, namely low less than 60, medium 60-69, high 70-79, and very high more than 80 (Herdiansyah & Kurniati, 2020).

As one of the development parameters in an area that is negatively correlated with poverty. The higher the HDI number indicates that the quality of human life is also getting better (Alhudhori, 2017). Development is an effort by the government to build a prosperous society. The meaning of development itself is as an activity carried out by a country to improve the quality of life of its people . (Muhamad & Rahmi, 2023).

Humans are the true wealth of a nation, therefore physical and non-physical human development needs to be carried out (utami, 2020) so that the Human Development Index becomes a vital factor for success in efforts to improve the quality of human life, through government spending it can increase the number of people who able to meet the primary needs of the health, education, food and nutrition sectors (Setiawan & Ariani, 2022).

2.2 Poverty

Poverty is known in Indonesia as a problem that has occurred since the beginning of the 20th century during the Dutch Colonial Government. Therefore, we must consider poverty carefully. So that the problem of poverty can be overcome (Syahri & Gustiara, 2020) . Poverty is a complex phenomenon, so it cannot be seen from one absolute perspective because the conditions and problems of poverty in Indonesia are very diverse due to the large area and many cultures that exist in Indonesia. Poverty problems are reflected in social indicators . Poverty is also seen as a deprivation of the poor people's rights, therefore it is necessary to emphasize the State's obligation to respect, protect and fulfill the basic rights of the poor (Fahmi, 2021). In essence, poverty is a situation of deprivation that occurs not because the poor want it (Papilaya, 2020).

A situation of deprivation faced by individuals to live a normal life like the rest of society. Disadvantages faced by poor individuals are based on insufficient income to purchase basic necessities, level of education, acquisition of assets or assets that are not large enough to interfere with living normally. This situation makes it difficult for individuals to escape the vicious cycle of poverty (Gopal *et al ,* 2021).

The vicious cycle of poverty is a theory stated by Nurkse as a form of oppression that keeps poor countries in a poor state (Rohima *et al* ., 2013). So we need a way to alleviate the poverty that occurs according to the interpretation of poverty (Jamil & Hadijah, 2014). The Poverty Line is a representation of the rupiah needed or the price paid so that the population can live a minimum decent life which includes meeting the minimum needs for food (equivalent to 2,100 kilocalories per capita per day) and essential non-food (BPS , 2020)

2.3 Gross Regional Domestic Product (GRDP)

GRDP or Gross Regional Domestic Product describes the overall market value of all goods and services produced at the regional and provincial levels within one year. Gross regional domestic product can be divided into 2, namely GRDP based on constant prices and GRDP based on current prices. In this research, GRDP is used at constant prices. GRDP is a permanent price base that describes the total value of goods and services performed and calculated originating from the base year (Pattikawa & Zai , 2021).

One very important indicator for knowing the economic conditions in a region in a certain period is shown by Gross Regional Domestic Product (GRDP) data. This GRDP value will see the extent of the ability to manage or utilize existing resources in the region. Apart from that, the overall economic condition in each region can also be seen from how much regional spending is in the region (Rahman & Chamelia, 2015). Based on previous studies conducted by Sania *et all (* 2021). Showing that GRDP has a significant and influential effect on the Human Development Index, the results of this research are also in line with what was stated by Kuznet who stated that one of the characteristics of modern economic growth is high per capita output.

3. Research Methods

The scope of this research is Bengkulu Province which consists of 10 districts/cities. This study uses data for the last three (3) years, namely from 2018-2020. The data used in this research is secondary data sourced from reports from the Central Statistics Agency (BPS). According to Sugiyono (2016), secondary data are data sources that do not directly provide data to data collectors, for example through other people or through documents and which are secondary data sources in the form of books, journals relating to ongoing research. The data used is poverty data, GRDP and human development index in Bengkulu Province. The type of data used is panel data, namely a combination of *time series data and cross section time series* data for the 2018-2020 period, while the *cross section data* is 10 city districts in Bengkulu province.

The method used is multiple linear regression . The data model used is panel data . The economic equation model is written as follows:

$$Y_{it} = \beta_{0it} + \beta_{1it} X_{1it} + \beta_{2it} X_{2it} + e_{it}$$

Information :
Y = HDI
X1= Poverty
X2 = P DRB
It: 10 districts/cities of Bengkulu Province, 2018-2020
e = Error Term.

The model interpretation technique uses CEM, FEM, and RE M and is selected through the best model test, namely the Chow test, Hausman test, and Lagrange Multiplier (LM). The Chow test was carried out to determine the appropriate regression method for panel data between FEM and CEM. To select a panel data regression model between FEM and SEM, the Hausman Test was carried out . Meanwhile, the LM test is used if the Chow test results show CEM and REM shows Hausman results. Apart from that , knowing the influence between variables is done using the T test . The T test is a statistical method used to determine whether there is a significant difference between the means of two groups. It is often used in comparative analyzes between two groups, for example, to compare the mean scores between a control and treatment group in an experiment (Smith & Jhonson , 2020). F test is a statistical test used to compare variances between two or more groups. This test is often used in analysis of variance (ANOVA) to determine whether there is a significant difference between the means of the groups (*Brits & Hill,* 2019) and the R-square test, the R-square test is one of the metrics used in statistics to measures how well the regression model fits the observed data. The R-square value ranges from 0 to 1, where the closer to 1, the better the model is at explaining variations in the data (Aksu *et all ,* 2019).

The classic assumption test used is multicollinearity. According to Ghozali (2017) states that the multicollinearity test aims to test whether in the regression model there is a high or perfect correlation between independent variables and the heteroscedasticity test. According to Umar (2013), the heteroscedasticity test is carried out to find out whether in a regression model There is an inequality of variance from the residual of one observation to another observation. The classical assumption test was carried out to clarify the influence of the regression analysis results obtained.

4. Research Findings and Discussion

The results of model calculations that have been tested using the Eviews 12 program to determine the selected estimation model are shown in the following assumption test.

4.1 Multicollinearity test

One of the purposes of the multicollinearity test is to evaluate the relationship that exists between independent variables. If correlation occurs between independent variables, this indicates that there is a multicollinearity problem. The existence of multicollinearity can be carried out using a correlation test. The correlation matrix can be used to determine whether there is a relationship between independent variables or multicollinearity problems. If the correlation value is more than 0.80, it indicates multicollinearity (Soemantri, 2019).

Table 1. Multicollinearity Test Results

	POVERTY	**GRDP**
POVERTY	1,000000	0.198690
GRDP	-0.198690	1,000000

Source: processed data (Eviews 12)

The correlation matrix in Table 1 shows that the correlation value is no more than 0.80, which indicates that there is no multicollinearity.

4.2 Heteroscedasticity Test

The heteroscedasticity test is used to evaluate differences in variance from the residuals of all observations in the regression model. Homoscedasticity occurs when the residual variances of two events are the same, while heteroscedasticity occurs when the residual variances of two events are different. The Glesjer test is used to test heteroscedasticity. When the number of chi-square probabilities exceeds α 0.05, model determination is determined (Soemantri, 2019).

Table 2. Mark Probability Test Glesjer

Variables	Prob
C	0.3833
Poverty	0.0144
GRDP	0.4720

Source: processed data (Eviews 12)

The results of the analysis are shown in table 1. The coefficient of determination or R-square is 0.341219, which means that 34.12% of the variation in the Human Development Index (Y) is explained by the independent variables, namely Poverty (X1) and Economic Growth (X2), while the remaining 65.88% explained by other factors not included in this study. According to the results of data processing, table 1 shows that the Prob value is 0.003 < 0.05, so this shows that the independent variables poverty (X1) and Economic Growth (X2) influence the Human Development Index (Y).

4.3 Panel Data Regression Model

To see the impact of the independent variables, poverty, and GRDP as well as the dependent variable, the human development index, a regression equation is used. To make panel data regression analysis faster and more accurate, use the Eviews 12 program. The results are as follows.

Table 3 Panel data regression results

Variables	Coefficient
Poverty level	-0.0409** (0.0213)
Economic growth	-0.1262*** (0.0000)
HDI	70,143*** (0.0000)
R-Square	0.34
F-Statistics	6,992**
Total Observation	30

Description: Significance Level 1%(<0.001)***, 5%(<0.05)**,10%(0.1)*
Source: processed data (Eviews 12)

According to table 3 the regression equation is as follows: Yit = 70.14351 – 0.040981-0.126214

Based on the results of the analysis, it can be explained that the regression constant value of 70.14351 indicates that if poverty (X1) and GRDP (X2) are zero, then the level of the human development index will be the same as the constant value, namely 70.14351%. And the regression coefficient value of the poverty variable is negative is -0.040981 , which shows that if poverty decreases by 1%, the human development index will increase by 0.040981 %, provided that other variables are considered constant or fixed. And the negative regression coefficient value of the GRDP variable is -0.126214 , which shows that if GRDP falls by 1%, then the human development index will increase by 0.126214 %, this shows that the economic growth described by GRDP is variably influenced by other factors so that there is a relationship negative correlation with HDI because in the year of this study the COVID-19 pandemic occurred.

The results of this research are in line with the results of research conducted by Trisno *et al,* 2022 which stated that The poverty variable has a negative and significant influence on the human development index, and is in line with research conducted by Nugraeni & Aji, 2021 entitled the influence of poverty, economic growth and ratios.dependence on development indices man in Java east. The results of this research conclude that there is influence negative between Poverty And Ratio Dependency toIndex Development Man in Province Java East . However, this research shows that GRDP has a negative effect on the Human Development

Index , which is influenced by other factors which cause the correlation between GRDP and HDI to be negative because in the year of this research the COVID-19 pandemic occurred.

5. Conclusion

Based on the study that has been carried out, it can be concluded that the research results show that poverty and economic growth factors have a negative and significant impact on the human development index in Bengkulu Province. This indicates that there is the influence of other factors that cause negative correlation between economic growth and the Human Development Index of Bengkulu province in the year of research. It is hoped that this research can provide an overview for policy makers.

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THE ROLE OF RETAIL INVESTORS, CULTURAL DİSTANCES, AND INCOME INEQUALİTY İN SOUTH EAST ASİA STOCK MARKET DEVELOPMENT

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ABSTRACT

World Federations of Exchange stressing the important role of retail investor. Exchanges need to focus on financial literacy as well as quality and quantity of retail participation in their markets. Development of technology and deregulation of investment in stock market arising the phenomena of retail investors. The breakthrough of ASEAN Exchanges integration is the establishment of ASEAN Trading Link in 2012. Recently, three exchanges already connected to this system and the retail investors in Malaysia, Singapore and Thailand have wider access to investment selection across the three countries. This study aims to provide answers to the long-known debate of the retail investor roles in the stock market by showing the significant role of retail investors for the stock market development in developing countries. In addition, the importance of cultural differences and income level to the retail investors and the stock market in ASEAN needs to be established. Data availability, lack of previous study and measurement problem might be challenges that relevant to discuss in order to development of this study.
Keywords: *Type keywords, separated by commas, a minimum of three and maximum five keywords.*

1. Introduction

Refers to Cambridge dictionary, a public company is *"a business that is owned by many people who have bought shares in it"*. The owners of a public company are the individual with excess money than willing to gain prosperity from the sharing wealth of public company. Company with goodwill and business model (including sustainability) would essentially list their shares in the stock market in order to distribute their wealth from private to public. Unfortunately, not all of the public company has a goodwill and business model. Furthermore, equal distribution of wealth not achieved and public trust to stock market become questionable.

Surprisingly, World Federations of Exchange (2017) stressing the important role of retail investor (known also as household or individual). Exchanges that willing to increase the number of retail investors advised to decrease costs-to-trade and promoting financial literacy of investors in order to create proper investment decisions in the stock market. The regulators also need to concern to perceived value and experience of retail investors. Furthermore, exchanges must focus on quality and quantity of retail participation in their markets.

Since the end of the 1980s, South East Asian countries have rapidly developed their stock market by reducing government intervention and boost the role of retail investors to invest in the stock market (Pradhan et al., 2014). To foster the better investment climate in South East Asia, countries in the region agreed to establish The ASEAN Capital Markets Forum (ACMF) in 2004 and following by collaborations of seven exchanges from six countries called ASEAN Exchanges. Establishment of ACMF and ASEAN exchanges align with the vision of ASEAN Economic Community to create *"highly integrated and cohesive; competitive, innovative and* *dynamic; with enhanced connectivity and sectoral cooperation; and a more resilient, inclusive, and people- oriented, people-centered community, integrated with the global economy"* (ASEAN Capital Markets Forum, 2016).

In the beginning, the ACMF implement cross-recognition of Qualifications on Education and Experience of Market Professionals since 2007 or known as investor certification standard. Then, the breakthrough of ASEAN Exchanges integration is the establishment of ASEAN Trading Link in 2012. Recently, three exchanges already connected to this system and the retail investors in Malaysia, Singapore and Thailand have wider access to investment selection across the three countries (ASEAN Exchanges, 2018). As for January 2018, ASEAN Exchanges has over 3,000 listed companies on its Exchanges and doubling market capitalization since the establishment of ASEAN Trading link to almost US$3 trillion, this amount is close to London Stock Exchange (US$3.6 trillion) but still have huge gap compare to New York Stock Exchange (US$18 trillion).

In January 2018, U.S retail investors derive the financial market hit new highs (Bloomberg, 2018). That is the sign that the powers of retail investors exist and stock market needs to take the concern to them. Ho (2010) in their study shows that overconfident of individual investors tends to show a higher degree of the disposition effect, sell off of winners but keep losers.

Development of technology and deregulation of investment in stock market arising the phenomena of retail investors or known also as household investors or individual investor. Interesting fact happens in one of developing the country in South East Asia, young investors (below 41 years old) counted more than half of the total investors in Indonesia Stock Exchange (Jakartapost, 2018). This phenomenon might happen around the world, but the effect may mix especially since developing countries differences in term of demographic, cultural, technology adoption and income level. Furthermore, the role of retail investors becomes questionable in developing countries.

Practitioners and scholarly has long known debate of the retail investor's roles in the stock market. Retail investors represent the high possibly investor of generating dumb money compare to the institution that builds the construct of quality of retail investors. Moreover, the importance to boost retail investors known as the stock market participation. Then, the stock market as well-regulated investment platform in the economic system becoming the representative of liberalization of economics, sources of innovation-driven and wealth generation for society. Researcher conclude this section by three research questions of this study

a. How quality and quantity of retail investors influence the stock market development in ASEAN Exchanges?
b. How cultural distances influence the stock market development in ASEAN Exchanges?
c. How income inequality relates to stock market development in ASEAN Exchanges?

2. Literature Review & Hypothesis

Stock market development is a construct that shows the improvements based on quantity, quality, and efficiency of the stock market (Levine & Zervos, 1996). Stock market development builds up based on complex proxies related to the market activity, market capacity, information asymmetry, corporate governance, regulation of the market and behavioral factors (Pradhan, 2013). This study trying to show the importance of retail investors, income inequality and culture distance for stock market development. Consequently, this study constructs three main hypotheses to show the relationship between those variables and the research framework shown in Figure 1.

Lack of literacy prevents retail investors from stock market participating (Van Rooij, Lusardi, & Alessie, 2011). Low level of stock participation negatively impacts to SMD. Moreover, retail investor move markets as the direction of their trades in short horizon, besides over long horizon move the only price of small stocks (Barber, Odean, & Zhu, 2008). Therefore, the first hypothesis stated as follow:

H1a. The impact of financial literacy on stock market development is mediated by stock market participation.
H1b. Stock market participation has the positive and significant effect to the stock market development

Increasing the level of uncertainty avoidance has a negative effect on stock market development (de Jong and Semenov, 2002). On the other hand, power distance level has a positive effect on trade volatility (Pirouz and Graham, 2010). In addition, Reuter (2011) in the meta- analysis titled "A Survey of Culture and Finance" shows the role of investors in stock market functioning (included stock market development) affected significantly by the differences of culture. Therefore, the second hypothesis stated as follow:

H2a. Power Distance has the positive and significant effect on Stock Market Development
H2b. Uncertainty avoidance has the negative and significant effect on Stock Market Development

Income inequality is beneficial for transitional growth in poor countries but it is harmful to high-income economies (Brueckner, & Lederman, 2017). Several macroeconomics indicators are insignificant to financial literacy differences for countries (Klapper, Lusardi, & Van Oudheusden, 2015). Macroeconomic volatility does not significantly influence stock market development as well (Garcia & Liu, 1999). On the other hand, stock market reform and development have different result related to the income of countries (Durham, 2001). Then, level of income inequality believes become significant factors to moderate the relationship of stock market participation and SMD in this study. Therefore, the third hypothesis stated as follow

H3. The effect of stock market participation on the likelihood of stock market development becomes stronger as a country has low-income inequality

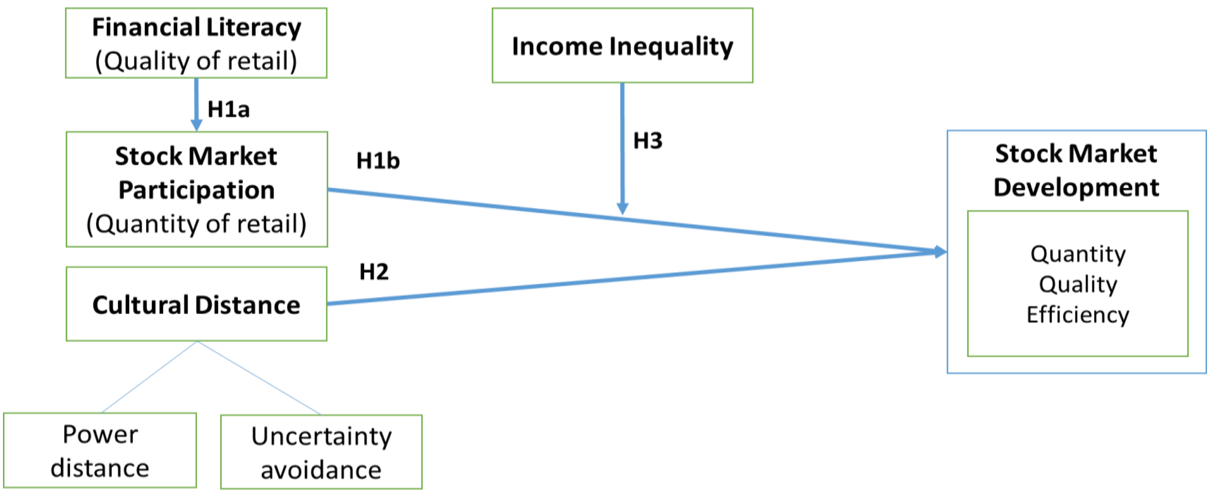

Figure 1. Research Framework

3. Methodology

This study conducts data collection process from secondary sources. The dataset comes from reliable sources, such as World Development Indicators (World Bank), World Exchange Federations Annual Statistic Guide, S&P Global Financial Literacy Survey, Hofstede's cultural dimension and The World Factbook. Researcher plan to make a panel data from 2012 – 2016. Stock Market Development would be dependent variable in this study. It will be measured based on four commonly used measures of stock market development, (1) market capitalization (MAC), (2) traded stocks (TRA), (3) turnover ratio (TUR), and (4) the number of listed companies (NLC). Quality of Retail Investors Financial literacy Index of Country. The role of the number of retail investors reflects by investor participation in the stock market. Stock market participation.

This study aims to become answers the long-known debate of the retail investor roles in the stock market by shows the significant role of retail investors for the stock market development in developing countries. In addition, the importance of cultural differences and income level to the retail investors and the stock market in ASEAN need to established. To conclude, some possible practical recommendation to regulatory of ASEAN Exchanges related to the importance of financial literacy for retail investors, give more attention to retail investors and establish policy that fulfill their interests and proactively protect retail investors from *"dumb"* firms in stock market (i.e: abandon corporate action that has bad effect to retail investors or Initiate the establishment of Securities Investor Association) are relevant to considers.

Table 1. Example of Data Available

Countries	Financial Literacy	Retail Investors	Market Cap. (USD mill.)	Listed companies	GDP/Capita (in USD)	Gini Index	Power Distance	Uncertainty avoidance
FBM KLCI (Malaysia)	36	1,849,048	382,976.7	902	26,623.3	46.2	104	36
SET (Thailand)	27	1,850,890	348,798.0	639	16,225.1	44.5	64	64
STI (Singapore)	59	1,682,100	639,955.9	769	86,139.1	45.8	74	8
[redacted]								
HNXi (Vietnam)	24	1,351,316	51,876.7	307	5,915.2	37.6	70	30
JCI (Indonesia)	32	526,027	353,271.0	521	11,040.2	36.8	78	48
PSEi (Philippines)	25	746,595	238,819.9	265	7,320.5	44.4	94	44

Note: example of dataset in 2015

4. Result & Discussion (Preliminary)

There are some challenges that are relevant to discuss to develop this study. Firstly, it is related to the data availability and generalization of using the data. The financial literacy rate for adults became generalization of retail investors quality in this study as unavailability data of investor literacy. Unavailability of time series data of financial literacy and Hofstede cultural dimension. Some incomplete data from stock exchanges. Not all countries have Retail investor data with Single Investor Identity (SID) numbers that are exclusively for stock market investment. Some countries mix up the number of retail investors in the stock market and other investment related, for example, bondholders or mutual funds. Table 1 shows an example of data available for the year 2015.

The second finding is related to the previous study that highlights the relationship between retail investors and financial literacy in the stock market. Retail investors and financial literacy studies that use country-level data are uncommon. In addition, it is rarely found the previous study that discusses culture and finances extensively (especially stock market) since it becomes a focus for non-finance scholars (i.e: Charles H. J. Reuter is an International Business Professor; John L. Graham is a Marketing professor. In addition, Karolyi (2016) on the paper titled "The gravity of culture for finance" found that measures of cultural values available in finance still not explain very well or they mention it as "fragility" measurement of culture in finance field using the data that available today.

The third concern of the possible challenges of this study is the measurement (or proxy) and the role of variables. The construct of country-level retail investor quality is rarely found, the researcher uses a proxy of country-level financial literacy in this study. Although, financial literacy has not explicitly measured the investors. Culture distance is well known as measured in management and marketing research field, in finance field it possibly needs specific proxy besides Hofstede's cultural dimension or World Value Surveys database.

The role of some construct in this study possibly challenges in term of trade-off stands. For instance, the role of income inequality could be dependent variable since the ultimate goal of the public company is to distribute wealth. Besides, cultural distance role might be more interesting as moderating variables rather than independent variables in this study. In addition, control variables for retail investors related to today's phenomena are essential to established (for example average age of investors and technology literacy).

Table 2. Preliminary Result of Study

OLS Regression Results					
Dep. Variable:	Market_Cap_USD_mill		**R-squared:**		
Model:	OLS		Adj. R-squared:	**0.987**	
Method:	Least Squares		**F-statistic:**	0.935	
Prob (F-statistic):	**0.0512**		Log-Likelihood:	**18.86**	
				-68.583	
	coef		std err		
const		1.33E+05	3.11E+05	t	P>|t|
Financial_Literacy		-2553.0614	1.22E+04	0.426	0.741
Retail_Investors		0.1143	0.103	-0.209	0.867
Gini_Index		-517.9192	3238.287	1.108	0.452
Power_Distance		-829.8014	3142.609	-0.16	0.904
Uncertainty_avoidance		2296.3043	4947.122	-0.264	0.839
				0.464	0.717
Omnibus:	0.742		Durbin-Watson:	1.938	
Prob(Omnibus):	0.69		Jarque-Bera (JB):	0.332	
Skew:	-0.438		Prob(JB):	0.847	
Kurtosis:	2.275		Cond. No.	3.38E+07	

The R-squared value of 0.987 suggests that 98.7% of the variability in market capitalization can be explained by the independent variables: Financial Literacy, Retail Investors, Gini Index, Power Distance, and Uncertainty Avoidance. This is a remarkably high value, indicating that the model has a very good fit to the data. In other words, the chosen predictors are collectively very effective at accounting for the changes in market capitalization across the different countries included in the analysis.

The F-statistic, which stands at 18.86, tests the overall significance of the regression model. This value indicates that the model is statistically significant and that at least one of the predictors is related to the dependent variable, market capitalization, in a meaningful way. The F-statistic compares the model with no predictors to the model with all the predictors, and a higher value suggests that the model with predictors is significantly better at explaining the variability in the dependent variable than a model without predictors.

The Prob (F-statistic) of 0.0512 is the p-value associated with the F-statistic. This value is slightly above the conventional threshold of 0.05 for statistical significance, suggesting that the model is on the borderline of being statistically significant at the 5% level. While the overall model fit is strong, the individual predictors do not show statistical significance (p-values > 0.05). This lack of significance for individual predictors could be attributed to the small sample size, which limits the statistical power and might mask the true effects of the predictors. To improve the model's robustness and reliability, increasing the sample size and exploring additional potential predictors or interactions between variables would be beneficial.

5. Conclusion

The regression analysis indicates that the model explains a substantial portion of the variability in market capitalization, as evidenced by the high R-squared value of 0.987. This suggests a strong overall fit, implying that the selected predictors—Financial Literacy, Retail Investors, Gini Index, Power Distance, and Uncertainty Avoidance—are collectively effective in explaining market capitalization differences. However, despite the strong overall fit, the individual predictors are not statistically significant, likely due to the limited sample size of six observations. To enhance the model's reliability, it would be advisable to collect more data and consider additional predictors or potential interactions among the variables.

For managers and policymakers, the high explanatory power of the model highlights the importance of understanding and addressing the various factors that influence market capitalization. Improving financial literacy and encouraging retail investor participation can be strategic goals to potentially enhance market performance. Furthermore, understanding the socio-economic factors such as income inequality (Gini Index) and cultural dimensions like power distance and uncertainty avoidance can provide deeper insights into market dynamics. Managers should focus on policies and initiatives that can positively influence these areas, such as financial education programs, investor-friendly regulations, and strategies to reduce income inequality and socio-economic disparities.

The role of some construct in this study possibly challenges in term of trade-off stands. For instance, the role of income inequality could be dependent variable since the ultimate goal of the public company is to distribute the wealth. Besides, cultural distance role might be more interesting as moderating variables rather than independent variables in this study. In addition, control variables for retail investor related to the today's phenomena are essential to established (for example average age of investors and technology literacy).

While the model demonstrates a high R-squared value, several limitations must be considered. The small sample size of only six observations limits the generalizability and statistical power of the findings. This small sample may lead to overfitting, where the model performs well on the existing data but poorly on new data. Additionally, the lack of statistically significant individual predictors suggests that the results should be interpreted with caution. There may also be other relevant variables not included in this analysis that could further explain variations in market capitalization. Future research should aim to incorporate a larger dataset and explore additional variables to provide a more comprehensive understanding of the factors influencing market capitalization.

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THE INFLUENCE OF SOCIAL MEDIA, RISK PERCEPTION, FINANCIAL LITERACY, AND RELIGIOSITY ON THE INVESTMENT INTEREST OF SANATA DHARMA STUDENTS IN THE BIBIT APPLICATION

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ABSTRACT
This study aims to investigate the influence of social media, risk perception, financial literacy, and religiosity on the investment interest of Sanata Dharma University students. A quantitative descriptive approach is employed in this research, with the population being Sanata Dharma University students in Yogyakarta aged 18-25 years using non- probability sampling techniques with a purposive sampling type. Data collection techniques were conducted using a Likert scale questionnaire (5 points). The results of this study are expected showed that the variables of Social Media, Risk Perception, Financial Literacy, and Religiosity can simultaneously affect the investment interest of Sanata Dharma University students in the Bibit application. It is hoped that stakeholders will utilize the factors that influence on investment interest in the Bibit application.
Keywords*: Social media, risk perception, financial literacy, religiosity, Bibit application*

1. Introduction

At this time, as we know that we have entered the digital age. The digital era has brought significant transformations in various aspects of life, including in terms of finances carried out on a daily basis. Various applications and digital platforms have emerged to help people manage their finances more easily and efficiently. One of the current technologies is an investment application that makes the investment process easier to do(*10 Aplikasi Investasi Terbaik, Cocok Untuk Investor Pemulaitle*, 2024). With this convenience, it encourages investment interest, especially among the younger generation such as students at Sanata Dharma. During the Covid-19 pandemic, the Indonesia Stock Exchange (IDX) revealed that young investors from millennials and generation Z dominatedthe number of investors in the capital market (*Alasan Milenial Dominasi Investor Baru Di Bursa Saham RI*, 2021).

Interest is a factor that involves various elements such as emotions, aspirations, education level, worries, or other tendencies that drive a person to make certain decisions (Firdhausa & Apriani, 2021). Students as the next generation of the nation have great potential to become smart and wise investors. In this era, they have wide access to information and education about investment that they can find on various online platforms, one of which is social media. Social media can be a valuable source of information and education for the younger generation (Mahyuni, 2022). Social media can also help students to connect with the investment community so that students can learn by exchangingexperiences from other investors. But on the other hand, social media can also lead to wrongperceptions about investment. Content that displays fantastic investment returns in a short time can actually keep students away from wise investments (Sosial et al., 2024). In addition, this will result in a high risk perception for students who do not have a good understanding of investment, so they tend to be wary of potential losses, so they are reluctant to start investing. Risk is a condition that investors generally fear. When investing, one of the things to consider is risk (Wulandari et al., 2017).

Low financial literacy is also an inhibiting factor in students' investment interest. Although the enthusiasm of the public in investing is increasing, the financial literacy of young investors needs to be improved to ensure investment security (Debora Laksmi Indraswari, 2022). Lack of basic knowledge and skills about financial management can make students confused in choosing investment products that suit their risk profile. The ability to manage finances or financial literacy effectively by potential investors is important because this will help them make smart financial decisions. In 2022, the Financial Services Authority survey (OJK) The national financial literacy index has reached 49.68% compared to the previous year. With this, it is expected that the more literate financial literacy, the interest in investing will also increase.

In addition, Indonesia is a country that has a majority Muslim population, so it has a fairly high level of religiosity. This religiosity not only affects the spiritual aspect, but also on other aspects of life, including in financial terms. Religiosity is also one of the inhibiting factors of student investment interest. Religiosity can also influence individuals in choosing investment products and companies in which they will invest . Many religions, especially those in Indonesia, have ethical and moral principles that prohibit their adherents from engaging in harmful activities. In this case, it makes religious individuals more selective in choosing investment products that are in accordance with the values of their religion.

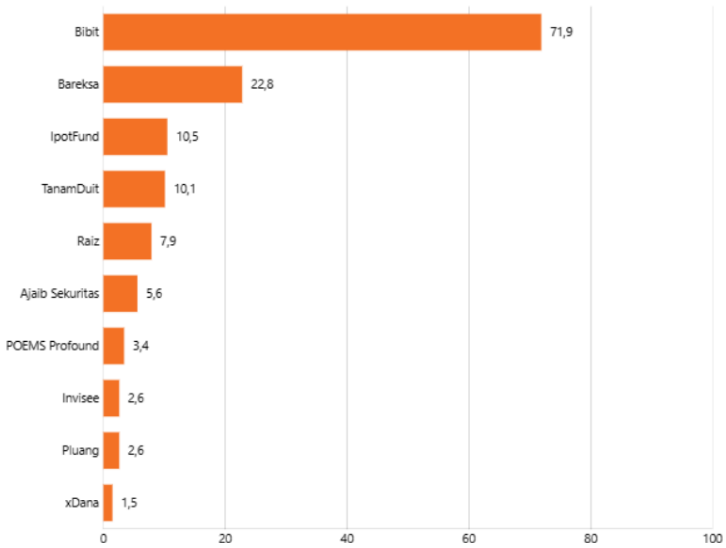

Figure 1. Investment application data by number of users (Pahlevi, 2022)

By knowing the barriers to investment interest that arise, there is a seed application that can help bridge the financial literacy gap and increase interest in investing among students. Based on figure 1,it can also be seen that Bibit is an application that has the most users compared to other investment applications. Bibit is a robo-advisor platform that allows students to invest in mutual funds easily and affordably (OJK, 2017). In the Bibit application, there are also financial education features that can help students improve their financial literacy. In addition, Bibit also provides a simple registration process and investment transactions and can be done via smartphones according to the digital lifestyleof students in this era.

In Ladamay et al., 2021 research found that social media and religiosity had a significant effect on investment interest. Meanwhile, financial literacy and risk perception do not significantly affect investment interest. In Apriliani & Murtanto, 2023 research found that social media has a significant influence on investment interest. Meanwhile, financial literacy and risk perception did not have a significant effect on investment interest. In Isnaini & Rikumahu, 2023 research It found that financial literacy had a significant effect on investment interest and risk perception had no significant effect on investment interest.

This study aims to examine in dept the influence of Social Media, Risk Perception, Financial Literacy, and Religiosity on the investment interest of Sanata Dharma University students in the Bibit application. Testing the hypothesis of this study using regression analysis. Discussion of the research, its practical implications, and further research suggestions are explained later.

Based on those researches, it was found that the results varied between factors. Therefore, there is aresearch question as follows:

Is there an interaction between social media, risk perception, financial literacy, and religiosity in influencing the investment interest of Sanata Dharma students in the Bibit application?

a. Does Social Media influence Sanata Dharma Students to invest in Bibit App?
b. Does Risk Perception affect Sanata Dharma students towards investment in the Bibit application?
c. Does Financial Literacy affect Sanata Dharma students' investment interest in the Bibitapplication?
d. Does religiosity affect Sanata Dharma students' investment interest in the Bibit application?

2. Literature Review

2.1.Social Media

Online media and web-based technologies that can be used to support social interaction between users, which can turn communication into interactive dialogue are social media (Ladamay et al., 2021). Social media technology includes the intensity of social media, the use of social media and the effectiveness of the use of social media in supporting investment activities (Isticharoh & Kardoyo, 2020).

2.2.Risk Perception

Risk perception in investing will arise as a result of uncertainty about the results received. Each investor has a different perception depending on the level of confidence and ability to manage risk (Suaputra et al., 2021). Investment risk is a form of potential deviation of investor expectations of assets or wealth which is fearful can be measured from the maturity of information so that it experiences losses from indicators such as performance, finance, time, psychological, social to privacy (Isnaini & Rikumahu, 2023).

2.3.Financial Literacy

According to the Financial Services Authority (OJK) (2017), Financial literacy includes the knowledge, abilities, and beliefs that influence a person's attitudes and behaviors to make better decisions and manage finances to succeed in well-being. Financial Literacy has an interest in theability of individuals to manage financial aspects (Sukresna et al., 2020). Financial literacy includesunderstanding, skills, and beliefs that influence their attitudes and actions in an effort to expand financial management and decision-making to achieve prosperity (Apriliani & Murtanto, 2023).

2.4.Investment Interest

Investment interest is a strong interest in investing with the aim of generating a surplus. (Apriliani & Murtanto, 2023)

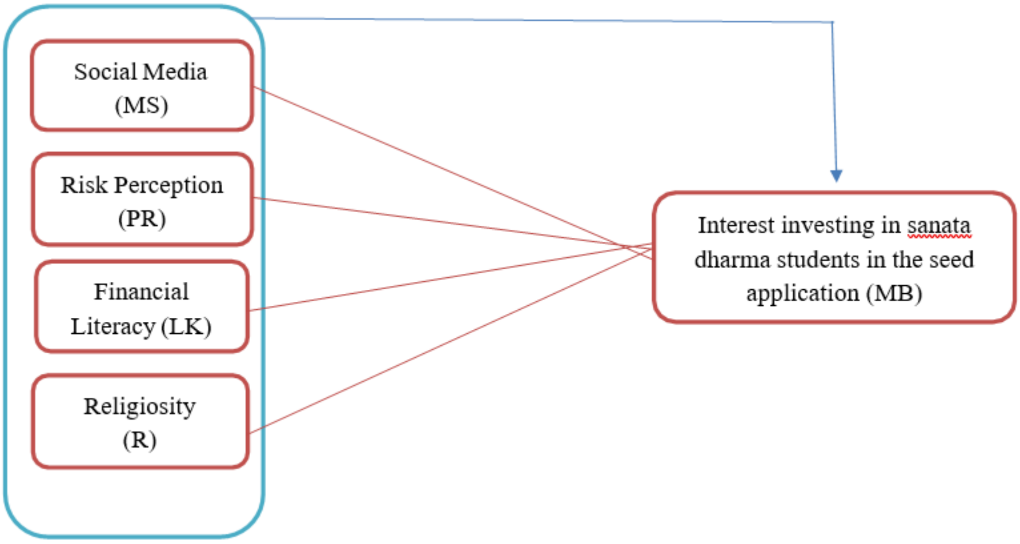

Figure 2. below illustrates the research model

2.5.The Effect of Social Media on Investment Interest of Sanata Dharma University Students

Social media, such as Instagram, Youtube, and Tiktok, are popular financial education platforms for students, educational content from financial influencers, investment communities, and trustedfinancial education platforms can increase students' understanding of investment, one of which is theBibit application. This can spark their curiosity and interest to try investing in the Bibit application.Curiosity is also supported again by the interaction between information and education, testimony,and experience, as well as easy access to investment. With the existence of social media, theinformation received by students is one of the considerations in their decision making to invest in theseed application.

In previous research conducted by Ladamay (2021), Isticharoh (2020), and Apriliani (2023) it was found that social media has a positive effect on investment interest. Based on the description above, the formulation of the hypothesis from social media is as follows:
H1: Social Media has an influence in decision making on the investment interest of Sanata Dharma students in the Bibit application.

2.6.The Effect of Risk Perception on the Investment Interest of Sanata Dharma University Students

Students with a high risk perception tend to be more cautious and hesitant to take risks in investing. They may prefer safer and less risky investment instruments, such as deposits, bonds, or money markets even though the potential returns are lower than investments. Meanwhile, students with low risk perception tend to be more courageous in taking risks in investing. They may be tempted by investment instruments that offer high profit potential, despite higher risk. Students whopay attention to risk perception in investing will be careful to make their decisions by considering several things that may be their reasons for investing.

In a previous study conducted by Ladamay (2021), it was found that financial perception has a positive effect on investment interest. Meanwhile, research conducted by Apriliani (2023), Suaputra(2021), and Maulidia (2023) resulted in that risk perception negatively affects investment interest. Based on the description above, the formulation of the hypothesis of risk perception is as follows:

H2: Risk perception has no effect in decision making on the investment interest of Sanata Dharma students in the Bibit application.

2.7.The Influence of Financial Literacy on the Investment Interest of Sanata Dharma University Students

Students with a high level of financial literacy have a better knowledge and understanding of investing. They are easier to understand information and education about investment, and are better able to evaluate risk and return on investment. Meanwhile, students with low levels of financial literacy may have limited knowledge and understanding of investing. Therefore, there is a doubt to invest because of fear of experiencing losses. With financial literacy, students can find out the level or what needs to be prepared in investing. In financial management, students can divide each specialpercentage of their finances to invest. Because it has knowledge in financial management, investment, and can determine precisely between needs and wants.

In a previous study conducted by Maulidia (2023), it was found that financial literacy has a positive effect on investment interest. Meanwhile, research conducted by Ladamay (2021) and Apriliani (2023) resulted in that financial literacy negatively affects investment interest. Based on the description above, the formulation of the hypothesis of financial literacy is as follows:

H3: Financial literacy does not affect decision making on the investment interest of Sanata Dharma students in the Bibit application.

2.8.The Influence of Religiosity on the Investment Interest of Sanata Dharma University Students

Some religions have rules and principles governing investment. Those rules and principles can influence the choice of investment instruments and investment strategies chosen by individuals. Every religion teaches teachings about patience, discipline, and long-term planning that are essentialfor the future. These teachings such as alms or zakat, managing talents to encourage a sense of responsibility and wisdom in managing existing skills also include investment. Religiosity has several positive impacts in determining investment such as strengthening moral values, increasing motivation, and making responsible decisions.

In a previous study conducted by Ladamay (2021), it was found that religiosity has a positive effect on investment interest. Based on the description above, the formulation of the hypothesis of religiosity is as follows:

H4: Religiosity has an influence in decision making on the investment interest of Sanata Dharmastudents in the Bibit application.

2.9.The interaction between social media, risk perception, financial literacy, and religiosity has their own influence on students' investment interests.

These four variables have a fairly complex influence on students' investment interest. This interaction can help students better understand and have more knowledge about investment and provide more effective education and promotion. Like social media which is a source of information that has a fairly high influence, risk perception which is knowledge of risk in investment makes students more critical in making decisions to invest, financial literacy about financial management carried out by students can help them in determining financial management to invest, and religiosity is a celebration that they believe before investing. These things have a relationship with one another, for students in making decisions.

In a previous study conducted by Ladamay (2021), it was found that social media, risk perception, financial literacy, and religiosity simultaneously had a significant effect on investment interest. Based on the description above, the formulation of the hypothesis of the four variables is asfollows:
H5: There is an interaction between social media, risk perception, financial literacy and religiosity in influencing the investment interest of Sanata Dharma students in the Bibit application.

3. Research Methodology

The research method to be used is a type of quantitative method using research instruments, thendata analysis is quantitative, statistical, inferential with the aim of sample data and the results applied to the population (Uma Sekaran and Roger Bougie, 1967). The population used in this study was Sanata Dharma University students in Yogyakarta aged 18-25 years and used social media.

4. Research Findings and DiscussionDescriptive Statistical Analysis

Class range table
Table 1. Tablrange of classes per scaleAnalisis deskriptif variabel Minat Berinvestasi (Y)

Scale	Class	MB	MS	PR	LK	
1	1 - 1,8	Very Disinterest	Very Not Good	Very Not Good	Very Not Good	Very Not Good
2	1,9 – 2,6	No Disinterest	Bad	Bad	Bad	Bad
3	2,7 – 3,5	Netral	Netral	Netral	Netral	Netral
4	3,6 – 4,2	Interest	Good	Good	Good	Good
5	4,3 - 5	Very Interest	Very Good	Very Good	Very Good	Very Good

Table 2. Results of descriptive analysis of MB variables (Investment Interest)

Item	Statement	Mean	Information
1	I have a curiosity to know more about the different types of investments and how they work.	4.17	Interest
2	I actively seek information and learn about investing.	3.71	Interest
3	I have basic skills in managing finances and analyzing investment opportunities.	3.76	Interest
4	I am motivated to invest to achieve my financial goals.	4.17	Interest
5	I attended education about investing to improve my knowledge and understanding.	3.79	Interest

The lowest average score is Y.2 which is found in the “Intensity” indicator which reads “I actively seek information and learn about investing.” With the majority of answers being a score 4 or agreeing with 47.75% with an average of 3.71. The highest average value in.

Y.1 is found in the “Curiosity” indicator which reads “I have a curiosity to know more aboutthe different types of investments and how they work” with an average value of 4.17 and the majority of respondents answers stated agree or score 4 was 52.25%. This explains that Sanata Dharma University students agree that before starting to invest they have more curiosity about the types and ways of starting investments.

Analisis deskriptif variabel Media Sosial (X1)
Table 3. Results of descriptive analysis of MS variables (Social Media)

Item	Pernyataan	Mean	Keterangan
1	Saya Mengikuti konten edukasi dan informasi tentang investasi di media sosial	3.70	baik
2	Saya memafaatkan media sosial untuk mendapatkan informasi terbaru tentang peluang investasi.	3.98	Baik
3	Saya aktif menggunakan media sosial untuk mencari informasi dan berinteraksi tentang investasi.	3.64	Baik
4	Saya menggunakan media sosial untuk bertukar informasi dan pengalaman tentang investasi dalam perkembangan investasi.	4.60	Baik

The lowest average score with a value of 3.64 is found in statement X1.3 contained in the indicator "intensity" reads "I actively use social media to find information and interact about investment" with the majority of answers found in a score of 4 or agree as much as 41.44%. The highest average score is found in statement X1.4 contained in the indicator "participation" reads "I use social media to exchange information and experience about investment in investment development". With the majority of answers found in a score of 4 or affirmative as much as 45.95%. It explained that Sanata Dharma University students agreed that they used social media to exchange information and experiences about investing in their development.

Analisis deskriptif variabel Persepsi Risiko (X2)
Table 4. Results of descriptive analysis of PR (Risk Perception) variables

Item	Statement	Mean	Information
1	I understand the risk of default in investments and take steps to mitigate those risks.	3.83	Good
2	I understand the difference between expected retrun and actual retrun in investment and consider it in decision making.	3.59	Good
3	I understand the liquidity risk in investing and choose the investment instrument that suits my needs.	3.60	Good
4	I understand the relationship between risk and reward levels in investments	3.77	Good

	and choose investments that fit my risk profile.		

The lowest average value with a value of 3.59 is found in statement X2.2 contained in the indicator "Expeted retrun and actual return" which reads "I understand the difference between expected retrun and actual retrun in investment and consider it in decision making". With the majority of answers found in a score of 4 or affirmative as much as 46.85%. The highest average value is found in statement X2.1 contained in the indicator "Default risk" reads "I understand the risk of default in investments and take steps to mitigate these risks". With the majority of answers there is a score of 4 or agree with 46.85%. This explains that Sanata Dharma University students understand the risk of default in investment and understand the steps to mitigate the risk.

Descriptive analysis of Financial Literacy variables (X3)
Table 5. Hasil analisis deskriptif variabel LK (Literasi Keuangan)

Item	Statement	Mean	Information
1	I have basic knowledge of financial concepts.	4.08	Good
2	I understand the basic components of personal finance, such as budgeting, saving, and debt.	4.13	Good
3	I have knowledge of different types of investments.	3.67	Good
4	I understand the economic and financial market fundamentals that affect the value of investments.	3.67	Good
5	I am able to make rational investment decisions based on adequate information and analysis.	3.76	Good
6	I am able to manage my income and expenses well to save and invest.	3.93	Good

The lowest average value with a value of 3.67 is found in statement X3.3 contained in the indicator "Investment Knowledge" reads "I have knowledge about various types of investments". With the majority of answers found in a score of 4 or 45.05% agree, and contained in statement X3.4 contained in the indicator "Fundamental knowledge" reads "I understand economic fundamentals and financial markets that affect investment value". With the majority of answers ona score of 4 or affirmative as much as 49.55%. The highest average value is found in statement X3.1 contained in the indicator "Knowledge of finance" reads "I have basic knowledge of financial concepts". With the majority of answers there is a score of 4 or agree with 62.16%. This explains that Sanata Dharma University students have basic knowledge of financial concepts.

Analisis deskriptif variabel Religiusitas (X4)
Table 6. Results of descriptive analysis of variable R (Religiosity)

Item	Statement	Mean	Information
1	My religious beliefs encourage me to invest ethically and responsibly.	3.73	Good

2	My spiritual power helps me to remain disciplined in investing to achieve my financial goals.	3.58	Good
3	My passion for religious values influenced my investment decisions.	3.59	Good
4	I use religious knowledge to understand financial principles that fit moral and ethical values.	3.60	Good
5	I apply my religious values in my investment practices.	3.54	Good

The lowest average score with a value of 3.54 is found in the X4.5 statement contained in the indicator "Implementation" which reads "I apply my religious values in my investment practice". With the majority of respondents' answers found in a score of 4 or 44.14% agree, the highest average score is found in statement X4.1 contained in the indicator "Belief" reads "My religious beliefs encourage me to invest ethically and responsibly". With the majority of respondents' answers there was a score of 4 or agreed with 48.65%. This explains that Sanata Dharma University students believe that religion encourages investing in an ethical and responsible way.

a. Reliability Test

Table 7. Hasil uji realibilitas

Cronbach's Alpha	N of Items
.760	25

The results of the validity test calculation show the Cronbach alpha value of all variables 0.760 which means all research variables are realistic because the nagka is above 0.6. In other words, all questions on the questionnaire have similar results even at different times and the data are accurate and can be used as a research measurement tool.

b. Classical Assumption Test

1) Normality Test

Table 8. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		111
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.77912145
Most Extreme Differences	Absolute	.073
	Positive	.073
	Negative	-.063
Test Statistic		.073
Asymp. Sig. (2-tailed)		.194[c]

Test distribution is Normal.
Calculated from data.
Lilliefors Significance Correction.

The normality test results showed the magnitude of Kolmogorov-smirnov Z was 0.073 and the significance was 0.194. The significance results of 0.194 < 0.05 can be concluded that the distribution of data in this study is normally distributed.

2) Multicollinearity Test

Table 9. Multicollinearity Test Results

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	5.462	1.083		5.043	.000		
	MS	.409	.090	.416	4.556	.000	.394	2.540
	PR	.123	.076	.142	1.627	.107	.434	2.303
	LK	.194	.070	.249	2.786	.006	.413	2.421
	R	.091	.057	.118	1.582	.117	.587	1.702

a. Dependent Variable: MB

The results of the multicollinearity test show the magnitude of the VIF with a total score ranging from 1,702 to 2,540 so that the number is less than 10 and the tolerance value with a total score ranges from 0.394 to 0.587 so that the number is less than 0.10 which shows that there is no multicollinearity.

3) Heteroscedasticity test

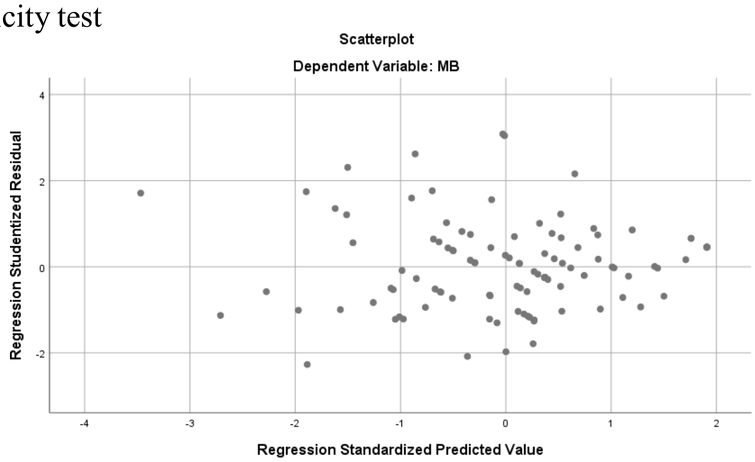

Figure 3. Heteroscedasticity test results

The results of the scatterplot above can be seen that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis, therefore it can be concluded that the data of this study does not occur heterokedasticity.

a. Multiple Linear Regression Test
   1) Coefficient of Determination Test

Table 10. Coefficient of Determination Test Results

Model Summary[b]

a. Predictors: (Constant), R, PR, LK, MS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.807[a]	.652	.638	1.812

b. Dependent Variable: MB

The value of R square is 0.652 or equal to 65.2%. This figure means that the variables Social Media (MS), Risk Perception (PR), Financial Literacy (LK) and Religiosity (R) simultaneously (together) affect the variable Investment Interest (MB) by 65.2%. While the rest (100%-65.2% = 37.5%) are influenced by other variables outside this regression equation or variables that are not studied.

Table 11. F Test Results (Simultaneous)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	651.297	4	162.824	49.570	.000[b]
	Residual	348.180	106	3.285		
	Total	999.477	110			

a. Dependent Variable: MB

b. Predictors: (Constant), R, PR, LK, MS

In table 6 get a sig result of 0.0 where the size is less than 0.5 which means there is a simultaneous influence (together) between the independent variables (MS, PR, LK, and R) on the dependent variable (MB)

2). Test T (Partial)

Table 12. Test Result T (Partial)

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5.462	1.083		5.043	.000
	MS	.409	.090	.416	4.556	.000
	PR	.123	.076	.142	1.627	.107
	LK	.194	.070	.249	2.786	.006
	R	.091	.057	.118	1.582	.117

a. Dependent Variable: MB

In table 7 get sig results on MS and LK variables of 0.000 to 0.006 where the results are below
0.05. While the PR and R variables are 0.107 to 0.117 where the results are above 0.05. Therefore, the variables that have a partial effect are the MS variable (Social Media) and the R variable (Religiosity), while the PR variable (Risk Perception) and the R variable (Religiosity) do not have a partial effect.

a. The influence of interaction between social media, risk perception, financial literacy, and religiosity in investment interest of Sanata Dharma University students on the Bibit application Results from the test f 0.000 < 0.005. It can be interpreted that all variables (MS, PR, LK, andR) have a significant influence on the investment interest of Sanata Dharma University studentssimultaneously. This is in accordance with the statement where this interaction can help students better understand and have more knowledge about investment and provide moreeffective education and promotion. Like social media which is a source of information that hasa fairly high influence, risk perception which is knowledge of risk in investment makes studentsmore critical in making decisions to invest, financial literacy about financial management carried out by students can help them in determining financial management to invest, and religiosity is a celebration that they believe before investing. These things have a relationship with one another, for students in making decisions. The results of this study are in line with research conducted by Ladamay (2021).

b. The influence of Social Media (MS) on the investment interest of Sanata Dharma University students in the Bibit application Results from t tests 0.000 < 0.005 and 4.556 > 1.982. It can be interpreted that this social media variable has a significant influence on the investment interest of Sanata Dharma University students partially. This is in accordance with the statement where the role of social media today is growing. Moreover, young people or students today use social media a lot in their daily lives. With the existence of social media, the information received by students is one of the considerations in their decision making to invest in the seed application. The results of this study are in line with research conducted by Ladamay (2021), Isticharoh (2020), and Apriliani (2023).
c. The Effect of Risk Perception (PR) on the Investment Interest of Sanata Dharma University Students in the Bibit application
   Results from t-tests 0.107 > 0.005 and 1.627 < 1.982. It can be interpreted that the risk perception variable does not have a significant influence on the investment interest of Sanata Dharma University students partially. In this study, risk perception has a relationship whichcan be interpreted that the lower the risk perception, the more investment interest Sanata Dharma University students will increase. The results of this study are in line with research conducted by Apriliani (2023), Suaputra (2021), and Maulidia (2023).
d. The Effect of Financial Literacy (LK) on the Investment Interest of Sanata Dharma University Students in the Bibit application
   Results from t-tests 0.006 < 0.005 and 2.786 > 1.982. It can be interpreted that financial literacy variables have a significant influence on the investment interest of Sanata Dharma Students partially. This is in accordance with the statement where students with a high level of financial literacy have better knowledge and understanding of investment. They are easier to understand information and education about investment, and are better able to evaluate riskand return on investment. Meanwhile, students with low levels of financial literacy may have limited knowledge and understanding of investing. The results of this study are in line with research conducted by Ladamay (2021).
e. The Influence of Religiosity (R) on the Investment Interest of Sanata Dharma University Students in the Bibit application
   Results from t-tests 0.117 > 0.005 and 1.582 < 1.982. It can be interpreted that the variable of Religiosity does not have a significant influence on the investment interest of Sanata Dharma Students partially. Religious behavior or the value of religiosity is not only manifested from a person's obligatory worship but also how the individual carries out his activities or activities in daily life. Religiosity itself varies between individuals and religions. Sanata Dharma University, where the majority of students are Christians, does not have standard rules in carrying out their religious practices. The results of this study are in line with research conducted by Ladamay (2021).

5. Consclucion

Based on the discussion and analysis that has been described, social media (MS) partially has a significant influence on the interest in investing in Sanata Dharma University Students in the Bibit application, Financial Literacy (LK) partially has a significant influence on the interest in investing in Sanata Dharma University Students in the Bibit application. Similarly, the results oftest f stated that Social Media (MS), Risk Perception (PR), Financial Literacy (LK), and Religiosity (R) simultaneously or together have a significant influence on investment interest in Sanata Dharma University Students in the Bibit application. In this study from the results of the coefficient of determination test produced a value of 65.2% and had a residual value of 37.5%, itcan be concluded that the independent variable in this study can explain the independentvariable of 65.2% and the resulting residual value can be interpreted that there are other factors that influence the interest in investing in Bibit in Sanata Dharma University Students outsidethis study

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THE MEDIATING EFFECT OF SERVICE QUALITY ON STORE LAYOUT EFFECT TOWARD REPURCHASE INTENTION AT INDOMARET

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ABSTRACT

A comprehensive exploration of Indomaret's triumph within the Indonesian minimarket retail sector remains absent from the literature, particularly from an operational standpoint. This investigation endeavors to fill this gap by presenting an empirical inquiry into the pivotal role of operational management, specifically focusing on store layout and service quality, in augmenting customer repurchase behavior at Indomaret. Employing quantitative methodologies, this study harnesses survey data procured through Google Forms, which will be subjected to analysis via Structural Equation Modeling-Partial Least Squares (SEM-PLS 3). The findings reveal a noteworthy positive correlation between store layout, service quality, and customer repurchases at Indomaret. Additionally, the study unveils the significant mediating function of service quality in the relationship between store layout and customer repurchases. Notably, the distinctive contribution of this research lies in its empirical validation of the mediating role of service quality in influencing the impact of store layout on customer repurchase behaviour at Indomaret. Furthermore, this study offers both theoretical insights and practical implications for the industry.
***Keywords**: Store layout, Service Quality, Repurchase Intention, Minimarket, Operations.*

1. Introduction

The prevailing societal consumption trend is witnessing a transition from conventional retail to contemporary formats (Suardyana & Tiarawati, 2022). Roy N. Mandey, chairman of APRINDO (Indonesian Retail Entrepreneurs Association), remarked that the burgeoning segment within retail comprises small modern outlets, notably minimarkets, which have managed to outpace their larger counterparts (Gayati, 2019). Among the array of minimarket brands in Indonesia, Indomaret stands out as the dominant force, as evidenced by Databooks' (2023) report indicating Indomaret's status as the leading retail company in terms of outlets, boasting 19,996 establishments by 2022. Notably, Indomaret's revenue trajectory has been on a steady rise, escalating from 5.03 billion Rupiah in 2018 to 7.61 billion Rupiah in 2022. Undoubtedly, the pivotal role of loyal clientele patronizing its outlets has been instrumental in Indomaret's success.

The strategic layout of a retail establishment plays a pivotal role in enhancing the shopping experience and fostering buyer comfort (Elbers, 2016). This comfort factor significantly influences repurchase intentions among shoppers (Wijaya & Nurcaya, 2017). The creation of a welcoming store ambiance commences with meticulous attention to store layout. Suardyana & Tiarawati's (2022) investigation underscores the pivotal role of Indomaret's store layout in stimulating repurchase intentions. Furthermore, Alaan (2016) emphasizes the substantial impact of service quality on repurchase intentions, as it ensures customers receive service exceeding their expectations, thereby fostering a sense of value. Both store layout and service quality emerge as key determinants in bolstering repurchase intentions, forming the crux of this study's inquiry within the Indomaret context.

Prior research by Rejeki and Hadi (2020) and Bataha et al. (2020) has affirmed the positive correlation between store layout and repurchase intentions. However, the insignificance of such an effect would be suboptimal. Hence, this study endeavors to examine the mediating role of service quality in the relationship between store layout and repurchase intentions. This novel framework stands as a distinctive feature of this research, as prior studies have not explored such mediation. The outcomes of this study hold potential utility for minimarket proprietors seeking to enhance repurchase intentions among their clientele.

2. Literature Review

2.1 Store Layout

The arrangement of a store, commonly known as store layout, constitutes a fundamental component of the in-store environment (Rohaeni & Damayanti, 2018). The design of the store layout aims not only to facilitate customer purchases but also to prolong their engagement within the retail space (Pambudi, 2019). Store layout encompasses the physical organization of operational areas or departments, translating various processes into tangible spatial configurations (Krajewski & Malhotra, 2022, p. 56). This includes aspects such as product display arrangements, allocation of shelf and floor space, departmental zoning, and wall adornments. Berman and Evans (2010) emphasize that *store layout* has six indicators that need to be considered when implementing it: *allocation of floor space*, *classification of store offerings*, *determination of a traffic flow pattern*, *determination of space needs*, *mapping out in store locations*, *arrangement of individual products*. Store layout is acknowledged for its potential to augment customer spending by streamlining the process of locating desired items (Elbers, 2016). A well-designed store layout has the capacity to stimulate customer purchase intentions (Hussain & Ali, 2015). Empirical studies have consistently demonstrated the positive impact of store layout on both customer purchase intentions and repurchase intentions (Tobroni, 2022; Rejeki & Hadi, 2020; Bataha et al., 2020).

2.2. Service Quality

Service quality is intricately linked to customer satisfaction (Putri & Suprapti, 2020). Kotler & Armstrong (2018) delineate service quality as the comprehensive amalgamation of attributes and traits inherent in a product or service, contingent upon its ability to fulfill expressed or implicit needs. When customers encounter service that surpasses their expectations, engendering a sense of contentment, it is deemed to be of high quality (Alaan, 2016). Conversely, if the service fails to meet consumer expectations and falls short of satisfying their requirements, it is regarded as poor quality and perceived unfavorably (Najmudin & Putra, 2021). *Service quality* has five dimensions; *reliability*, *responsiveness*, *assurance*, *empathy* (Parasuraman et al., 2016). (Parasuraman et al., 1985). In order to gain a more comprehensive understanding, a detailed exposition of each dimension of service quality will be provided below. Prior investigations by Chang et al. (2018) and Wiradarma and Respati (2020) have demonstrated the favorable impact of service quality on customer purchase intentions.

2.3 Repurchase Intention

As per Kotler & Armstrong (2018), repurchase intention denotes a phase in consumer evaluation wherein an intention is formed to repeatedly choose the most preferred brand for future purchases. Repurchase intention represents a consumer's purchasing behavior stemming from the perceived alignment between their desires and the product or service offered, thereby engendering an inclination to repurchase (Wijaya & Nurcaya, 2017). It is imperative to differentiate between purchase intentions and actual purchases, as the former involves considerations such as timing and situational factors (Belch & Belch, 2018). Repurchase intentions are cultivated through the establishment of a strong customer relationship, primarily by enhancing customer satisfaction (Theresia & Wardana, 2019).

2.4 Hypothesis Development

Store layout, when effectively implemented, has the potential to enhance customer purchase inentions (Tobroni, 2022) by fostering a comfortable and satisfying store atmosphere, thereby augmenting customer satisfaction and stimulating repurchase intentions (Theresia & Wardana, 2019). Prior research corroborates the positive impact of store layout on repurchase intentions (Tobroni, 2022; Rejeki & Hadi, 2020; Bataha et al., 2020). However, merely achieving positive results may not guarantee repeat patronage. Tobroni (2022), Rejeki and Hadi (2020), and Bataha et al. (2020) underscore the significance of store layout outcomes on repurchase intentions. Additionally, beyond store layout, service quality also influences repurchase intentions. Fatimatuz et al. (2022) and Wiatna (2022) affirm the influence of service quality on repurchase intentions, positing that superior service provision by a company can elevate repurchase intentions.

Dokcen et al. (2021) reveal that store layout positively impacts service quality, thus underscoring the importance of implementing service quality initiatives to significantly enhance repurchase intentions. In this regard, service quality serves as a mediating factor in the relationship between store layout and repurchase intentions. Previous studies by Chang et al. (2020) and Wiradarma and Respati (2020) demonstrate the substantial positive effect of service quality on customer purchase intentions. Consequently, this study aims to elucidate the influence of each dimension of service quality as a mediating variable. Based on the foregoing discussion, the following hypotheses can be formulated:

H1: *Store layout has a* positive effect on *repurchase intention*

H2: *Store layout has a* positive effect on *service quality*

H3: *Service quality has a* positive effect on affects *repurchase intention*

H4: *Service quality* mediates the relationship between store layout and *repurchase intention.*

3. Research Methods

3.1 Respondents

The participants selected for this study consisted of consumers of Indomaret. Non-probability sampling was employed as the sampling technique, wherein the selection of respondents is based on the researcher's judgment and not all members of the population have an equal chance of being included (Simamora, 2004). Each respondent was requested to complete a questionnaire, envisioning their shopping experience at Indomaret. This approach facilitated the accurate completion of questionnaires pertaining to store layout, service quality, and repurchase intention. The total sample size comprised 259 individuals. Detailed information regarding the complete sample is provided in Table 1.

Tabel 1. Characteristics Respondent

Characteristics		**Frequency**	**Percentage**
Gender	Male	95	36,7%

	Female	164	63,3%
	Total	**259**	**100%**
Age	Under 20 Years	63	24,3%
	21-30 Years	162	62,5%
	31-40 Years	26	10%
	Above 50 years old	6	3,1%
	Total	**259**	**100%**
Education	Junior High School	3	1,2%
	Senior High School	122	47,1%
	Higher Education	134	51,7%
	Total	**259**	**100%**
Income per month	Under 1 million	108	41,7%
	1-3 million	79	30,5%
	3-5 million	38	14,7%
	5-7 million	20	7,7%
	Above 7 million	14	5,4
	Total	**259**	**100%**

Source: Primary data has been processed, 2024

3.2 Instrument

The measurement instruments employed for the variables in this study were adapted from previous research that investigated analogous constructs. Modifications were made to tailor each instrument to the specific requirements of this study. The store layout variables utilized measurement instruments from Rohaeni and Damayanti (2018), comprising 11 statement items. The service quality variable adopted measurement instruments from Pereira et al. (2016), encompassing a total of 14 statement items. Meanwhile, the repurchase intention variable drew upon the work of Mosavi and Ghaedi (2012), consisting of 3 statement items. A 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was employed to measure all variables. Subsequently, the data analysis process entailed the utilization of structural equation modeling (SEM) via SmartPLS software version 3.2.8. Table 2 provides a summary of the Loading Factor, Cronbach Alpha, Average Variance Extracted, and Composite Reliability for each variable. Certain items within the store layout and service quality variables were omitted due to failure to meet the stipulated criteria.

Tabel 2. Measurement

Variable	*Item*	*Loading factor*	α	*AVE*	*Composite reliability*
Store Layout	SL3	0,793	**0,954**	**0,610**	**0,933**

	SL4	0,817			
	SL5	0,722			
	SL6	0,840			
	SL7	0,766			
	SL9	0,786			
	SL10	0,786			
	SL11	0,799			
Service Quality	SQ3	0,711	**0,958**	**0,740**	**0,963**
	SQ5	0,751			
	SQ6	0,848			
	SQ7	0,878			
	SQ8	0,807			
	SQ9	0,844			
	SQ10	0,851			
	SQ11	0,869			
	SQ12	0,885			
	SQ13	0,894			
	SQ14	0,873			
Repurchase Intention	RI1	0,959	**0,954**	**0,913**	**0,969**
	RI2	0,967			
	RI3	0,940			

Source: Primary data has been processed, 2024

Based on the data outlined in Table 2, it is evident that each indicator loading within the variables meets the requisite threshold of 0.7. Furthermore, all variables exhibit satisfactory Cronbach's alpha coefficients, surpassing the 0.7 benchmark. Similarly, the average variance extracted (AVE) values for each variable are deemed acceptable, exceeding the 0.5 threshold. Moreover, the composite reliability values for each variable surpass 0.6. Consequently, it can be inferred that each variable demonstrates reliability.

4. Research Findings and Discussion

4.1 Discriminant Validity

According to Hair et al. (2017), the Fornell-Larcker analysis stipulates that the root average variance extracted (AVE) value for each research variable, denoted in the diagonal row (highlighted), should exceed the correlation coefficients between research variables listed in the non-diagonal row (not highlighted) in Table 3.

Tabel 3. *Discriminant Validity* menurut Fornell-Larcker *Criterion*

	RI	SQ	SL
RI	**0,956**		
SQ	0,720	**0,839**	
SL	0,728	0,756	**0,781**

Source: Primary data has been processed, 2024

The values indicated on the diagonal of Table 3 are 0.966, 0.839, and 0.781, all of which surpass the threshold of 0.7. Consequently, according to the assessment provided in Table 3, the Fornell-Larcker analysis affirms that the discriminant validity model in this study fulfills the requisite criteria.

4.2 Hypothesis Testing

Significance testing involves examining the t-statistic value and p-values to ascertain the acceptance or rejection of a hypothesis. In this study, a hypothesis is accepted if the t-statistic value exceeds the critical value from the t-table (1.96), and the corresponding p-value is less than 0.05, indicating statistical significance.

Tabel 4. Hypothesis Test

Hypothesis	***Original Sample***	**Std Dev**	**t-*statistic***	**p-*values***	**Status**
H1: SL → RI	0,429	0,072	5,926	0,000	Accepted
H2: SL → SQ	0,756	0,034	22,447	0,000	Accepted
H3: SQ → RI	0,396	0,075	5,260	0,000	Accepted
H4: SL → SQ → RI	0,299	0,057	5,258	0,000	Accepted

Source: Primary data has been processed, 2024

a. The t-test outcomes for H1, which posits that store layout has a positive effect on repurchase intention, indicate a t-value of 5.936, exceeding the critical value of 1.96. The original sample coefficient is 0.429, indicating a positive relationship. Additionally, the associated p-value is 0.000, which is less than the significance threshold of 0.05. Therefore, it can be concluded that store layout exerts a significant positive effect on repurchase intention, leading to the acceptance of H1.

b. The t-test findings for H2, asserting that store layout has a positive effect on service quality, reveal a t-value of 22.447, surpassing the critical value of 1.96. The original sample coefficient is 0.756, indicating a positive association. Furthermore, the associated p-value is 0.000, falling below the significance threshold of 0.05. Thus, it can be affirmed that store layout significantly enhances service quality, leading to the acceptance of H2.
c. The t-test results for H3, positing that service quality has a positive effect on repurchase intention, demonstrate a t-value of 5.260, surpassing the critical value of 1.96. The original sample coefficient is 0.396, indicating a positive relationship. Additionally, the associated p-value is 0.000, which falls below the significance threshold of 0.05. Consequently, it can be concluded that service quality significantly influences repurchase intention, thereby accepting H3.
d. The t-test outcomes for H4, proposing that service quality significantly mediates the influence of store layout on repurchase intention, indicate a t-value of 5.258, exceeding the critical value of 1.96. The original sample coefficient is 0.299, signifying a positive mediation effect. Furthermore, the associated p-value is 0.000, falling below the significance threshold of 0.05. Thus, it can be concluded that the mediating effect of service quality on the path of influence from store layout to repurchase intention is significantly positive, leading to the acceptance of H4.

4.3 Discussions

This study seeks to ascertain the impact of store layout and service quality on repurchase intention, along with exploring the mediating role of service quality in the relationship between store layout and repurchase intention. The findings of hypothesis testing reveal that both store layout and service quality exert a significant positive influence on repurchase intention. This suggests that an improved arrangement of merchandise and superior service provision lead to higher purchase intentions among customers. Consequently, the arrangement of goods and the quality of service received by Indomaret customers have effectively heightened their inclination to shop.

These findings align with prior research by Tobroni (2022), Rejeki and Hadi (2020), and Bataha et al. (2020), which similarly attest to the positive impact of store layout on repurchase intention. Furthermore, they corroborate the findings of Chang et al. (2020) and Wiradarma and Respati (2020), demonstrating the significant positive effect of service quality on repurchase intention. An organized arrangement of goods based on functional categories facilitates customers in locating desired items, while maintaining store cleanliness and ensuring adequate shelf space minimizes clutter and enhances convenience. Additionally, attentive staff members who cater to customers' needs contribute to a satisfactory shopping experience, as emphasized by Alaan (2016). This underscores the success of Indomaret's goods arrangement and service quality in fostering customer comfort during shopping by grouping items logically.

A notable contribution of this research lies in uncovering the significant positive effect of store layout on service quality, implying that an improved store layout enhances service quality. A well-organized store layout facilitates swift service provision by staff members, aiding customers who require assistance in locating items. Furthermore, wider store aisles facilitate smooth customer navigation and enable prompt service delivery in the event of shopping impediments. Moreover, this study reveals the mediating role of service quality in the relationship between store layout and repurchase intention. Service quality serves as a partial mediator, as the direct effect of store layout on repurchase intention, alongside the indirect effect mediated by service quality, remains significantly positive. This partial mediating function underscores that the shopping comfort provided to Indomaret customers through the responsive services offered by employees has effectively bolstered their repurchase intentions. Importantly, this enhanced comfort persists even in the absence of expedited service.

5. Conclusion

This study underscores the significance of optimizing both store layout and service quality to enhance customer repurchase rates at Indomaret. It highlights the pivotal role of service quality in fostering customer loyalty and emphasizes the empirical validation of the impact of store layout on service quality. Moreover, it unveils the novel finding of service quality acting as a partial mediator in the relationship between store layout and repurchase intention. However, a notable limitation of this study is its relatively small sample size, suggesting avenues for future research to explore similar frameworks with more targeted sample sizes for further validation and refinement.

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THE INFLUENCE OF PERSONALITY TRAITS IN THE GREEN PURCHASING BEHAVIOUR OF YOUNG CONSUMERS SOCIOLLA INDONESIA MEDIATING BY CONSUMER ENVIRONMENTAL CONCERN

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ABSTRACT

This study aims to determine the influence of personality traits, based on the theory of the big five personality traits models, towards green purchasing behaviour of young consumers in Sociolla Indonesia with the level of environmental concern as a mediator. The population in this study are consumers of Sociolla Indonesia aged 13-40 years old. This study used nonprobability sampling technique and purposive sampling method. This study used 96 respondents as samples through distributing the questionnaires by Google Form. Data Analysis technique used in Partial Least Square (PLS) with SmartPLS 4.1.0.0 application. The result of this study is from all big five personality traits, neuroticism was the only factor that influenced green purchasing behaviour both directly and indirectly mediated by the level of environmental concern.
***Keywords**: Personality Traits, Green Purchasing, Green Marketing.*

1. Introduction

In this era, environmental concern become main focus in public that must be developed. This is caused by global warming is increasing due to the times. Ginting & Ekawati (2016) said that environmental damage has attracted world attention since 1970. Many environmentally unfriendly activities like using styrofoam, animal testing, and throw away any waste causing increasing environmental problems (Rini, Sukaatmaja, & Giantari, 2017). Economic growth causes excessive use of resources and causes environmental pollution (Fatoki, 2020). This negative impact caused by production and consumption activity using unfriendly raw materials for environment.

Now, many parties in economic sector realize that environmental concern is important, so that they start green activities in their economic activities. Green activity can can be implemented by producting green product, use green product, and recycle waste or recycle packaging. The existence of green products can trigger environmentally friendly economic activities. Then, there's packaging recycling, it can help to reduce environmental damage.

The application of green activities can be carried out by implementing green marketing. Company can make green product and recycle packaging as the application of green activities can be carried out by implementing green marketing. Green marketing has a goal to fills the consumer's needs, but keep proctecting the environment (Aulia & Hidayat, 2018). In implementing green marketing, consumers are invited to become green consumers. Globally, public already started to do green behaviour as implementation of green activities & green marketing. Green behaviour shown with green products what they consume like F&B, cosmetics, bag, shirt, amenities, and other green products.

Green behaviour has influenced by personality traits (Fatoki, 2020). Green purchasing behaviour influence in achieving global sustainable development (Sun, Wang, Gao, & Li, 2018). Public who has environmental awareness tend to be motivated become green consumers (Ginting & Ekawati, 2016). Green consumers dominated by young consumers. Young consumers are consumers that considered caring about the surrounding environment. This's proven in study conducted by Dianti & Paramita (2021) which results in a positive influence between green products on young consumers purchasing decisions. This means that young consumers have environmental awareness and they've tendency to become green consumers.

Study about green marketing has been done several times before and every studies has different results. The results of the study that conducted by Fatoki (2020) is from big five personality traits, there are four who has influence in green purchasing behaviour, while the results of the study that conducted by Li, Wang, & Li (2023), there's just one from five personality traits who has influence in green purchasing behaviour. The results of the study that conducted by Crespo, Mantoya, Rivas, Soto, & Riel (2023), all big five personality traits have influence in green purchasing. Then, the results of the study that conducted by Duong (2020), from all big five personality traits, there are three who has influence in green purchasing. This means that there's results inconsistence from several previous studies.

Based on big five personality traits models, researchers want to know about the influence personality traits in environment concern and green purchasing behaviour in detail based on theory big five personality traits models. Researchers want to analysing green behaviour patterns at Sociolla.

Indonesia through the Waste Down Beauty Up program. Sociolla Indonesia is a cosmetics retail. Sociolla Indonesia has collaboration with Sukin Recycle Station, Pastelab, and Waste4Change to create the program named Waste Down Beauty Up. This program is returning used cosmetic packaging for recycling by Pastelab & Waste4Change. In this program, Sociolla invites consumers to take part in green activities as an implementation to reduce environmental damage.

2. Literature Review

2.1 Green Marketing

Marketing is a process in company to creating values for consumers and creating strong relationship for them with the aim of achieving company targets (Kotler & Armstrong, 2006:6). Marketing not only increase sales, but for now, marketing can be a media for implemented go green that named green marketing. Green marketing is a marketing that leads to satisfaction providing consumer needs in the process has environmental awareness (Supandini & Pramudana, 2017). Green marketing is a process who fasilitate consumption, production, distribution, marketing, packaging, and reclamation in a product taking into account ecological issues (Sutawidjaya, Nawangsari, Permana, Siswanti, & Pratama, 2022:69). Many ways to implement green marketing, like using reusable totebag in transaction, producting green product, and and other environmentally friendly ways. The first implementation of green marketing is focus in recycle packaging to become a product that can be use again (Sutawidjaya et al., 2022:69).

2.2 Personality Traits

Personality traits divided in five models personality tratis that named Big Five Personality Traits Models (Crespo et al., 2023). In this model, personality traits divided in five namely Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness (Li et al., 2023). Extraversion is the level of individuals to sosializing, love to talk, and easy to get along with others (Wang, Shen, & Chu, 2021). The person who has high level of extraversion tends to be more confident in to do activities and feel enjoy in the interaction. Agreeableness is the level of individuals to empathize with others and easy to agree with something (Duong, 2022).

The person who has high level of agreeableness tends to be tolerant, cooperative, shympatic, and love to helps others (Sun et al., 2018). An agreeable person tends to has environmental awareness (Crespo et al., 2023). An agreeable person tends to eco-friendly behaviour because they assume if their behaviour will be accepted in public. Conscientiousness is the level of individuals to be organized, can be responsible, and obedient with the rules (Li et al., 2023). Conscientious person tend to understand the consequences they will choose. Neuroticism is the level of individuals to control their emotion like emotion stabilize, anxiety, insecurity, and anger issues (Fatoki, 2020). An individuals who can control their emotion tend to control their behaviour, including the decisions they make. Openness is the level of individuals to be openned with new lesson and want to learn new things. The person who has high level of openness tend to be enthusiastic to receive new experiences (Crespo et al., 2023).

2.3 Green Purchasing Behaviour

Consumers behaviour that have environmental awareness called green purchasing behaviour (Saraswaty & Suprapti, 2015). Green purchasing is a purchase decision which based environmental knowledge principle. This behaviour conducted to reduce the environmental damage. Consumers who has high level of environmental concern will do green purchase decision and it’s called green purchasing behaviour (Utami, 2020). In green purchasing behaviour, consumers will do 3R: Reduce, Reuse, & Recycle (Nilasari & Kusumadewi, 2016).

2.4 Environmental Concern

Environmental concern shown by their eco-friendly behaviour like using reusable product, recycle waste, and utilizing unused products for recycling into useful products (Saraswaty & Suprapti, 2015). Crespo et al. (2013) said that environmental concern shown by waste prevention behaviour, waste avoider behaviour, and green consumer. Individuals who have environmental awareness and do green activity is the individuals who have environmental concern.

3. Research Methods

This study is causality research with quantitative methods. This study is to determine the influence of independent variables in dependent variable through mediation variable. The population in this research are Indonesia’s public who knows and have shopped before at Sociolla Indonesia. Sample in this research are Sociolla Indonesia’s consumers aged 13-40 years old and have already returned the cosmetic packaging to Sociolla Indonesia at least once in a year. Because the population is unknown, this study uses 96 samples based on unknown population theory.

Data in this study is using primer data that researchers get from an online questionnaire. Researches use Google Form to create the online questionnaire. Researchers use cross-sectional techniques for collecting data. This study uses rating scale and Likert scale for descriptive analysis. The rating scale is between 1 for 4. Analysis data technique is Partial Least Squares Path Modeling (SEM-PLS) and this study uses SmartPLS 4.1.0.0 to analyze data. The steps of data analysis in this study are validity-reliability test and bootstrapping test to count p-values and r-square.

4. Research Findings and Discussion

4.1 Descriptive Statistical Analysis

Descriptive statistical analysis in this study are based on age, incomes, jobs, and recent education of the respodents. Based on the results of analysis, from 96 respondents as samples, young consumers of Sociolla Indonesia dominated by the respondents aged 13-40 years old

(85 respondents), income Rp 1.000.000-Rp 3.000.000 (48 respondents), work as students at university (49 respondents), and has recent education in Senior High School (53 respondents).

Table 3

No.	Variable	Average Total Score	Category
1	Extraversion	3.39	Very high
2	Agreeableness	3.46	Very high
3	Conscientiousness	3.63	Very high
4	Neuroticism	3.33	Very high
5	Openness	3.70	Very high
6	Environment Concern	3.54	Very high
7	Green Purchasing Behaviour	3.65	Very high

Based on Table 1, young consumers of Sociolla Indonesia are the persons who has personality extrovert, humble, careful in act, have good emotional control, open with new things, has high environmental concern, and has eco-friendly environmental purchasing behaviour.

4.2 Data Analysis

This analysis has started with validity and reliability testing. Variable declared valid if outer loading / loading factor > 0.70 and AVE > 0.50 and reliable declared if composite reliability > 0.70. In this study, all of variables is valid and reliable because all indicators qualify the validity and reliability tet requirements (Table 2).

Table 4

Variable	Indicators	Outer Loading	AVE	Composite Reliability
Extraversion	X1.1	1,000	1,000	1,000
Agreeableness	X2.1	1,000	1,000	1,000
Conscientiousness	X3.2	1,000	1,000	1,000
Neuroticism	X4.2	1,000	1,000	1,000
Openness	X5.2	1,000	1,000	1,000
Environment Concern	Z1.1	1,000	1,000	1,000
Green Purchasing Behaviour	Y1.1	1,000	1,000	1,000

Results of R-Square in this study i.e that mediation variable (environmental concern) and dependent variable (green purchasing behaviour) as much as 10.2% and 22.8% has influenced by *extraversion, agreeableness, conscientiousness, neuroticism,* and openness. As much as 89.8% and 77.2& has influenced by others variables outside this study (Table 3).

Table 5

Variable	R-Square	Percentage
Environment Concern	0.102	10,2%
Green Purchasing Behaviour	0.228	22,8%

Hypothesis and framework in this study are:
H1 (a-f): Extraversion influenced green purchasing behaviour through consumers environmental concern as mediator.
H2 (b-f): Agreeableness influenced green purchasing behaviour through consumers environmental concern as mediator.
H3 (c-f): Conscientousness influenced green purchasing behaviour through consumers environmental concern as mediator.
H4 (d-f): Neuroticism influenced green purchasing behaviour through consumers environmental concern as mediator.
H5 (e-f): Openness influenced green purchasing behaviour through consumers environmental concern as mediator.

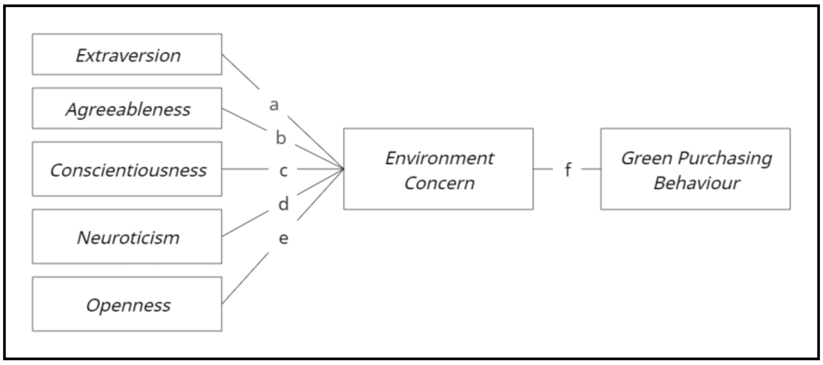

Figure 9

Path coefficients indirect effects & direct effects showed that from all five personality traits, it's only one that has influenced green purchasing behaviour directly. Besides, Table 4 showed that from all big five personality traits, it's only one that influenced green purchasing behaviour through environmental concern as mediator.

Table 6

Hypothesis (*Indirect Effect)*	*P-Values*	*Direct Effect*	*P-Values*
X1 - Z - Y	0.054	X1 - Y	0,277
X2 - Z - Y	0.223	X2 - Y	0,161
X3 - Z - Y	0.314	X3 - Y	0,280
X4 - Z - Y	0.048	X4 - Y	0,019
X5 - Z - Y	0.227	X5 - Y	0,068

Based on Table 4, p-values of hypothesis 1 is 0.054 > 0.05. It's means hypothesis rejected and it's means no mediation and no effect (Hair, Hult, Ringle, & Sarstedt, 2022:234). This results isn't same like the study that conducted by Fatoki (2022), extraversion influenced green purchasing behaviour. But, this study has same results with the study that conducted by Duong (2022), extraversion doesn't having correlation with green purchasing behaviour.

Based on Table 4, p-values of hypothesis 2 is 0.223 > 0.05. It's means hypothesis rejected and it's means no mediation and no effect. This results isn't same like the study that conducted by Fatoki (2022), agreeableness influenced green purchasing behaviour. But, this study has same results with the study that conducted by Li et al. (2023), extraversion doesn't having signification with green purchasing behaviour.

Based on Table 4, p-values of hypothesis 3 is 0.314 > 0.05. It's means hypothesis rejected and it's means no mediation and no effect. This results isn't same like the study that conducted by Li et al. (2023), conscientiousness influenced green purchasing behaviour. But, this study strengthened by the study that conducted by Duong (2022), conscientiousness doesn't having correlation with green purchasing behaviour.

Based on Table 4, p-values of hypothesis 4 is 0.048 < 0.05. It's means hypothesis accepted and it's means partial mediation. (Hair et al., 2022:235). This results isn't same like the study that conducted by Li et al. (2023), neuroticism doesn't influenced green purchasing behaviour. But, the study that conducted by Duong (2022), said that neuroticism has correlation with green purchasing behaviour. The level of anxiety and high emotional stabilize has correlation with environmental conservation (Crespo et al., 2023). It's mean that, when an individual can control their emotional well, they can think about the effect from their behavioural.

Based on Table 4, p-values of hypothesis 5 is 0.277 > 0.05. It's means hypothesis rejected and it's means no mediation and no effect. This results isn't same like the study that conducted by Fatoki (2020), openness influenced green purchasing behaviour. But, this study strengthened by the study that conducted by Li et al. (2023), openness doesn't having significant effect to green purchasing behaviour.

Based on the results, the cause of extraversion, agreeableness, conscientiousness, & openness hasn't influenced green purchasing behaviour through environmental concern as mediator was found. Li et al. (2023) said that the low level of education enabled respondents to receiving environmental knowledge. Respondents in this study is dominated by they who have education in Senior High School, so they don't have enough environmental knowledge.

5. Conclusions

This study aims to know about the influence of personality traits in green purchasing behaviour through environmental concern as mediator. Variable personality traits elaborated based on big five personality traits models theory: extraversion, agreeableness, conscientiousness, neuroticism, & openness. The result of this study is from extraversion, agreeableness, conscientiousness, neuroticism, & openness, only neuroticism that influenced green purchasing behaviour of young consumers mediating by consumers environmental.

Based on the results of this study, researchers recommend that green product company create programs that can increase consumption of green products and for the next study, researchers can use another variable exclude this study. Because of neuroticism has influenced green purchasing behaviour, then green product company or another company that want to implementing green activity, can create educational program about emotional control can help to reduce environmental damage.

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THE INFLUENCE OF E-WOM, CELEBRITY ENDORSEMENT, AND CUSTOMER REVIEWS ON PURCHASE INTENTION STUDY ON CONSUMERS OF BLOOMERY PATISSERIE YOGYAKARTA

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ABSTRACT

This research aims to determine: 1) the influence of E-WOM, celebrity endorsement, and customer reviews simultaneously on purchasing interest. 2) the partial influence of E-WOM, celebrity endorsement, and customer reviews on purchasing interest. The sampling technique was carried out using purposive sampling with 100 respondents who met the criteria. The data analysis techniques in this research are descriptive analysis, validity test, test rehabilitation, classical assumption testing, and multiple linear regression analysis using the IBM SPSS Statistics 25 application program. Descriptive analysis is a data analysis method carried out to see a picture of research variables, without carrying out hypothesis testing. Validity and reliability tests were carried out to test the device. The classic assumption test is a test of the feasibility of a multiple linear regression model which used to test data quality. Multiple linear regression analysis is a regression model that involves more than one independent variable. The research results show that: 1) E-WOM, celebrity endorsement, and customer reviews simultaneously influence purchasing interest. 2) E-WOM, celebrity endorsement, and customer reviews partially influence purchasing interest.

Keywords: *Electronic Word of Mouth (E-WOM), Celebrity Endorsement, and Customer Review*

1. Introduction

The current digital era has brought rapid advances in technology and communication, making it easier for people's activities in various fields, including the economy. As digital technology has developed, especially on social networking platforms, it has opened up new possibilities for traditional promotion methods such as word of mouth, and posters have been developed into modern promotions using social media. Based on this trend, many brands choose social media to promote their products, especially considering the high use of social media in Indonesia. According to Mita, M.,Pranatasari, F. D., & Kristia, K. (2021) by using the internet, it has become easier for many entrepreneurs to carry out their business transactions. Consumers also feel the same things, as advances in the internet make it easier for consumers to access their needs via the internet.

We Are Social & Hootsuite (2020) specifically for Indonesia, in 2020 the number of active internet users was 160.0 million. Social media is not only limited to communicating and interacting with other people but has also become an important part of everyday life, including accessing news, searching for information, shopping, and building professional networks. Where with the internet and social media information can spread quickly and widely, even in a matter of seconds. This can reach a wider relationship, and the information you want to convey can be easily known.

According to Bataineh (2015), stated that the development of the internet has influenced communication capabilities and has strengthened the scale and scope of communication by word of mouth or Electronic Word of Mouth (E-WOM), and has presented the basic meaning of Electronic Word of Mouth (E-WOM). is a new concept from E-WOM which provides transparency and easy access to information via the internet. This creates an environment where consumers are not just recipients of information. However, it is also an active information provider, helping others make informed purchasing decisions. From the perspective of MSMEs or modern businesses, all businesses, including Bloomery Cake & Patisserie, strive to provide the best services and products to create E-WOM that customers like.

Bloomery Cake & Patisserie uses E-WOM to promote its products and improve its reputation. By becoming an advertising star, or Celebrity Endorser, a celebrity who is well-known in society can function as a spokesperson for the product. Sari et al (2022) state that a Celebrity Endorser is an athlete, actor or artist who is known to many people and becomes an idol for their achievements in that field and is used to distribute advertisements designed to attract attention and influence consumers.

With advances in technology and the opportunity for Customer Reviews to shape brand image and purchasing decisions cannot be ignored. Internet users often rely on reviews and recommendations of other users to form opinions about Bloomery Cake & Patisserie products on their social media platforms. According to Mo, Li, and Fan (2015). Customer Reviews are the opinions of consumers regarding information and product evaluation from various aspects. Consumers find out information through reviews and experiences from other consumers after previously purchasing products from online sales.

According to Abzari, et al (2014), purchasing interest is consumer behavior where consumers have the desire to choose and consume a product. Using E-WOM, celebrity endorsements and good customer reviews can influence purchasing interest in making purchases at Bloomery Cake & Patisserie. Bloomery Cake & Patisserie itself is a local dessert brand that is currently on the rise. They are famous for their pastries, cakes, and breads which follow global trends. The business founded by Vania Raharjo and her three younger siblings during the pandemic was able to grow and develop quite rapidly, even in just a short period of time. Starting from Vania's expertise as a food technology professional and her sister's hobby, Bloomery Cake & Patisserie was founded. They started their business by selling their family's favorite cakes to those closest to them. Unexpectedly, through word of mouth promotion, Bloomery Cake & Patisserie received many orders and positive responses from customers. Realizing this opportunity, they developed the business until it reached its current level.

According to the site mokapos.co.id (2021), the success achieved by Bloomery Cake & Patisserie was thanks to the development strategy promoted by Vania herself, namely by establishing several new outlets, especially in the Yogyakarta area, the city where it all started. Apart from that, Bloomery Cake & Patisserie pays attention to superior product quality by committing to continuing to use premium ingredients to maintain taste. Bloomery Patisserie utilizes social media such as Instagram, Twitter, Tiktok, and Google Reviews to attract market consumers, they hold attractive promotions. Examples include discounts and bundling packages at affordable prices, holding giveaways and quizzes to increase engagement and expand market reach on social media, and collaborating with celebrities to promote their products, to increase their credibility and brand awareness. Bloomery Cake & Patisserie also encourages consumers to provide reviews about their products on social media, thereby increasing potential consumers' trust in their products. Even though this strategy is quite effective, Bloomery Cake & Patisserie still faces quite difficult challenges in competition in the dessert industry.

In previous literacy, Mukti,&Santosa (2023) stated that the E-WOM, celebrity endorsement and customer review variables influence purchasing interest. On the other hand, there are inconsistencies in the results of previous research by Megayani & Merlina (2019) which stated that the celebrity endorsement variable did not affect buying interest.

Based on these gaps and phenomena, a problem formulation that can be developed is the use of E-WOM, celebrity endorsements, and customer reviews, both simultaneously and partially influencing buying interest. Through a holistic approach, this research aims to gain a deeper understanding of the dynamics of the dessert industry in Yogyakarta with a focus on Bloomery Cake & Patisserie. This research produces a deeper understanding of the factors that influence purchasing interest in the dessert market in Yogyakarta, which can be used to develop best practices to strengthen the company's position in an increasingly competitive market. The findings from this research can also serve as a basis for the development of more effective marketing strategies for other companies in the dessert industry, and provide insight into the current conditions and directions for the future development of the dessert industry in Yogyakarta and perhaps elsewhere.

2. Theoretical Basis and Hypothesis

2.1 Electronic Word of Mouth

With the power of E-WOM, internet marketing is one of the fastest market penetrations. This can influence consumer behavior, especially people in Indonesia. Indonesia is ranked 10th in the world with an average usage of 197 minutes or around 3.2 hours a day and 73% of people get information from social media (katadata.co.id, 2023), Kotler & Keller (2022) define E-WOM (Electronic Word of Mouth) is marketing that uses the internet to produce word of mouth effects to support business and marketing goals. The use of E-WOM has now become a resource that can be used to stimulate someone to do something with the information, for example an interest in buying. According to Goyette et al (2012:52) inHabibah, I. N., & Nasionalita, K. (2019) Electronic Word Of Mouth (E-WOM) is divided into three dimensions, namely:

a. Intensity: E-WOM intensity is the number of comments written by customers on social networking sites. By combining intensity indicators including the intensity of accessing social networking sites, interactions, and reviews written by social networking site users.
b. Valence of Opinion: Valence of Opinion is a consumer's perception of goods, services, and brands in a positive or negative way. Factors that indicate the validity of opinions include: positive comments, negative comments, and recommendations from users of social networking sites.
c. Content: Content is content originating from social networking sites related to goods and services. Content indicators include: information about product variations, product quality, and prices offered.

2.2 Celebrity Endorsement

Celebrity endorsement is a company strategy to use the services of celebrities or film characters who are known to the public to star in product advertisements in information media (Algiffary et al., 2020). This celebrity endorsement can shape consumer beliefs which then influence subjective norms and buying behavior (Ramdhani , 2016). When celebrities who are idolized by many people associate themselves with a brand or product, it can create positive associations in consumers' minds.

One of the main advantages of celebrity endorsement is its ability to create a strong and memorable impression in the minds of consumers. Celebrities often have large fan bases and strong influence in social media and the entertainment industry, so when they promote a product, the message can reach a wide audience in a short time. Additionally, when consumers see celebrities they admire using or recommending a product, they may feel more emotionally connected to the brand and are more likely to purchase it. According to Bimal et al. (2015) in Award, R. (2022). Celebrity Endorsement has the following indicators:

a. Visibility: An endorser is a person who has sufficient visibility to be noticed by the audience. These endorsers are usually chosen by people who are well known and have a big influence on society so that public attention can be diverted to the brand being advertised.
b. Credibility: Credibility is a measure of how well a source is seen by the audience so that they follow it. Apart from an endorser's credibility, an endorser's character is also very important; This personal character can determine how credible an endorser is.
c. Attractiveness: There are two characteristics possessed by attraction; charm (likability) and similarity:
    1) Likabilty
    These characters will be judged based on their personality and physical appearance. It is hoped that the endorser's attractiveness will have a positive impact on the brand he carries.
    2) Similarity
    When ads have similar emotional imagery, this can help to achieve the advertising goal. This is the reason why similarity is considered one of the factors that determine the effectiveness of communication, namely, similarity can facilitate good presentation (decoding), translate symbols and signs into ideas, form and build the same premise, can make the audience interested. to the communicator, and can foster respect and trust in the communicator.
d. Power: This character is usually followed by a large level of influence that an endorser has. The high rank or name of the endorser supports this character.

2.3 Customer Review

Customer reviews are opinions, experiences, or testimonials given by consumers about a product or service after they have used it. These reviews can be found on a variety of platforms, including e-commerce websites, social media, online forums, and specialty review platforms. Customer reviews play an important role in the consumer decision-making process because they provide valuable insight into the quality, performance, and user satisfaction with a particular product or service. Consumers often rely on reviews from fellow consumers to help them decide whether to buy a product or use a service. Positive reviews can increase consumer confidence and motivate them to make purchases, while negative reviews can provide warnings and inhibit purchase interest (Latief, F., et al., 2020).

Mo et al., (2015:420) explained that online customer reviews reviews given by consumers regarding a product they have purchased regarding various aspects provide additional information that helps other consumers find information about the product, by providing an overview of the quality of the product. the product through the reviews provided. According to Asiyah (2020), There are four important points that must be included in a customer review:

a. Perceived Usefulness: Consumers get benefits when they find out information about the review features on online shopping sites.
b. Source Credibility: Valid information about previous customer reviews about a product is called source credibility.
c. Argument Quality: The strength of the argument attached to information. Comments or opinions from previous customers can be considered to have argumentative power in online customer reviews because they come directly from previous customers.

d. Valance: Produces the positive or negative nature of a statement, and valence itself will have a big influence on the formation of consumer attitudes, which in turn will influence consumers' desire to buy something.

2.4 Interested in buying

Purchase intention, also known as buying interest, is the tendency of a buyer to buy goods or services with a particular brand related to the purchase. Purchase interest can be measured by measuring the level of possibility of the individual or buyer to purchase goods or services (Kotler & Keller, 2022). Meanwhile, another opinion by Engel et al (2009) in Nih Luh (2014) stated that buying interest can be used as a driving force or as an intrinsic motive so that it can encourage individuals to pay attention to a product and make purchases spontaneously, naturally, easily, without coercion and selectively so that pleasure and satisfaction are obtained. Purchase interest can increase or decrease along with changes in market conditions, promotions, or new information obtained by consumers. According to Ferdinand (2014), buying interest can be identified through the following indicators:

a. Exploratory interests:
   Exploratory interest is interest which describes the behavior of someone who always looks for information about the product they are interested in and looks for information to support the positive properties of the product.
b. Interest preferential:
   Interest preferensial is showing the behavior of someone who has a primary preference for a company's products.
c. Interest referential:
   Interest referential is a person's tendency to recommend a product to others.
d. Transactional interest
   Transactional interest is a person's tendency to buy a product

Tommi and Eristia (2014) say that electronic word of mouth is a statement made by actual, potential, or previous consumers regarding a product or company where this information is available to people or institutions via Internet. According to Kotler & Keller (2022), Electronic Word of Mouth can influence customer behavior, including their interest in purchasing products. Charo et al. (2015) also stated that E-WOM is a form of exchanging information and knowledge via the Internet. In general, electronic word-of-mouth communication. E-WOM is the development of word-of-mouth communication which is influenced by the existence of the internet. This hypothesis states that E-WOM, recommendations or reviews about products or brands spread through electronic platforms such as social media or review websites, influences purchase intention. In other words, the more positive the E-WOM is about a product or brand, the more likely consumers are to have an interest in purchasing that product or brand.

H1: Electronic Word of Mouth partially influences Purchase Interest

According to Anisa and Widjatmiko (2020), celebrity endorsement is a form of communication where celebrities become representatives of certain products. Celebrity statements can make other people believe and focus on them. The use of spoken words by celebrities is characterized by skill to positively influence consumer behavior or responses towards the product. An attractive appearance in interactions supported by professional marketing and communication skills can have a positive influence on consumers' impulse buying behavior (Li et al., 2022). They may feel that the product has higher value or quality because it is approved by a respected celebrity (Annissa, et al., 2021). This hypothesis states that celebrity endorsement, or endorsement or promotion of products by famous figures or celebrities, influences purchase intention. If a product or brand is endorsed by a famous figure who is respected or idolized by consumers, consumers will likely have an interest in purchasing the product or brand.

H2: Celebrity Endorsement partially influences Purchase Interest

Customer Reviews are said to be a factor that is able to influence consumer buying interest (Ichsan et al., 2018). According to Ningsih (2019), one part of the process of making purchasing decisions is customer reviews. Online reviews can be comments left by customers or content created by customers and uploaded to an online store's website. Research by Halim & Keni (2022) shows that positive reviews found in online forums indirectly increase the brand image of skincare products. Customer Reviews create trust so they have a significant influence on purchasing interest both indirectly and directly because they greatly influence the quality of an online shop and consumers' subsequent purchasing interest. This hypothesis states that customer reviews, both positive and negative, influence purchasing interest. Consumers tend to consider reviews from other customers before making a purchasing decision. If the majority of customer reviews are positive, then buying interest will likely increase. Conversely, if the majority of reviews are negative, buying interest will likely decrease.

H3: Customer Reviews partially influence Purchase Interest.

2.5 Conceptual Framework

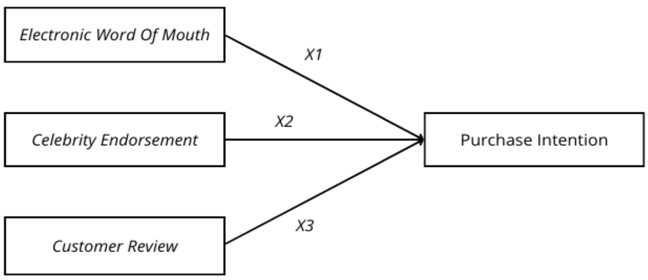


Figure 1. Research Conceptual Framework

3. Research Methods

In this research, the methodological approach applied combines techniques for collecting and examining quantitative type data. Sample selection method used is a non-probability sampling technique. Non-probability sampling is a sample selection method that does not allow equal opportunities for each element in the population to be selected as a sample, in accordance with the explanation of Sugiyono (2018). Considering that not all individuals meet the requirements desired by researchers, the groups selected as respondents are as follows:

a. People in Yogyakarta have actively used the internet for at least the last 3 months
b. Have you ever seen Electronic Word of Mouth (E-WOM), Celebrity Endorsements, and Customer Reviews or at least seen social media Instagram, Twitter, Tiktok, and Google Reviews regarding Bloomery Cake & Patisserie Yogyakarta, both as an actual consumer and a potential consumer.
c. Are in the age range 12 to 39 years

In this research, the main technique for collecting data involves questionnaire distribution. One of the common methods in preparing this questionnaire is the application of an ordinal scale, better known as a Likert scale. This scale consists of five response levels ranging from 1, which indicates 'Strongly Disagree', to 5, which indicates 'Strongly Agree'.

Variable	Variable Definition	Indicator	Questionnaire Statement
Electronic Word of Mouth (X1)	**Theoretical Definition:** E-WOM (Electronic Word of Mouth) is a marketing strategy that uses the internet to generate word-of-mouth effects to support business and marketing objectives. Kotler & Keller (2022) **Operational definition :** E-WOMis a review, both positive and negative, made by customers of Bloomery Cake Patisserie on the internet, to show their satisfied reactions to Bloomery products Cake Patisserie, so that it can produce effects to support marketing objectives.	a) Intensity E-WOM b) Validity E-WOM c) ContentE-WOM Goyette et al (2012:52)	a) Intensity of accessing review features or viewing reviews on social networking sites. b) The intensity of reviews written by users of social networking sites. a) Positive comments from social networking site users b) Recommendations from social networking site users a) Information about product variety and quality. b) Information about the prices offered.
Celebrity Endorsement (X2)	**Theoretical Definition:** Celebrity endorsement is a company strategy to use the services of celebrities or film figures who are known to the public to star in advertisements for their products in information media (Algiffary et al., 2020). **Operational definition:** Celebrity endorsement is strategyBloomery Cake & Patisserie by using the services of celebrities or film figures who are known to the public to star in product advertisementsBloomery Cake & Patisserie in information media.	a) Visibility b) Credibility c) Attraction d) Power Bimal et al.,(2015) inAward, R. (2022)	a) Frequency level celebrity endorsers appeared in the media. a) Skill(expertise) Celebrities who have high expertise in this factor will have intelligence, expertise, ability and extensive knowledge, experience and training. a) Similarity(similarity) in common with the endorser who describes the advertisement emotionally, it makes the purpose of the advertisement more effective. a) Charm or charisma that can influence consumer thinking.
Customer Review (X3)	**Theoretical Definition:**	a) Perceived Usefulness	a) Get benefits from the review feature.

	Customer reviews are opinions, experiences, or testimonials given by consumers about a product or service after they have used it (Latief, F., et al., 2020). **Operational definition :** Customer review are opinions, experiences, or testimonials given by consumers about a product or service after the consumer visitsBloomery Cake & Patisserie	(Perceived benefits) b) Source Credibility (Source Credibility) c) Argument Quality (Quality of Argument) d) Valance Harimukti W in Asiyah & ABS, (2020)	a) Ensure valid information. a) The argument must demonstrate a deep understanding of the product. a) Reviews influence consumers in purchasing.
Interest to Buy	**Theoretical Definition:** Purchase intention, also known as buying interest, is the tendency of a buyer to buy goods or services with a particular brand related to the purchase. (Kotler & Keller, 2022). **Operational definition :** Purchase intention, also known as buying interest is the tendency of a buyer to purchase the product related to the purchaseBloomery Cake & Patisserie	a) Exploratory Interest. b) Interest Preferensial c) Interest Referentia d) Transactional Interest Ferdinand (2014)	a) Interested in advertising a product. a) Convince consumers that the brand it's different. a) Recommend products to people around you. a) Comparison of product prices with other products

Table 1 Definition of Variable and Indicators

Quantitative validity is usually referred to as construct validity, namely a test that shows how good the results obtained through the use of a measurement are in accordance with the use of theory to describe the construct (Abdillah & Hartono, 2015). Sugiyono (2019) stated that research results are reliable if there are similarities in data at different times. Validity and reliability tests were carried out to test the device. The instrument is said to be valid if r count > r table with a confidence level of 95%. An instrument is considered damaged if r count < r array. The Cronbach's alpha value of the variable is > 0.60 so that the variable is recognized as reliable.

The classic assumption test is a test of the feasibility of a multiple linear regression model which is used to test data quality. Classic Assumption Test includes:

A. Normality Test according to Ghozali (2016), the normality test is carried out to test whether in a regression model, an independent variable and a dependent variable or both have a normal or abnormal distribution. The normality test aims to test whether in the regression model, the confounding or residual variables have a normal distribution. The data normality test can be carried out using the Normal P-Plot Of Regression Standardized Residual test, namely with the following conditions:
    - If the data points in the P-Plot follow a straight line pattern, then the data can be concluded to be normally distributed.
    - If the data points in the P-Plot do not follow a straight line pattern, and form a curved pattern, then the data cannot be concluded to be normally distributed.

B. Multicollinearity Test according to Ghozali (2016) in multicollinearity testing aims to find out whether the regression model found any correlation between independent variables or independent variables. Multicollinearity Test Conditions, to find out whether or not there is multicollinearity in the regression model can be determined from the tolerance value and variance inflation factor (VIF) value.

Guidelines based on Tolerance Values:

- If the tolerance value is greater than 0.10 then multicollinearity does not occur
- If the tolerance value is smaller than 0.10 then multicollinearity occurs

Guidelines based on VIF Value:

- If the VIF value is <10.00, it means that there is no multicollinearity in the regression model
- If the VIF value is > 10.00, it means that multicollinearity occurs in the regression model

C. Heteroscedasticity Test, where this test aims to test whether in a regression model, there is a variation in variance from the residuals from one observation to another.
   - If the variants are different, it is called heteroscedasticity. One way to find out whether there is heteroscedasticity in a multiple linear regression model is by looking at the scatter plot graph or from the predicted value of the dependent variable, namely SRESID with the residual error, namely ZPRED.
   - If there is no particular pattern and it does not spread above or below zero on the y-axis, then it can be concluded that heteroscedasticity does not occur. A good research model is one that does not contain heteroscedasticity (Ghozali, 2016).

D. Autocorrelation Test according to Ghozali (2016) The autocorrelation test is only carried out on time series data and does not need to be carried out on cross section data such as in questionnaires where measurements of all variables are carried out simultaneously at the same time. The autocorrelation test is used to test whether in a linear regression model there is a correlation between confounding errors in period t and errors in period t-1 (previous).
   - If correlation occurs, it is called an autocorrelation problem. To overcome the occurrence of autocorrelation, it is based on the Durbin Watson (dW) method.
   - If the results of the Durbin Watson (dW) calculation are greater than the table values of dL and dU, then this means that there is no autocorrelation. The dL and dU values can be seen in the Durbin-Watson statistical table at the important point level of 0.05.

$$\boldsymbol{Y} = \boldsymbol{a} + \boldsymbol{b1X1} + \boldsymbol{b2X2} + \boldsymbol{b3X3} + \mathrm{e}$$

Information:

Y	= Interest to Buy
A	= Constant
$b1b2b3bk$	= Partial Regression Coefficient
$X1$	= Electronic Word Of Mouth (E-Wom)
$X2$	= Celebrity endorsement
$X3$	= Customer Review
It is	= Error or remainder

After carrying out the classical assumption test, and the data is declared normal, there is no multicollinearity, and there is no heteroscedasticity, the data can be processed further in accordance with the research objectives. The steps that are often used in multiple linear regression analysis are the Determination Coefficient, F Test, and t Test.

a. The coefficient of determination in linear regression is often interpreted as how much ability all independent variables have in explaining the variance of the dependent variable. In simple terms, the coefficient of determination is calculated by squaring the Correlation Coefficient (R). The Adjusted R Square value can increase or decrease with the addition of new variables, depending on the correlation between the additional independent variable and the dependent variable. The Adjusted R Square value can be negative, so if the value is negative, then the value is considered 0, or the independent variable is completely unable to explain the variance of the dependent variable. In this case, the coefficient of determination test is carried out to find out how much influence the independent variables (E-WOM, celebrity endorsement, and customer reviews) have on the dependent variable (purchase interest).
b. The F test is a goodness of fit test that must be carried out in linear regression analysis. In hypothesis testing, the F test determines the simultaneous influence of the E-WOM, celebrity endorsement and customer review variables on purchasing interest. F test testing conditions:

1. Based on the significance value of the Anova Output:
    - If the value of Sig <0.05 then there is an influence of X1, X2, and X3 simultaneously on Y
    - If the value of Sig > 0.05 then there is no simultaneous influence of X1, X2, and X3 on Y
2. Based on the comparison of the calculated F value with F Table:
    - If the calculated F value > F table then there is a simultaneous influence of X1, X2, and X3 on Y
    - If the calculated F value < F table then there is no influence of X1, X2, and X3 simultaneously on Y

c. The t test aims to find out whether the independent variable or independent variable (X) partially (individually) has an effect on the dependent or dependent variable (Y). In this case, the t test is to determine the partial influence of the E-WOM, celebrity endorsement and customer review variables on purchasing interest. Basics for taking the Partial t Test:

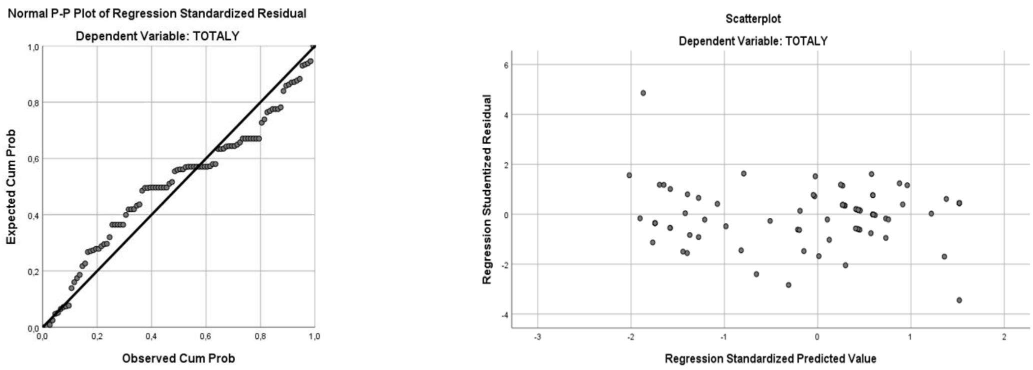
1. Based on significance value (Sig.)
    - If the Significance value (Sig.) < 0.05 then there is an influence of the independent variable (X) on the dependent variable (Y)
    - If the Significance value (Sig.) > 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y)
2. Based on the comparison of the calculated t value with the t table:
    - If the calculated t value > t table then there is an influence of the independent variable (X) on the dependent variable (Y).
    - If the calculated t value < t table then there is no influence of the independent variable (X) on the dependent variable (Y)

4. Discussion

Respondents have met previously determined criteria. This research found that the characteristics of respondents who made purchases at Bloomery Cake & Patisserie based on age level 12-20 years had a percentage of 27%, age 21-29 years was 48%, age 30-38 years had a percentage of 21%, and age > 39 years old has a percentage of 4%. It can be seen that the majority of the sample in this study were aged 21-29 years. The average of the Electronic Word of Mouth (E-WOM) variable is 4.31, which is in the very good category according to respondents. The average of the Celebrity endorsement variable is 4.24, which is in the very good category according to respondents. The average Customer Review variable of 4.34 is in the very good category according to respondents. The average Purchase Interest variable of 4.28 is in the very good category according to respondents.

Validity tests have been carried out and all question items in the questionnaire have a calculated r value greater than the r table value so that all statement items are declared valid. Based on the value reliability testCronbach’s alpha from the instrument Electronic Word of Mouth (E-WOM) is 0.813, Celebrity Endorsement of 0.787, Customer Review amounted to 0.731, and buying interest amounted to 0.727. We can see together that all values of Cronbach's alpha of each variable are greater (>) than 0.60. So it can be concluded that all variables are said to be reliable.

Graph 1. Normality and Heteroscedasticity Test



Normality analysis on the three dependent variables (Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, and Customer Review) shows a straight-line pattern on the P-Plot graph. This indicates that the residual data from the research regression model is normally distributed. The results of calculating the Tolerance value show that there are no independent variables that have a Tolerance value <0.10. The results of calculating the VIF (Variance Inflation Factor) value also show the same thing, there is not one independent variable that has a VIF value > 10. Therefore, it can be concluded that there is no multicollinearity between the independent variables in the regression model on the three dependent variables (Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, Customer Review). Heteroskedasticity analysis on the three dependent variables (Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, Customer Review) shows that the data points on the scatterplot are distributed randomly, without showing any particular pattern. This identifies that the residual variance is constant and there is no heteroscedasticity

Table 2. Multiple Linear Regression Analysis

Model	B	Std. Error	Beta	t	Say.	Tolerance	VIF
(Constant)	2,855	1,256		2,273	,025		
E-Wom (X1)	,244	,083	,357	2,937	,004	,294	3,403
Celebrity Endorsement (X2)	,213	,106	,231	2,014	,047	,331	3,023
Customer Review (X3)	,250	,115	,240	2,177	,032	,355	2,813

Based on the table, the multiple linear regression equation is obtained as follows:

Y=2.855+0.244X1+0.213X2+0.250X3

The value of the regression equation with a constant of 2.855 means that if the value of the Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, and Customer Review variables is considered constant or has a value of 0 then consumers will still have a positive purchasing decision. A positive value for each independent variable coefficient indicates a unidirectional relationship between each independent variable and the dependent variable. However, if you look further at the t test (significance of influence) on variable X2, which shows there is no significant influence, then the positive coefficient on the ease of use variable becomes meaningless. The interpretation of the positive coefficients in X1 and The Adjusted R Square value is 0.571 (57.1%), which means that the ability of the Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, Customer Review variables to explain the variance of the purchase interest variable is 57.1%, while it is 42.9 The remaining % is influenced by other independent variables not tested in this study. The F test shows that the calculated F value is 44.887 > F table 2.70, so E-WOM(X1), Celebrity Endorsement(x2), and Customer Review(X3) which means Electronic Word Of Mouth (E-WOM), Celebrity Endorsement, Customer Reviews simultaneously influence purchasing interest.

The t test shows that the calculated t value of the Electronic Word of Mouth (E-WOM) variable is 2.937, which is a higher value compared to the t table of 1.984, meaning that the Electronic Word of Mouth (E-WOM) variable has a significant effect on Purchase Interest, as well as from sig value 0.004 < 0.05 means that Electronic Word of Mouth (E-WOM) influences Purchase Interest. The test results show that Electronic Word of Mouth (E-WOM) has a positive and significant effect on trust. Based on the test results, it can be concluded that the second hypothesis is accepted. The results of this research are under the research results of Erika Kristina (2021) which states that Electronic Word of Mouth (E-WOM) has a positive and significant effect on consumer buying interest. With the existence of Electronic Word of Mouth (E-WOM) made by previous consumers regarding the product Bloomery Cake & Patisserie, consumers are more likely to trust recommendations from others because online reviews, testimonials on social media, and recommendations from influencers are considered more credible sources of information than traditional advertising. Not only that, Electronic Word of Mouth (E-WOM) reaches a wide audience quickly and easily. Through the internet, information can spread in seconds throughout the world. This allows businesses to reach more potential customers at lower costs.

The t test shows that the calculated t value of the Celebrity Endorsement variable is 2.014, which is a higher value than the t table of 1.984, meaning that the Celebrity Endorsement variable has a significant effect on Buying Interest, and from a sig value of 0.047 < 0.05, Celebrity Endorsement has an effect on Buying Interest. The test results show that Celebrity Endorsement has a positive and significant effect on trust. Based on the test results, it can be concluded that the second hypothesis is accepted. This research found that Celebrity Endorsements have a positive and significant influence on consumer buying interest. This is in line with research by Dikdik Harjadi (2022) which states that Celebrity Endorsements have a positive and significant effect on consumer buying interest. Consumers tend to trust and are interested in buying products recommended by celebrities they idolize. Celebrity endorsements can also increase consumer awareness of products and build a positive image of Bloomery Cake & Patisserie products in the eyes of consumers.

The t test showed that the calculated t value of the Customer Review variable was 2.117, which was higher than the t table of 1.984, meaning that the Customer Review variable partially had a significant effect on Purchase Interest, and from a sig value of 0.032 < 0.05, Customer Reviews had an effect on Purchase Interest. The test results show that Customer Review positive and significant effect on trust. Based on the test results, it can be concluded that the second hypothesis is accepted. This research found that Customer Reviews have a positive and significant influence on consumer buying interest. This is in line with research by Sofia Amalia (2023) which states that Customer Reviews have a positive and significant influence on consumer buying interest. Consumers tend to trust reviews from fellow consumers more than a company's marketing claims. Positive customer reviews can provide confidence and valuable information about real experiences in purchasing Bloomery Cake & Patisserie products.

5. Conclusion

This research found that Electronic Word of Mouth (E-WOM), Celebrity Endorsement, and Customer Reviews simultaneously influenced purchasing interest in Bloomery Cake & Patisserie. Electronic Word of Mouth (E-WOM) partially influences purchasing interest in Bloomery Cake & Patisserie. Celebrity Endorsement partially influences purchasing interest in Bloomery Cake & Patisserie. Online customer reviews partially influence purchasing interest in Bloomery Cake & Patisserie

- Electronic Word of Mouth (E-WOM)
  The advice given to Bloomery Cake & Patisserie regarding Electronic Word of Mouth (E-WOM) is to pay attention to the Electronic Word of Mouth (E-WOM) circulating on all existing social media and then try to organize the E-WOM (such as responding and replying). the E-WOM). So that in the end the E-WOM seen by respondents can be understood clearly because there is a further response/explanation from Bloomery Cake & Patisserie.
- Celebrity Endorsement
  The advice given by Bloomery Cake & Patisserie regarding Celebrity Endorsements, to improve further attention to the selection of celebrities used, needs to consider what the celebrity's image is in recent times, needs to consider what the celebrity's image is currently, whether they have been involved in scandals or not, and so on .. Then apart from that, you also need to choose and pay attention to how celebrities are used when making endorsements, it's good if they have good knowledge about Bloomery Cake & Patisserie itself. So it is recommended for Bloomery Cake & Patisserie to provide a special brief for them before advertising Bloomery Cake & Patisserie and review it before they advertise it either on Bloomery Cake & Patisserie social media or the celebrities themselves.
- Customer Review
  Suggestions given to Bloomery Cake & Patisserie regarding Customer Reviews To increase responses to Customer Reviews, Bloomery Cake & Patisserie can adopt a proactive and responsive approach. First, it's important to respond to each review quickly and in a polite manner. A quick response shows that a company cares about what their customers think. Additionally, responding well to criticism and gratitude to customers who provide negative feedback can demonstrate a willingness to learn and improve. Offer appropriate solutions or compensation if there are complaints, and invite customers to talk privately if necessary. Asking for positive reviews after an issue is resolved can help improve the imageBloomery Cake & Patisserie . Lastly, use reviews as a learning tool to continuously improve products and services, and provide ongoing response to reviews overall. With this approach, Bloomery Cake & Patisseriecan build strong relationships with customers and improve its business reputation.

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THE EFFECT OF PRODUCT QUALITY, INFLUENCERS, AND PRICE ON PURCHASING DESCISIONS FOR IMPLORA URBAN LIP CREAM MATTE (STUDY ON CONSUMERS OF IMPLORA PRODUCTS SERIES 12 BROWN SUGAR)

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ABSTRACT
This study aims to explore the influence of product quality, influencers, and price on consumer purchasing decisions for Implora Urban Lip Crean Matte series 12 Brown Sugar. In this study, product quality, as a major factor in purchasing decisions plays an important role in influencing consumer preferences. On the other hand, influencers have become an increasingly popular strategy in influencing consumer behavior. The influence of influencers in promoting Implora Urban Lip Cream Matte series 12 Brown Sugar can affect consumers' perception of product quality and value. Price also affects the buying process in the Implora Urban Lip Cream Matte 12 Brown Sugar series, so this study analyzes whether these three factors will be connected or influence the decision to purchase Implora Urban Lip Cream Matte products. The research method used in this research is quantitative in nature where using survey methods and sampling. The instrument in this study was a questionnaire involving 100 respondents who met the criteria with the conditions of adolescents to adults, had bought the product more than once and used Implora Urban Lip Cream Matte series 12 Brown Sugar products. Instrument testing is carried out by validity and reliability tests, then classical assumption tests, normality tests, multicollinearity tests, heteroscedasticity tests, multiple linear regression analysis, coefficient of determination tests, f tests and t tests. Based on the research and data processed, it can be concluded that although all independent variables together have an effect in explaining purchasing decisions, variable X_3 may have a smaller individual effect than X_1 and X_2. Nevertheless, its is important to consider that the three independent variables are still important to components in understanding and predicting purchasing decisions for Implora Urban Lip Cream Matte Series 12 Brown Sugar.
Keywords: product quality, influencers, price, purchasing decisions, influence

1. Introduction

In recent years, the cosmetics industry has experienced rapid development as people's awareness of the importance of aesthetics in self-care and appearance has increased. Many cosmetic products have emerged and are competing to offer varying quality and prices. Cosmetic products have become a necessity to fulfill the beauty image of facial appearance. The potential for the rapid spread of cosmetic products makes the Food and Drug Supervisory Agency (BPOM) increasingly strict in controlling the spread of cosmetic products that are not marketable.

Since 2002, CV Priskila Mandiri Utama has been marketing its products and has received a good response from consumers. With only his wife and two employees, Go Wie Liem started a fragrance business under the Implora brand. The fragrance received a good response from the public. CV Priskila Mandiri Utama began developing decorative products such as face powder, eyeshadow, and solid lip stick to adapt to the changing trends of women's needs. These products were sold exclusively in Java and Bali. In 2017, CV Priskila Mandiri Utama launched Urban Lip Cream Matte, which received a positive response among beauticians and became women's best friend. In the same year, CV Priskila Mandiri Utama collaborated with PT Kapal Api Global, and changed its name to PT Implora Sukses Abadi which is now the new name. The company began to enter the personal care industry such as disinfectants and hand sanitizers rather than just producing perfumes. The company continues to innovate to create products that meet consumer needs.

2. Literature Review

Product quality according to Kotler and Keller (2016: 164) is the ability of an item to provide results or performance that matches and even exceeds customer desires. Product quality reflects how the product can perform its function in accordance with consumer expectations (Erdalina & Evanita, 2015). currently cosmetic products are increasingly gaining public interest. Implora releases cosmetic products that are easy to find and are often sought after by many women to meet their facial beauty needs.

People, especially women, are often influenced by others in buying something they want. Many contents related to business products such as on the TikTok and Instagram platforms have sprung up in gaining the interest of the audience to be interested in what is promoted on the business product.Influencer is a method of appointing people or figures who are considered to have influence among the public or target consumer segments to be addressed and are felt to be the target of promotion of the brand (Hariyanti and Wirapraja, 2018).In April 2022, Implora introduced Lyodra Ginting and appointed Mahalini as its new Brand Ambassador. Both Brand Ambassadors are singers and are considered the right person to represent Indonesian women who love themselves and never give up.

In general, when someone is looking to buy an item, they tend to evaluate price as an important factor in decision making. Gitosudarmo (2014: 271) argues that price is a measure of the size of the value of a person's satisfaction with the product he bought. Several previous researchers (Anggriani, Sumarsih, Supu, and Rivai, 2019; Apriliani, Ekowati, 2023; Aqilah, Cahyono 2023) stated that the variables of product quality, influencers, and price have a positive effect on purchasing decisions.

In the ever-evolving world of cosmetics, a deep understanding of the factors that influence consumer purchasing decisions is key for companies to successfully position and market their products effectively.Today, the cosmetics industry focuses not only on the product itself, but also on the consumer experience and overall brand image. Based on this gap, the problem formulation that can be built is whether product quality, influencers, and price have a simultaneous and partial effect on purchasing decisions.

The purpose of this study is to review the influence of product quality, influencer influence, and price on purchasing decisions, specifically in the context of products on Implora Urban Lip Cream Matte, not only important to understand the latest market trends, but also to reveal the dynamics underlying consumer behavior in this digital era.

3. Research Methods

The research conducted is quantitative and uses a survey method. Quantitative research is a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection is quantitative or statistical, with the aim of testing the hypothesis set (Sugiyono, 2017: 8). This research instrument is a questionnaire which is then transformed into primary data, with 100 respondents each who meet the research criteria. The sampling technique in this study was purposive sampling. The criteria used are teenage to adult women, who have bought and used Implora Urban Lip Cream Matte series 12 Brown Sugar products.

Table 1

Variable	Definition	Indicator
Product Quality (X_1)	**Theoretical Definition:** Product quality according to Kotler and Keller (2016: 164) is the ability of an item to provide results or performance that matches and even exceeds customer desires. **Operational Definition:** Product quality is the skill of a product in providing product excellence Implora Urban Lip Cream Matte Brown Sugar series.	1. Durability 2. Reliability 3. Product Suitability 4. Ease of use and repair (Budiyanto, 2018)
Influencer (X_2)	**Theoretical Definition:** According to Nurhandayani et al (2019), an influencer is someone who is famous and has certain skills that they usually show on social media. **Operational Definition:** Influencer is a person or figure who can influence other people to be interested in a thing or item to make a purchase on Implora Urban Lip Cream Matte products.	1. Visibility 2. Credibility 3. Attractive 4. Power (Sartika, 2018)
Price (X_3)	**Theoretical Definition:** According to Kotler and Keller (2021: 278) price is an element of the marketing mix that provides benefits and generates costs. **Operational Definition:** Price is the amount or quantity that consumers must pay to buy Implora Urban Lip Cream Matte products.	1. Conformity of service prices with service quality 2. Price list 3. Special discounts 4. Perceived price (Kotler and Amstrong. 2016)
Purchase Decision (Y)	**Theoretical Definition:** According to Kotler and Armstrong (2016: 199) purchasing decisions are part of consumer behavior, consumer behavior, namely how individuals, groups and organizations choose, buy, use, and how goods, services, and ideas, or experiences satisfy their needs and desires. **Operational Definition:** Purchasing decisions are actions taken by buyers to get the goods they are looking for.	1. Steadiness in a product 2. Habit of buying a product 3. Giving recommendations to others 4. Decided to buy because they like the brand 5. Buying according to needs and desires

		6. Consumer loyalty not to change their purchasing decisions 7. Repeat purchase 8. Quality (Kotler and Amstrong, 2016)

3.1 Validity and Reliability Test

Validity and reliability tests are carried out for instrument testing. The validity test is an instrument to determine existing or valid data from the sample to collect the desired results. The questionnaire consists of questions that are intended to be answered by respondents to obtain results. The reliability test is carried out after conducting a validity test to ensure that the research conducted can be trusted. The basis for decision making in the validity test is to compare the calculated r value with the r table value. If the calculated r value is greater than or equal to the r table value, then an instrument is declared valid. Vice versa, if the calculated r value is smaller than the r table value, then an instrument is declared invalid. While the basis for decision making in the reliability test if the Cronbach's Alpha value> 0.60 then the questionnaire can be declared reliable or consistent, otherwise if the Cronbach's Alpha value <0.60 then the questionnaire is declared unreliable or inconsistent.

3.2 Classical Assumption Test

The classic assumption test is used to determine whether there is residual normality, multicollinearity, autocorrelation and heteroscedasticity in the regression model (Purnomo, 2017: 107).

3.3 Normality Test

The normality test is carried out to test whether in a regression model, an independent variable and the dependent variable or both have a normal or abnormal distribution (Ghozali, 2016). The data normality test can be done using the one sample kolmogorov smrinov test. If the significance value is above 5% or 0.05, the data has a normal distribution, but if the one sample komogorov smirnov test results produce a significant value below 5% or 0.05, the data does not have a normal distribution.

3.4 Mulitcolinearity Test

The mulitcolinierity test aims to find out whether the regression model found a correlation between independent variables or independent variables (Ghozali, 2016). In finding whether or not there is mulitcolinierity in the regression model, it can be seen from the tolerance value and the variance inflation factor (VIF) value. Based on the tolerance value, if the tolerance value is greater than 0.10, there is no multicollinearity, but if the tolerance value is less than 0.10, there is multicollinearity. Based on the VIF value, if the VIF value is <10.00, it means that there is no multicollinearity in the regression model, but if the VIF value is> 10.00, it means that there is multicollinearity in the regression model.

3.5 Heteroscedasticity Test

According to Ghozali (2016) a good research model is one that does not have heteroscedasticity. To determine the presence or absence of heteroscedasticity in a multiple linear regression model, namely by looking at the scatterplot graph or from the predicted value of the dependent variable, namely SRESID with the residual error, namely ZPRED. The absence of heteroscedasticity can be concluded based on the absence of a certain pattern and does not spread above or below zero on the Y-axis.

3.6 Multiple Linear Regression Analysis

Sugiyono (2018: 307) says that multiple linear regression is used by researchers to predict how (up and down) the dependent variable or multiple linear regression is carried out when the number of independent variables is at least two, while according to Ghozali (2018: 95) the multiple linear regression analysis model is used to explain the relationship and how much influence the independent variables have on the dependent variable.

3.7 Coefficient of Determination

After testing the classical assumptions and the data is declared normal, there is no multicollinearity and there is no heteroscedasticity, the data can be processed further by testing the coefficient of determination, F test, t test. The coefficient of determination test in linear regression is defined as how bear the ability of all independent variables (product quality, influencer, price) to influence the dependent variable (purchase decision). In simple terms, the coefficient of determination is calculated by squaring the coefficient of correlation (R). The Adjusted R Square value can increase or decrease with the addition of new variables, depending on the correlation between the additional independent variable and the dependent variable. The Adjusted R Square value can be negative, so if the value is negative then the value is considered 0, or the independent variable is completely unable to explain the variance of the dependent variable.

3.8 F Test

According to Ghozali (2018: 98) the F test aims to determine the effect of independent variables together (simultaneously) on the dependent variable. Based on the Anova Output significance value, if the Sig value <0.05 then there is a simultaneous influence of X_1, X_2, and X_3 on Y. If the Sig value> 0.05 then there is no simultaneous influence of X_1, X_2, and X_3 on Y. Based on the comparison of the calculated F value with the F table, if the calculated F value> F table then there is a simultaneous influence of X_1, X_2, and X_3 on Y. If the calculated F value < F table then there is no simultaneous influence of X_1, X_2, and X_3 on Y.

3.9 T Test

According to Ghozali (2018: 152) the t test is used to determine each independent variable on the dependent variable. The basis for taking the parisal t test is based on the significance value (Sig.) if the significance value (Sig.) <0.05 then there is an influence of the independent variable (X) on the dependent variable (Y). If the significance value (Sig.) > 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y). Based on the comparison of the t value with the t table, if the t value> t table then there is an influence of the independent variable (X) on the dependent variable (Y). If the value of t count < t table then there is no influence of the independent variable (X) on the dependent variable (Y).

4. Research Findings and Discussion

4.1 Validity and Reliability Test

4.1.1 Validity Test

The validity test is an instrument used to determine existing or valid data from the sample to collect the desired results. The basis for decision making in the validity test is to compare the calculated r value with the r table value. If the calculated r value is greater than or equal to the r table value, then an instrument is declared valid.

In table 2, it can be seen that the value of r count on the product quality variable (X_1), influencers (X_2), and price (X_3), as well as the purchasing decision variable (Y)> r table value, it can be concluded that the data in this study is declared valid.

Table 2

Variable	Item	R count	R table	Description
Product Quality	X1.1	0,836	0,19	Valid
	X1.2	0,898	0,19	Valid
	X1.3	0,830	0,19	Valid
	X1.4	0,555	0,19	Valid
Influencer	X2.1	0,712	0,19	Valid
	X2.2	0,870	0,19	Valid
	X2.3	0,868	0,19	Valid
	X2.4	0,850	0,19	Valid
Price	X3.1	0,669	0,19	Valid
	X3.2	0,788	0,19	Valid
	X3.3	0,838	0,19	Valid
	X3.4	0,755	0,19	Valid
Purchase Decision	Y1.1	0,872	0,19	Valid
	Y1.2	0,888	0,19	Valid
	Y1.3	0,883	0,19	Valid
	Y1.4	0,891	0,19	Valid
	Y1.5	0,917	0,19	Valid

4.2 Reliability Test

The reliability test is carried out after conducting a validity test to ensure that the research conducted can be trusted. The basis for decision making in the reliability test is in the form of a Cronbach's Alpha value> 0.60, so the questionnaire can be declared reliable or consistent, otherwise if the Cronbach's Alpha value <0.60, the questionnaire is declared unreliable or inconsistent.

Based on table 3 on the reliability test results, it can be concluded that all independent and dependent variables have a Cronbach's Alpha value> 0.60 so that it can be stated that all questionnaire data can be declared reliable or consistent.

Table 3

Variable	Cronbach's Alpha	r-Table	Description
Product Quality	0,782	0,60	Reliabel
Influencer	0,843	0,60	Reliabel
Price	0,757	0,60	Reliabel
Purchase Decision	0,993	0,60	Reliabel

4.3 Normality Test

The data normality test can be done using the one sample Kolmogorov Smrinov test. If the significance value is above 5% or 0.05 then the data has a normal distribution, but if the one sample komogorov smirnov test results produce a significant value below 5% or 0.05 then the data does not have a normal distribution.

Based on table 4, the significance value of the table is 0.105> 0.05, so the data can be concluded to be normally distributed.

Table 4

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		105
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.72442005
Most Extreme Differences	Absolute	.073
	Positive	.064
	Negative	-.073
Test Statistic		.073
Asymp. Sig. (2-tailed)		.200[c,d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

4.4 Multicollinearity Test

In finding whether or not there is mulitcolinierity in the regression model, it can be seen from the tolerance value and the variance inflation factor (VIF) value. Based on the tolerance value, if the tolerance value is greater than 0.10, there is no multicollinearity, but if the tolerance value is less than 0.10, there is multicollinearity. Then based on the VIF value, if the VIF value is <10.00, it means that there is no multicollinearity in the regression model, but if the VIF value is> 10.00, it means that there is multicollinearity in the regression model.

Based on table 5, it can be seen that the tolerance value of the product quality variable (X_1), influencers (X_2), and price (X_3)> 0.10, it can be concluded that the data in this study does not occur multicollinearity.

The variance inflation factor (VIF) value listed on each variable (X_1, X_2, X_3) also shows < 10, so it can be stated that all data in the study does not occur multicollinearity with an overall VIF value of less than 10 and a tolerance value of more than 0.10 on each independent variable.

Table 5

Coefficients[a]					
Model	Unstandardized Coefficients	Standardi zed Coefficien ts	t	Sig.	Collinearity Statistics

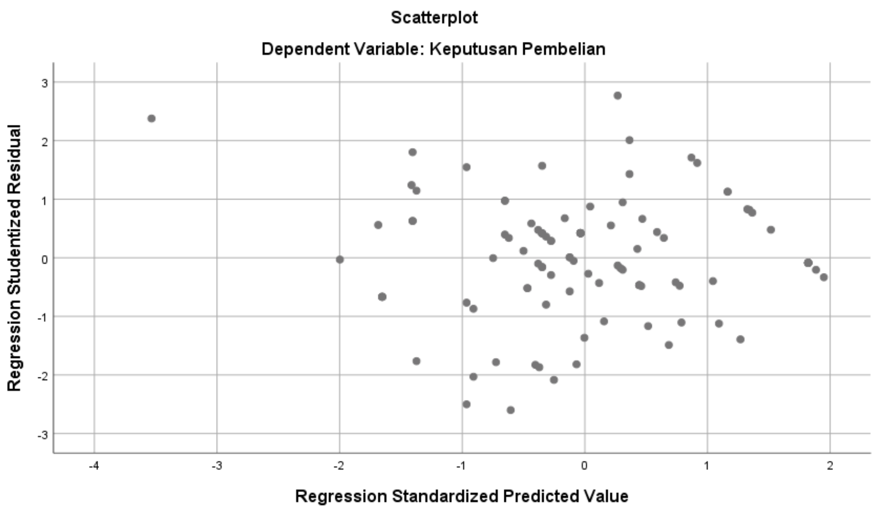
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-3.380	1.099		-3.075	.003		
	Product Quality	.481	.125	.290	3.836	.000	.395	2.529
	Influencer	1.091	.111	.690	9.842	.000	.460	2.174
	Price	-.101	.116	-.060	-.876	.383	.477	2.098
a. Dependent Variable: Purchase Decision								

4.5 Heteroscedasticity Test

In determining the presence or absence of heteroscedasticity in a multiple linear regression model, it can be done by looking at the scatterplot graph or from the predicted value of the dependent variable, SRESID, with the residual error, ZPRED. The absence of heteroscedasticity can be concluded based on the absence of a certain pattern and does not spread above or below zero on the y-axis.

In the scatteplot results below, it can be seen that the data points spread above and below on the Y axis, so it can be concluded that the data in this research does not occur heterocodeasticity.

Graphics 1



4.6 Multiple Linear Regression Test

Multiple linear regression is used by researchers to predict how (up and down) the dependent variable or multiple linear regression is performed when the number of independent variables is at least two.

Table 6

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.380	1.099		-3.075	.003

	Quality Product	.481	.125	.290	3.836	.000
	Influencer	1.091	.111	.690	9.842	.000
	Price	-.101	.116	-.060	-.876	.383
a. Dependent Variable: Purchase Decision						

$Y = a + b_1X_1 + b_2X_2 + b_3X_3$
$Y = -3,380 + 0,481 + 1,091 - 0,101$

- The cosntanta value is -3.380, this figure is negative and means that there is a decrease in purchasing decisions by -3.380.
- The coefficient value b1 is 0.481, meaning that if the product quality has an additional value of 1 unit, the purchasing decision will increase by 0.481 units, assuming that the other independent variables remain.
- The coefficient value of b2 is 1.091, meaning that if the influencer experiences an increase in value of 1 unit, the purchasing decision will increase by 1.091 units assuming other independent decisions remain.
- The coefficient value of b3 is -0.101, meaning that if the price increases in value by 1 unit, the purchasing decision will decrease by -0.101 units, assuming other variables remain constant.

4.7 Determination Coefficient Test

The coefficient of determination test in linear regression is defined as how much the ability of all independent variables (product quality, influencers, price) to influence the dependent variable (purchase decision).

Table 7

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878[a]	.771	.765	1.74984
a. Predictors: (Constant), Price, Influencer, Product Quality				

Based on the table above, it is influenced by the R Square coefficient value of 0.771 or 77.1%. So that it can be concluded that the influence of the independent variables (X_1, X_2, X_3) on the dependent variable (Y) is 77.1%.

4.8 F Test

The F test is used to evaluate the feasibility or simultaneous influence between the independent and dependent variables in the study. Based on the Anova Output significance value, if the Sig value <0.05, there is a simultaneous influence of X_1, X_2, and X_3 on Y. If the Sig value> 0.05, there is no simultaneous influence of X_1, X_2, and X_3 on Y. Based on the comparison of the calculated F value with the F table, if the calculated F value> F table, there is a simultaneous influence of X_1, X_2, and X_3 on Y. If the calculated F value < F table, there is no simultaneous influence of X_1, X_2, and X_3 on Y.

Table 8

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1043.505	3	347.835	113.599	.000[b]
	Residual	309.257	101	3.062		
	Total	1352.762	104			
a. Dependent Variable: Purchase Decision						
b. Predictors: (Constant), Price, Influencer, Product Quality						

In the Anova table, it can be seen that the sig value is <0.05, so it can be stated that the X_1, X_2, and X_3 variables simultaneously affect the Y variable.

Furthermore, the comparison of the values in the F count and F table is as follows:
DF 1 = k = 3
DF 2 = n-k-1 (105-3-1) = 101
F table = 3; 101 = 2.69
F count = 113.599 > 2.69

Then X_1, X_2, X_3 have a significant effect on variable Y because the calculated F value in the table is greater than the F table.

4.9 T Test

Based on the comparison of the t value with the t table, if the t value> t table then there is an influence of the independent variable (X) on the dependent variable (Y). If the value of t count < t table then there is no influence of the independent variable (X) on the dependent variable (Y).

Table 9

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.380	1.099		-3.075	.003
	Product Quality	.481	.125	.290	3.836	.000
	Influencer	1.091	.111	.690	9.842	.000
	Price	-.101	.116	-.060	-.876	.383
a. Dependent Variable: Purchase Decision						

The following is a comparison of the calculated t value with the t table:
T table = t (a/2; n-k-1)
A = 5% = t (0.05/2; 105-3-1)
= 0,025 ; 101

= 1,983

- The calculated t value on variable X_1 is 3.836> 1.983, it can be stated that the product quality variable has an influence on purchasing decisions.
- The t value on variable X_2 is 9.842> 1.983, it can be stated that the influencer variable has an influence on purchasing decisions.
- The calculated t value on variable X_3 is -0.876 < 1.983, it can be stated that the price variable has no influence on purchasing decisions.

5. Conclusion

Based on the results of data analysis, this study shows that the data used in this study are valid and reliable. This evident from the correlation values between variables X_1, X_2, and X_3 which indicate the validity of the data, as well as the Cronbach's Alpha value which exceeds 0.60, indivating the consistency or reliability of the questionnaire used. No multicollinearity problem was found because the Variance Inflation Factor (VIF) value on all variables was less than 10 and the tolerance value was more than 0.10. In addition, the scatterplot shows a pattern of data distribution that does not experience heteroscedasticity. The analysis also revealed that the independent variables have a significant influence on the dependent variable, with each independent variable (X_1, X_2, X_3) contributing differently to the purchasing decision (variable Y).

Overall, the independent variables simultaneously had a significant effect on the dependent variable in the ANOVA test. However, variable X_3 did not show a significant effect on variable Y as seen from its t value. Nonetheless, the analysis concluded that the magnitude of the influence of the independent variables on the dependent variable reached 77.1% indicating the importance of the independent variables in explaining variations in purchaisng decisions.

The decision in this study can be concluded that although all independent variables collectively play a significant role in explaining purchasing decisions, variable X_3 may have a lower individual impact compared to X_1 and X_2. However this can be considered because the three independent variables remain important factors in understanding and predictiong purchasing decisions.

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OPTIMIZING JOB SATISFACTION: THE ROLE OF COWORKER SUPPORT AND WORK MOTIVATION AT PT KERETA API INDONESIA UPT BALAI YASA YOGYAKARTA

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ABSTRACT
Workers spend a lot of time in the work environment, so job satisfaction is very important. At PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta, job satisfaction impacts individuals and service quality. Colleague support and high motivation increase job satisfaction, as it makes employees feel more competent and motivated. Therefore, his study aims to determine the impact of coworker support on job satisfaction mediated by work motivation at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta. 50 respondents, including both permanent and temporary employees, provided the data for this study. The research is quantitative, and data analysis is done using SMARTPLS. The results showed that coworker support has no direct effect on job satisfaction but has a significant indirect effect through motivation. The findings highlight the importance of leaders being able to strengthen supportive relationships among workers to stimulate work motivation and increase satisfaction in the workplace.
Keywords: *coworker support, job satisfaction, motivation.*

1. Introduction

Organisations that are able to create a work environment that supports and nurtures employee satisfaction have a competitive advantage in employee retention. Satisfied employees tend to be more productive, creative, and committed to the organisation (Marie Giese & Bola Avoseh, 2018), resulting in lower absenteeism and higher retention rates, which in turn can reduce recruitment and training costs. Satisfied employees will provide better service to customers, which in turn increases customer loyalty and overall organizational profits. Organisations with satisfied employees are better able to handle business challenges and changes because they are more flexible, innovative, and open to new ideas, which is invaluable in dealing with fast-paced market dynamics. Employee satisfaction is not only an internal factor but also the key to an organisation's success in achieving its long-term goals.

Job satisfaction in public organisations such as PT Kereta Api Indonesia is very important because it is directly related to the quality of services received by the community. PT Kereta Api Indonesia has the responsibility to continuously improve its service transformation, which, from time to time, is getting better. However, work behaviours that reflect dissatisfaction still occur, such as the phenomenon of employees not being in place during working hours, tardiness, and manipulation of attendance in one of PT Kereta Api Indonesia's branch units (Widyastuti & Trisninawati, 2018). The work environment of friends who lack discipline can impress tolerance for violations in the organisation and transmit it to other employees. The inherent supervision of superiors by subordinates is found to be a factor that is still considered poor (Widyastuti & Trisninawati, 2018), which can affect worker motivation. This study aims to uncover the problem of whether coworker support and motivation are antecedents of job satisfaction at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta.

Job satisfaction is a complex concept that is influenced by a variety of factors, including coworkers' support. Coworker support is defined as how much employees help each other in doing everything between colleagues in the organization (Herawati et al., 2023). Building a relationship between employees and their fellow coworkers fosters trust and affection, which is crucial for organisational success. Additionally, receiving support from fellow employees can enhance employee satisfaction with themselves and their work. This will motivate employees to gain a deeper psychological and emotional understanding of their coworkers. Previous studies suggest that coworker support can have a significant positive impact on employees' job satisfaction levels (Journals & Merchandisers, 2018). However, other studies have found that coworker support does not significantly affect job satisfaction (Hamdani, 2022) (Muchtadin & Sundary, 2023). There are inconsistencies in previous research findings on the relationship between coworker support and job satisfaction.

With coworker support, motivation can increase. In Hessari (2022), coworker support has a significant positive effect on motivation. Individuals who feel coworker support have a sense of mutual support, individuals will feel valued and motivated to do a better job. Positive involvement from fellow employees also creates a pleasant work climate, so that it can increase satisfaction at work. However, there are inconsistencies in the findings on the relationship between coworker support and motivation. Previous research also confirmed a negligible effect of coworker support on job satisfaction (Vitri, 2003).

Motivation can be a factor in job satisfaction. The findings of Sinniah et al. (2022) and Carvalho et al. (2020) confirmed that motivation has a significant positive effect on job satisfaction. Motivation is an internal drive that encourages individuals to achieve goals and comes from needs, desires, and values. Motivation comes from intrinsic (from within) or extrinsic (from outside) sources and affects individual behaviour, performance, and achievement in various ways (Hong & Waheed, 2011). Intrinsic motivation is the motivation that drives a person to achieve and comes from within the individual, while extrinsic motivation is the motivation that comes from outside the self and also determines one's behavior in life. However, other research findings (Abrori & Hidayati, 2020) (Kurniawan & Nurohmah, 2022) show that motivation does not have a significant effect on job satisfaction. Previous research has inconsistently shown that motivation has an effect on job satisfaction. The inconsistency of previous research and the situation at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta provide an opportunity for researchers to conduct further research on what factors affect job satisfaction, with coworker support as an independent variable and motivation acting as a mediator.

2. Literature Review

2.1 Coworker support

According to Kim et al. (2017) coworker support refers to the support that employees feel from their peers or their evaluation of the quality of the helping relationships they receive. Individuals who feel coworker support from colleagues can make employees feel more valued and satisfied with their work, reducing their tendency to leave the company (Nagami et al., 2010). Thus, coworkers have an important role in influencing attitudes among coworkers in the organisation (Shukla & Srivastava, 2016). Coworkers' emotional and instrumental support significantly contributes to job satisfaction, with instrumental support buffering the negative impact of unrewarding work on satisfaction (Ducharme & Martin, 2000). Affective support includes acceptance and friendship, while instrumental support may include advice or task assistance.

2.2 Job Satisfaction

Job satisfaction is the attitude of an employee who has completed important work and feels the results of his work are appreciated. It is also the result of individual perceptions and work results that are influenced by the individual himself (Marie Giese & Bola Avoseh, 2018). This feeling becomes a feeling of liking from the individual's view of his job (Soelton et al., 2020). Various factors, including the job's characteristics, organisational factors, and individual factors like values, expectations, and needs, can influence a person's level of job satisfaction (Journals & Merchandisers, 2018). High job satisfaction is often associated with better performance, higher employee retention, and higher levels of happiness in daily work life (Journals & Merchandisers, 2018).

2.3 Motivation

Motivation is an important foundation in career development in companies, as it is the main driver for individuals to achieve their corporate and personal goals (Riyanto et al., 2021). This drive not only boosts morale but also triggers development, progress, and skill enhancement (Hong & Waheed, 2011). Strong motivation allows individuals to work optimally, producing the best results that not only benefit the company but also advance the individual's own career (Hong & Waheed, 2011). Thus, maintaining high motivation in the workplace is a key aspect of achieving career success and organisational goals (Luthans, 2002). Extrinsic motivation originates from external factors in the individual's environment, whereas intrinsic motivation originates from within the individual (Luthans, 2002).

2.4 Hypothesis Development

2.4.1 The impact of Coworker Support on Job Satisfaction

Job satisfaction refers to a person's level of happiness and emotional satisfaction with their job, as well as a positive evaluation of the work experience in a specific context. Coworker support is a factor that contributes to job satisfaction. Coworkers provide support in various forms, ranging from practical assistance in task completion to emotional support during work challenges. It entails active collaboration among individuals, constructive feedback, and expressions of appreciation and moral support. The presence of support from fellow colleagues not only increases individual motivation but also increases job satisfaction (Herawati et al., 2023). The research findings of Jabak (2023) and Herawati et al. (2023) show that coworker support has a significant effect on job satisfaction.
H1: Coworker support has a significant positive effect on job satisfaction.

2.4.2 The Effect of Coworker Support on Motivation

Individuals employees who feel high support from coworkers tend to experience increased motivation for carrying out tasks and achieving their goals (Hessari, 2022). Support from coworkers can provide individuals with moral encouragement and self-confidence, so they feel more motivated to contribute optimally in the work environment. Individuals tend to be more eager to overcome obstacles or challenges in their work when they feel supported. Research by Abdullatif and Anindita (2021) and Hessari (2022) demonstrated a significant positive effect of coworker support on motivation.
H2: Coworker support has a significant positive effect on motivation.

2.4.3 The impact of motivation on job satisfaction

Motivation is a psychological force that drives individuals to act or behave in a certain way. It motivates individuals to complete tasks well, improve performance, and achieve set goals. Various sources can drive motivation, including the desire for recognition, achievement, or personal satisfaction from completed work. The work environment, which includes

coworker support, growth opportunities, and a fair reward system, can also influence motivation. The more motivation there is, the greater the satisfaction. The findings of Carvalho et al. (2020), Astuti et al. (2020) and Sinniah et al. (2022) show that motivation has a significant positive effect on job satisfaction.
H3: Motivation has a significant positive effect on job satisfaction.

2.4.4 Mediation of Motivation on Coworker Support for Job Satisfaction

Coworker support is assistance or encouragement from others in the work environment, which can take the form of emotional, informational, or practical support. Motivation is an internal state that drives individuals to act or achieve goals. In this context, the mediating role of motivation occurs when support from coworkers affects one's motivation at work. This level of motivation then affects job satisfaction; highly motivated individuals tend to feel more satisfied, while the less motivated may feel less satisfied. This links the influence of coworker support on motivation Hessari (2022), and the influence of motivation on strengthening individual job satisfaction in the workplace (Sinniah et al., 2022).
H4: Coworker support has a significant effect on job satisfaction, mediated by motivation.

3. Research Methods

This research was conducted at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta, with a population of 50 employees, including permanent and non-permanent employees. Data collection was carried out through a census using a questionnaire as a research instrument. Researchers submitted questionnaires to the HR department of PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta, then distributed them to permanent and non-permanent employees. To maintain the quality of data collection, researchers explained the purpose of data collection to the HR department and submitted a written research permit. The data that has been collected is processed using SMARPLS. Variable measurements using questionnaire instruments with a Likert scale of 1–5 (from strongly disagree to strongly agree) include motivation variables (Luthans, 2002), coworker support variables (Shukla & Srivastava, 2016), and job satisfaction variables (Weiss et al., 1967).

4. Research Findings and Discussion

Table 1 displays the characteristics of 50 respondents, comprising 11 women (22%) and 39 men (78%). Based on employment status, permanent employees dominated as many as 29 (58%) people, while based on marital status, unmarried respondents dominated as many as 39 (78%) peuples. The majority of respondents were under 30 years old, with as many as 29 (58%) having completed high school or its equivalent, and as many as 44 (88%) being unmarried. We can direct the age range and education level towards positive reinforcement of individual intrinsic motivation in the implementation of work tasks. Employees who are still young are potentially productive and adaptive to the organisational environment. Young age is likely to contribute to the high level of enthusiasm and involvement in achieving work goals.

Table 1. Characteristics of Respondents

Category	Description	Amount	Percentage (%)
Gender	Male	39	78.0
	Female	11	22.0
	Not permanent	21	42.0

Employment status	Permanent	29	58.0
Marital status	Not married	39	78.0
	Married	11	22.0
Age	<30 years	29	58.0
	31-39 years	7	14.0
	40-49 years	9	18.0
	>50 years	5	10.0
Last education	Middle school/equivalent	4	8.0
	High school/equivalent	44	88.0
	Diploma (D1/D2/D3/D4)	1	2.0
	S-1	1	2.0
Tenure	<1 years	14	28.0
	2-5 years	14	28.0
	6-10 years	7	14.0
	11-15 years	3	6.0
	>16 years	12	24.0

Source: Primary data processed, 2024.

The outer loading test results (Table 3) show that the values of coworker support, job satisfaction, and motivation meet the conferent validity test value, with the AVE score (Table 2) having a value of> 0.5, so all indicators pass according to the criteria. Coworker support, job satisfaction, and motivation have a composite reliability value > 0.7. The Cronbach's alpha value of coworker support, job satisfaction, and motivation exceeds 0.6, indicating the reliability of the instrument. Table 2 shows that all latent variable scores have values that exceed the minimum criteria, so the latent variable indicators have a high level of reliability and validity. Statements that did not meet the minimum limit were deleted, including questions 4 and 5 on the coworker support variable, statements 4, 9, and 10 on the job satisfaction variable, and statements numbers 3, 7, 10, 11, 12, and 13 on the motivation variable.

Table 2. Reliability and Validity

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
Coworker support	0.840	0.840	0.904	0.757
Job satisfaction	0.912	0.926	0.929	0.654
Motivation	0.907	0.911	0.926	0.643

Source: Primary data processed, 2024.

Table 3. Outer Loadings

	Coworker support	Job satisfaction	Motivation
CS1	0,846		
CS2	0,880		
CS3	0,885		
JS1		0,846	
JS2		0,864	
JS3		0,777	
JS5		0,768	
JS6		0,781	
JS7		0,900	
JS8		0,706	
M1			0,759
M2			0,789
M4			0,809
M5			0,860
M6			0,750
M8			0,804
M9			0,838

CS: cowoker support; JS: job satisfaction; M: motivation
Source: Primary data processed, 2024.

Table 4 and Figure 1 present the results of hypothesis testing. The results of testing the first hypothesis have an STDEV value of 0.219, T statistics of 1.499, and P values of 0.1340 at the α = 5% significance level seen in the results of testing the path coefficients test, indicating that coworker support has no significant effect on job satisfaction. The results of testing the second hypothesis have an STDEV value of 0.053, T statistics of 14.937, and P values of 0.000, which are seen in the results of testing the path coefficients test, indicating that coworker support has a significant positive effect on motivation. The results of the third hypothesis have an STDEV value of 0.229, T statistics of 2.074, and P values of 0.039, which can be seen in the results of the path coefficients test, indicating that job motivation has a significant positive effect on job satisfaction. The results of testing hypothesis 4 have an STDEV value of 0.191, a T statistic of 1.966, and a P value of 0.50, the results of which can be seen in the path coefficients test, indicating that motivation has a mediating role on coworker support and job satisfaction.

Table 4. Path Cofficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	
Coworker support -> job satisfaction	0.328	0.338	0.219	1.499	0.134	H1 not supported
Coworker Support -> Motivation	0.789	0.792	0.053	14.937	0.000	H2 supported
Motivation -> Job Satisfaction	0.475	0.468	0.229	2.074	0.039	H3 supported
Coworker Support -> Motivation -> Job Satisfaction	0.375	0.374	0.191	1.966	0.050	H4 supported

Source: Primary data processed, 2024.

Testing the inner model, or structural model, is done after testing the outer model has been completed. R-square is used to evaluate the structural model of the dependent construct of the study and the path coefficient to test significance. The higher the R-square value, the better the model predicted by the study (Hair et al., 2014). Table 5 illustrates the magnitude of the R square value for the dependent construct of this study. The adjusted R square value of 0.579 means that coworker support and motivation influence job satisfaction by 57.9%; the rest is influenced by variables outside the study. The adjusted R square value of motivation is 0.622, meaning that the effect of coworker support on motivation is 62.2%; the rest is caused by other variables outside this study.

Table 5. Coefficient of Determination

	R Square	R Square Adjusted
Job Satisfaction	0.579	0.561
Motivation	0.622	0.614

Source: Primary data processed, 2024.

Table 6 shows the results of measuring the fit model or goodness of fit (GOFI) using the Standardised Root Mean Square Residual (SRMR) indicator, the squared Euclidean distance (d_ULS), the geodesic distance (d_G), Chi Square, and the Normed Fit Index (NFI). Standardised Root Mean Residual (SRMR), or the average value of all standardised residuals of 0.101, can be said to be acceptable if SRMR ranges from 0 to 1. d_ULS of 1.557, d_G of 1.409, Chi Square of 292.601, and Normed Fit Index (NFI) of 0.640 mean that all indicators have a good fit value because the NFI value ranges from 0 to 1.

Table 6. Fit Model

	Saturated Model	Estimated Model
SRMR	0.101	0.101
d_ULS	1.557	1.557
d_G	1.409	1.409
Chi-Square	292.601	292.601
NFI	0.640	0.640

Source: Primary data processed, 2024.

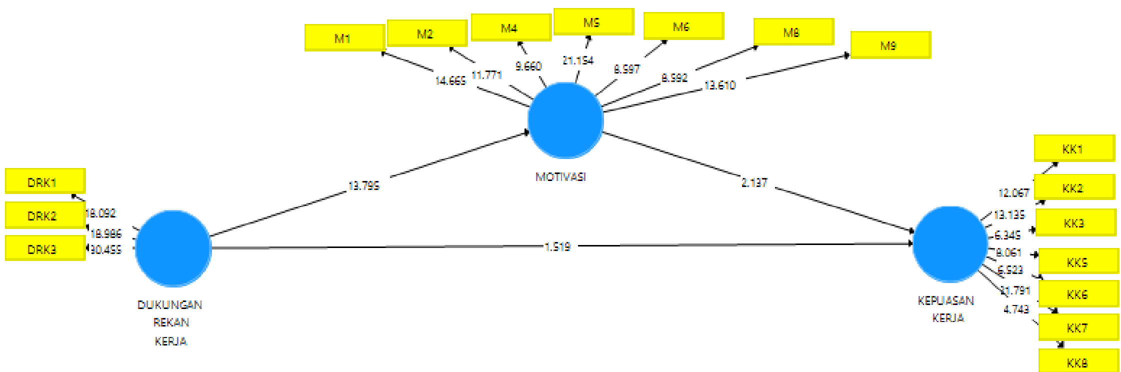

Figure 1. Model Testing

The results of the H1 analysis show that coworker support does not significantly affect job satisfaction at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta. Table 4 shows that the t-statistic value of 1.499 and the p-values (0.134) are greater than the value of a = 5%, meaning that hypothesis 1 is not supported. Coworker support in the organisation does not affect individual employee job satisfaction. The results of the study are inversely proportional to the research of Murshed & Jali (2018), Jabak (2023), and Herawati et al. (2023), who found that coworker support significantly affects job satisfaction. This finding is in accordance with other research (Hamdani, 2022), which states that coworker support has no significant effect on job satisfaction. There are several reasons why coworker support does not significantly affect employee job satisfaction. One of them is that the quality of support provided by coworkers may vary. Less effective or less relevant support may not have a significant impact on job satisfaction. In addition, other factors, such as motivation, affect the level of job satisfaction. The coworker support variable has the lowest mean value (4.060) on the statement "Coworkers remind each other to work well," while the highest mean value (4.380) is on the statement "I enjoy working with coworkers who can appreciate the work I do."

The results of the H2 analysis show that coworker support has a significant positive effect on the work motivation of employees of PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta. Table 4 shows a statistical t value of 14.937 and a p-value of 0.000, which means that hypothesis 2 is supported. The results of this study are in accordance with the research of Abdullatif and Anindita (2021) and Hessari (2022), which show that coworker support has a significant positive effect on motivation. Support provided by coworkers creates a positive work environment and provides encouragement and recognition for individual efforts. This can help generate self-confidence, emotional support, and a sense of belonging to a common goal. When a person feels supported and valued by colleagues, employees feel recognised and motivated to contribute positively to the team and overall organisational goals. The motivation variable has the lowest mean value (3.920) on the statement "Superiors always give praise when an employee performs job duties satisfactorily," while the highest mean value (4.280) is on the statement "The working relationship between superiors and subordinates is good and not rigid".

The results of the H3 analysis show that motivation has a significant effect on job satisfaction at PT Kereta Api Indonesia aUPT Balai Yasa Yogyakarta. Table 4 shows a statistical t value of 2.074 and a p-value of 0.039, meaning that hypothesis 3 is supported. The results of the study are in accordance with the research of Carvalho et al. (2020) and Sinniah et al. (2022), which states that motivation affects job satisfaction. Motivation has a positive effect on job satisfaction because someone feels motivated to do their job well and feels fulfilled when employees achieve success. High motivation also leads to feelings of personal achievement, recognition from coworkers or superiors, and career advancement, all of which can increase job satisfaction. The job satisfaction variable has the lowest mean value (3.680) on the statement "Supervisors provide punishment/sanctions for negligence for employees in achieving targets," while the highest mean value (4.200) is on the statement "There is a guarantee of old age from work".

The results of the H4 analysis show that motivation fulfills the role of mediator in the influence of coworker support on job satisfaction at PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta. Table 4 shows that if the statistical t value is 1.966 and p-values are 0.050, it means that there is a mediating role. Support received from coworkers has the potential to influence an individual's level of motivation in the work environment, which in turn will affect their level of job satisfaction. When employees feel supported by their coworkers, it can increase motivation to perform tasks more effectively, which in turn will have a positive impact on job satisfaction. Coworker support is indirectly connected to job satisfaction without going through the motivation mechanism. This is because job satisfaction is directly influenced by intrinsic and extrinsic factors related to the job itself, while coworker support is more about the interpersonal aspects of the work environment. Therefore, motivation acts as an intermediary that bridges the relationship between coworker support and employee job satisfaction.

5. Conclusion

This study was conducted on employees of PT Kereta Api Indonesia UPT Balai Yasa Yogyakarta to examine the role of motivation in mediating the relationship between coworker support and job satisfaction. The findings confirm the positive influence of coworker support on employee motivation. It was further found that motivation has a positive effect on increasing job satisfaction. Therefore, it is important for organisations to pay attention to factors such as peer support and motivation in improving employee job satisfaction, which in turn will have a positive impact on overall organisational performance and productivity. Organisational leaders can maintain and improve a supportive work environment on items that are still rated low, namely between workers reminding each other to perform well. Strengthening motivation can also be provided on items that are still rated low in the form of superiors giving praise when there are employees who carry out job duties satisfactorily, including other possible factors such as recognising achievements, providing career development opportunities, and paying attention to employee needs.

The findings of this study show that coworker support has no significant effect on job satisfaction. This finding suggests that motivation variables act as mediators between coworker support and job satisfaction. However, it also opens up opportunities for future research to better understand why. Future research can examine motivation separately in the form of intrinsic or extrinsic motivation. Expand the scope of research and obtain a more representative sample to gain a more holistic understanding of the factors that influence job satisfaction by considering work-life balance.

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THE INFLUENCE OF GREEN DIGITAL MARKETING, BRAND AWARENESS AND CELEBRITY ENDORSEMENT ON CONSUMER LOYALTY FOR WARDAH COSMETIC PRODUCTS

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ABSTRACT

The research aimed to investigate the impact of Green Digital Marketing, Brand Awareness, and Celebrity Endorsement on the loyalty of Wardah cosmetic product consumers. In an era of continuous digital development, the use of marketing technology has become increasingly important for companies to promote products while considering environmental impact. The cosmetics industry, heavily influenced by this trend, Wardah as a local Indonesian cosmetic brand, needs to understand how digital marketing can influence brand awareness and consumer commitment to Wardah products. This study employed a survey method to collect data and analyze it using statistical methods. The results showed that Green Digital Marketing, Brand Awareness, and Celebrity Endorsement have a significant impact on the loyalty of Wardah cosmetic product consumers. By understanding the influence of these factors, companies can develop effective marketing strategies to increase consumer loyalty and remain relevant in a constantly changing market.
Keywords *: Green Digital Marketing, Brand Awareness, Celebrity Endorsement, Customer Loyalty*

1. Introduction

Nowadays, customer loyalty is important for a company to maintain their business and increase revenue. Loyal customers can recommend a brand or product to other potential customers, make repeat purchases, and not switch to competitors. When compared to new customers, loyal customers usually spend more money on shopping, resulting in a higher conversion rate. On the early days, advertisers gave careful consideration on value-based reward and gave less concentrate on building client loyalty. However, in this era digital marketing is used to make it easier for companies to communicate their products to consumers. (Khan & Islam, 2017). Consumer opinions are influenced by brand awareness. Apart from that, brand awareness also greatly influences income levels. Promotion or advertising in Indonesia currently tends to use the internet. (Bisnis, 2019). In spite of the fact that the cutting edge shopper is getting more and more empowered, brands are still being propagated using a celebrity's status, power and fan following. How successful these commercials are, that is what companies always struggle to understand. Therefore celebrity endorsement is a form of marketing communication used by brand managers that utilizes a well-known personality from sports, amusement, training, design, or some other industry utilizing their social status or their reputation to help support an item or a thought (Mookda et al., 2020).

In the ever-growing digital era, the use of marketing technology has become increasingly important for companies to promote products by considering environmental impacts. One of the industries that is greatly affected by this trend is the beauty industry. For example, Wardah uses green digital marketing and celebrity endorsement strategies to promote its products. By using this strategy, companies can directly increase brand awareness and grow consumer loyalty.

Following based on research from *top brand index* published in the first quarter of 2024 , that some products from Wardah complied position in the various type level . This can be seen from Table 1 which shows *Top Brand Index* (TBI) for products cosmetics in 2024 :

Table 1 *Top Brand* Product Index Cosmetics On 2024

Lipstick	**TBI**	***Lip Gloss***	**TBI**	***Blush***	**TBI**
Wardah	**22.4%**	*La Tulipe*	16.0%	**Wardah**	**16.0%**
Maybelline	19.3%	**Wardah**	**15.2%**	*Maybelline*	13.9%
Revlon	4.2%	*Maybelline*	15.0%	Inez	9.1%
Pixy	4.1%	*Make Over*	14.3%	*L'Oreal*	7.8%
Viva	1.8%	*L'Oreal*	9.9%	*Revlon*	4.5%

Source : www.topbrand-award.com 2024

Table 1 shows that the results from the survey show that the top *brand* product from The Wardah *brand* already has a good image product in Indonesia. This is also due to the quality of The products provided by Wardah are always the best. Although this Wardah *brand* is a local product from Indonesia, products from Wardah can compete with products cosmetics from brands overseas.

Wardah, as one of the well-known cosmetic brands in Indonesia, in facing this trend, Wardah needs to understand how the use of digital marketing can influence *brand awareness* and consumer commitment to Wardah products. This research aims to discuss the influence of digital marketing on brand awareness and consumer loyalty for Wardah cosmetic products. There are two main important factors why this research is important to carry out. First, increasing environmental awareness among consumers encourages companies to increasingly pursue environmentally friendly marketing strategies. Second, in the competitive cosmetics industry, companies like Wardah need to focus on building and maintaining consumer loyalty in order to remain competitive. By understanding the influence of green digital marketing on brand awareness and consumer loyalty, a company can develop an effective marketing strategy. This can help Wardah companies and similar companies to remain relevant in an ever-changing market and improve consumer decisions.

Brand factor *Awareness* is one of the keys to influencing consumer behavior. Wardah as a local cosmetics brand has been active in introducing sustainable marketing strategies and the use of natural ingredients. By conducting this research, it is hoped that we can find out the extent to which *green digital marketing* , *brand awareness* and *endorsements* play a role in consumer loyalty to Wardah products.

The development various of marketing strategies carried out by several cosmetic *brands* in Indonesia changes thoughts and patterns of consumer behavior. Every company naturally currently tries to gain trust and a good image in the eyes of consumers. One of them is the Wardah cosmetic *brand which* is one local *brands* from Indonesia. In this context, of course, just The Wardah *brand* uses several strategies to obtain a good image in the eyes of consumers and consumer confidence. There are several strategies and other things that are important factors in the process of obtaining loyal customers such as *green digital marketing, brand awareness,* and *celebrity endorsement.* Based on the background of the problem that has been described, the problem formulation is does green digital marketing influence consumer loyalty towards Wardah cosmetic products? Does celebrity endorsement influence consumer loyalty towards Wardah cosmetic products? Does brand awareness influence consumer loyalty towards Wardah cosmetic products?

The theoretical benefits of this research are provides a new contribution to the literature on digital marketing, brand awareness, and celebrity endorsement in the context of the cosmetics industry. This research will help increase understanding of how these factors interact with each other and influence consumer loyalty and the results of this research can help in developing a theory regarding factors that influence consumer loyalty in the context of digital marketing and celebrity endorsement.

The practical benefits of this research can provide strategic guidance for cosmetic companies, including Wardah, in designing more effective marketing campaigns to increase consumer loyalty. By understanding the factors that influence consumer loyalty, companies can allocate resources more efficiently in the development and implementation of marketing strategies. By applying this research, cosmetics companies can strengthen their position in the market by building stronger relationships with consumers and increasing brand loyalty.

2. Theoretical Study and Development of Hypothesis

2.1. Green Digital Marketing

Digital Marketing is an activity non - existent promotions The limitation is because companies can use any device, for example mobile phones, tablets, televisions, laptops, and also through social media, email, video and SEO and many more which can be used to promote the company's products and services. (Ayesha, nd)

Green marketing as a strategy concept marketing of products by producers for the needs of consumers who care about the environment. It can also mean the concept of marketing strategy for producer products that care about the environment for consumers. This can also be combined between the two, producers who care about the environment market their products to consumers who care about the environment. (Manongko & Allen, 2018)

Based on the definition above, the author concludes that *Green Digital Marketing* is combination from *digital marketing* and *green marketing* strategies , namely ways to promote a product or service using digital networks and digital strategies that can reduce the digital impact and influence environmental sustainability. this strategy involves incorporating sustainable principles into various aspects of marketing, such as product design, packaging, messaging, and promotions.

2.2. Brand Awareness

Brand awareness can be interpreted as how a brand can appear in consumers' minds. Apart from that, brand awareness is also the key for a brand to be in a *brand equity position* . Brand *awareness* can be reflected by the knowledge and characteristics of a brand in consumers' minds . (Ramadayanti, 2019)

Brand Awareness as one of the dimensions base equity brand , often considered to be a prerequisite from consumer purchasing decisions , because this is the main factor to get into the brand considerations for consumers . (Andre Danio Hasiholan Silalahi, 2022)

Based on the definition above, the author concludes that *Brand Awareness* is the consumer's ability to recognize or remember that a brand is part of a product. The better *Brand Awareness* is remembered by consumers, the greater the opportunity to make repeat purchasing decisions.

2.3. Celebrity Endorsers

Celebrity Endorser is one option in conveying information about the products they have. Company usually using individuals starting from unknown to famous individuals among the useful community as a source in conveying messages both directly and indirectly. However, messages conveyed by interesting or well-known sources can attract higher attention and memory in the minds of target consumers . (Anas & Sudarwanto, 2020)

Celebrity Endorser is a promotion that leverages an artist, entertainer, athlete and public which figures are many known by many people for their success in their respective fields supported fields .(Andrianto et al., 2016)

It can be concluded that using celebrities as endorsers is an effective strategy in marketing. The use of celebrity endorsers brings a positive image to the product or service being promoted with the aim of influencing consumer interest. This approach is considered creative because it utilizes the character's appeal to attract consumer attention. Therefore, celebrity endorsers can strengthen the brand image and increase the product's appeal in the market.

2.4. Consumer Loyalty

According to Hasan in (Salsabila & Utomo, 2023) loyalty customer is related behavior with A products , incl possibility renew contract brand in the future come , what are the chances? customer change his support to brand , how much do you want customers to upgrade image positive something product .

According to Nadiri et al . (2008) in the journal (Anggraeni & Kurniawati, 2020) state that aspect behavior loyalty customers can be tagged with desire buy back , then do communication from word of mouth , and providing recommendations to organizations.

From the definition that , then writer conclude that consumer loyalty is behavior carried out by consumers when do purchase return something product in a way repeatedly and give suggestions to others to buy product the .

2.5. Hypothesis Development

Based on research conducted by ((Sawitri & Rahanatha, 2019)) concluded that *green marketing* is influential in a way positive and significant to consumer loyalty . These results show that the more tall *green marketing* done Eat consumer loyalty will increase. Then in research conducted by ((Sawitri & Rahanatha, 2019) get results that *green marketing* influential in a way positive and significant to consumer loyalty . In research conducted by ((Sawitri & Rahanatha, 2019) influential *digital marketing* in a way significant to consumer loyalty . From third study this can be interpreted that *green digital marketing* is influential in a way positive and significant to consumer loyalty. This is because This *green digital marketing* is merger from *green marketing* and *digital marketing* strategies, which means companies can maximize promotion products sustainable through networking social and from matter the in a way indirectly consumers will become loyal to the product.

H 1 : *Green Digital Marketing* has an effect in a way significant to consumer loyalty .

In research conducted by ((Sri Pujiarti, 2016) state that brand awareness or Brand *Awareness* according to Aaker (2007) in (Sri Pujiarti, 2016) is a person's ability to recognize or recall that a brand is part of a certain product category. And from study this can be concluded that *Brand Awareness* matters directly limited consumer loyalty . Then in research conducted by (Lengkong et al., 2021) get conclusion that with the sense of satisfaction that consumers get to *brand awareness* then with automatically consumers will become loyal and will still buy product the . From both this research can be interpreted that when consumers have awareness to something brand , automatic brand the will embedded in their and consumers ' memories it won't be right away always buy return product it and become loyal to it product the .

H 2 : *Brand Awareness* matters in a way positive and significant to consumer loyalty

On research previous ones that have been conducted by (Riani & Wijayanto, 2023) obtain results that influential *celebrity endorsements* to *brand loyalty* and *repurchase intention* towards product cosmetics *Maybelline.* Then in research conducted by (Salsabila & Utomo,

2023) it can be concluded that the more Good image from celebrities who provide ratings to product the so consumer loyalty will the more tall . From this research it can be interpreted that at the moment a lot once consumers are influenced to do so purchase return something product due to *reviews* from *celebrity endorser.*

H 3 : *Celebrity Endorsements* matter in a way positive and significant to consumer loyalty.

Figure 1 below depicts the research model:

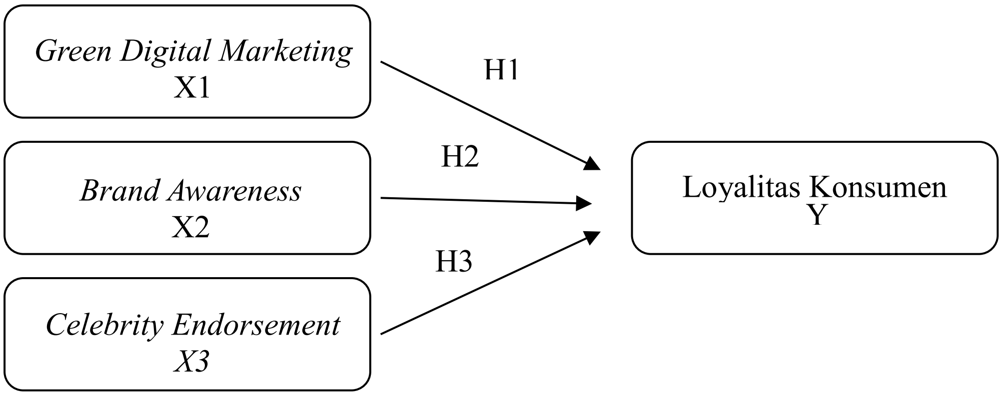


Figure 1. Research Model

3. Research Methods

3.1. Research Design

Research method will be done this using approach Quantitative , which is based on the philosophy of positivism, is used for research a particular population or sample . Data collection via instrument study form distributed questionnaires directly to customer Wardah cosmetics and descriptive data analysis or processed statistical data using SPSS which aims to provide an initial understanding of the basic characteristics of the data, such as the average value, median, mode and distribution of the data. Apart from that, this technique can also be used to look for correlations between variables, make predictions using regression analysis models, and make comparisons between average sample data with the aim of testing established hypothesis .

3.2. Population and Sample

3.2.1. Population

The population in this study were Wardah cosmetics consumers who live in the Special Region of Yogyakarta.

3.2.2. Sample

Samples are customer purchases product Wardah cosmetics online periodically. The data will be used in this research are results from the data obtained through questionnaire filled out by customers through gform that is distributed via social media platforms. As for several characteristics. The respondents we need in this research are:

a. Customer Wardah domicile DIY products.
b. Once do purchase repeated to product Wardah cosmetics.

With referring to Hair, Black, Babin, and Anderson (2014) in (Muna et al., 2021) , a reference for determining the amount The sample to achieve maximum likelihood is 100 samples . Which consist of 3 variables *independent* (*Green Digital Marketing, Brand Awareness* and *Celebrity Endorsement*) and 1 variable *dependent* (Consumer Loyalty).

3.3. Data analysis technique

Data analysis was carried out to evaluate the impact of *Green Digital Marketing, Brand Awareness, and Celebrity Endorsement* on consumer loyalty to Wardah cosmetic products. Data can be collected through surveys to obtain consumer opinions on these factors. The analysis begins with descriptive steps to understand the characteristics of the data, followed by a correlation test to determine the initial relationship between the variables. Then, a multiple linear regression test was carried out to test the simultaneous influence of *Green Digital Marketing, Brand Awareness, and Celebrity Endorsement* on consumer loyalty. The results of this analysis will provide a better understanding of how significant the influence of each factor is on consumer loyalty to Wardah cosmetic products. Additionally, mediation and moderation analyzes can be performed to explore the additional effects of other variables on the relationship between the independent and dependent variables. Thus, the results of this analysis will provide valuable insight for companies in designing more effective marketing strategies and optimizing consumer loyalty to the Wardah cosmetics brand.

3.4. Variables and Definitions Operational Variable

According to (Purwanto, 2019) variable research basically is something shaped thing What only those determined by the researcher For studied so that obtained information about matter that , then withdrawn the conclusion . on research This there is three variable freely researched includes: influence *Green Digital Marketing, Brand Awareness and Celebrity Endorsements* as well variable Loyalty Consumer Product Wardah cosmetics are used as variable bound . as for what becomes variable operational in study:

3.4.1. Loyalty Consumer

Loyalty consumer used for measure how much big possibility consumer for Keep going buy Wardah products directly consistent. This matter covers factors like trend for recommend brand, desire For buy product again, and relationships emotional with the brand. According to (Dwi Wahyuni, 2017) proposed six indicators that can be used to measure consumer loyalty, namely: Repeat purchases, habit of consuming the brand, always liking the brand, still choosing the brand, believing that the brand is the best, recommending the brand to others.

3.4.2. Green Digital Marketing

Variable This can be measured with gather level data participation consumer towards sustainable digital marketing programs offered by Wardah, such as: Social media campaigns that focus on reward programs supportive consumers issues and practices environment.
Related with matter the application marketing green with using this digital media role For know mix marketing green that covers product green , price green , promotion green , and distribution green (Titisari Anugraheni, 2021)

3.4.3. Brand Awareness

Brand Awareness is used For evaluate how much aware consumer to Wardah brand, level search brand online, and levels interaction they with content brand on social media. This matter can be measured with analyze indicator like awareness brand in group target.

To measure how far customers have brand awareness of a brand, there are brand awareness indicators according to Keller (2003) in the journal (Winadi, 2017) First *Recall:* How much consumers can remember when asked what brands they remember. In general, it is believed that to increase brand recall the brand name chosen must be. To increase brand recall, you need a brand name that is simple and easy to pronounce. The simplicity of a brand name can make it easier for consumers to understand the brand name . Ease of pronouncing to increase verbal repetition in order to build strong memory. Therefore, pronunciation influences the emergence of consumers' attention and desire to mention the brand name verbally. The brand name must be clear so that it can be understood and not have an ambiguous meaning. Because an ambiguous brand name will make customers understand the meaning of the brand differently. The brand name should sound familiar and have meaning. Second, Recognition How far consumers can recognize the brand as belonging to a particular category. To increase brand recognition, the brand name must be different, special and unusual. Third Purchase How far consumers will include a brand in their alternative choices when they want to buy a product or service. And the fourth Consumption How far consumers still remember a brand when they are using competing products or services.

3.4.4. Celebrity Endorsements

This matter covers collection of data about how much often and how much strong celebrity linked with Wardah brand on social media, advertising and activities promotion others, as well consumption placement products and support from celebrity the . This matter can be measured with evaluate reaction public.

According to (Rosita & Novitaningtyas, 2021) There are three indicators in measuring celebrity endorsers, including attractiveness, trustworthiness and expertise (Sintani, 2016). This attractiveness includes physical, intelligence, personality, and lifestyle or certain characteristics possessed by celebrity endorsers and can attract the attention of consumers. Trust is the integrity and credibility of a celebrity endorser to be able to convince other people in making decisions and taking purchasing actions. Expertise consists of knowledge, skills or experience related to the subject of the advertisement

3.5. Instrument Test

3.5.1. Validity test

According to Ghozali in (Onata & Mukaram, 2023) Validity test used For measure legitimate or whether it is valid or not something questionnaire . Something questionnaire is said to be valid if questions on the questionnaire capable for disclose something will measured by a questionnaire the for measure level validity can done with method correlate between score item question with a total score construct or variable, if mark the significance is <0.05 then item question is valid. If value the significance is > 0.05, then item question the invalid.

3.5.2. Reliability Test

Reliability test is tool for measure something questionnaire which is indicator from variable or construct. An questionnaire said to be reliable or reliable If answer somebody to statement is consistent or stable from time to time. Measurement reliability done with caraone shot or measurement very just with tool help SPSS with the Cronbach Alpha (α) statistical test. Something construct or variable is said to be reliable if give Cronbach Alpha value > 0.60 (Onata & Mukaram, 2023)

3.6. Multiple Linear Regression Analysis

Multiple linear regression analysis is something technique statistics used For understand connection between One variable dependent (variable bound) and two or more variable independent (variable free). The goal For know how much Good variable independent explain variation variable dependent . according to (Wisudaningsi et al., 2019) Regression multiple used unique analyze connection causal a number of variable free (X) against One variable depends (Ŷ). Model used For analysis regression multiple as following :

$$Y = \alpha + \beta 1X1 + \beta 2\ X2 + \beta 3X3 + e$$

Information:

Y	: Consumer Loyalty
α	: Constant
β1	: Coefficient regression *green digital marketing*
β2	: Coefficient regression *brand awareness*
β3	: Coefficient regression *celebrity endorsement*
X1	: *Green digital marketing*
X2	: *Brand awareness*
X3	: *Celebrity Endorsement*
e	: Error

3.7. Test Assumptions Classic

3.7.1. Normality test

According to (Haniah, 2013) Normality test is what empirical data were obtained ? from field in accordance with distribution theoretical certain . With objective know whether the data obtained from results A study normally distributed or No . Normality test often done before apply a number of analysis statistics parametric, such as t test, analysis regression , or analysis variance (ANOVA), because Lots from analysis This assume that the data originates from from normal distribution .

3.7.2. Multicollinearity Test

Multicollinearity Test is A analysis purposeful statistics For know is there is problem multicollinearity in a multiple linear regression model . Multicollinearity happen when there is correlation tall between two or more variable independent in that model . In analysis multiple linear regression , multicollinearity can give rise to a number of problems , like instability coefficient , lack significance statistics on actual variables importance , and uncertainty in estimate . For identify multicollinearity , some general method used including use of tolerance and variance inflation factor (VIF), as well as analysis correlation between variable independent . If multicollinearity detected , steps repair like delete redundant variables , do data transformation , or combine variable can taken For repair circumstances .

3.7.3. Heteroscedasticity Test

Heteroscedasticity test is procedure statistics used For determine is residual variance of the regression model is constant . There are two technique For identify heteroscedasticity : technique graphics and statistics according to (Firdausya & Indawati, 2023) This step involve creating regression models , calculating residue , and test it use method such as the Breusch-Pagan test and White's test, heteroscedasticity must interpreted with be careful , with consider possibility influence size sample and distribution the variable being tested .

3.8. Feasibility Test (Goodness of fit)

3.8.1. F test

The F test is tool statistics For compare significance between two or more group in analysis variance.If p value is below level established significance (usually 0.05) can be reject hypothesis zero and conclude that there is significant difference between group . If the p value is more big from level established significance No can reject hypothesis zero and conclude that No There is significant difference between group .

3.8.2. Coefficient Determination Double (R2)

Coefficient determination multiple (R-squared) essentially metric important in analysis regression multiple that measures how much Good variable independent in the regression model explain variation variable dependent . R- squared value range between 0 to 1, with more value tall show that the model can explain proportion more data variations big .

3.8.3. Testing Hypothesis (t Test)

Hypothesis testing (t-test) can be done concluded as technique statistics used For determine significance difference between the sample mean and the known population mean , or between two group sample . This step covers formation hypothesis null and hypothesis alternatively , calculating t- statistics , determines important areas based on level significance, and interest conclusion . The T-test is very important For taking decision based on statistical data analysis , so possible researcher interesting clear conclusion about significance difference.

4. Discussion

4.1. Validity test

Correlations

		XI1	XI2	XI3	XI4	Total X1
XI1	Pearson Correlation	1	.279**	.438**	.326**	.680**
	Sig. (2-tailed)		.005	.000	.001	.000
	N	100	100	100	100	100
XI2	Pearson Correlation	.279**	1	.505**	.478**	.737**
	Sig. (2-tailed)	.005		.000	.000	.000
	N	100	100	100	100	100
XI3	Pearson Correlation	.438**	.505**	1	.491**	.829**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	100	100	100	100	100
XI4	Pearson Correlation	.326**	.478**	.491**	1	.757**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	100	100	100	100	100
Total X1	Pearson Correlation	.680**	.737**	.829**	.757**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2. Validity Test Variable *Green Digital Marketing* (X1)

Correlations

		XII1	XII2	XII3	XII4	XII5	Total X2
XII1	Pearson Correlation	1	.163	.378**	.280**	.254*	.611**
	Sig. (2-tailed)		.106	.000	.005	.011	.000
	N	100	100	100	100	100	100
XII2	Pearson Correlation	.163	1	.163	.257**	.473**	.661**
	Sig. (2-tailed)	.106		.106	.010	.000	.000
	N	100	100	100	100	100	100
XII3	Pearson Correlation	.378**	.163	1	.280**	.405**	.658**
	Sig. (2-tailed)	.000	.106		.005	.000	.000
	N	100	100	100	100	100	100
XII4	Pearson Correlation	.280**	.257**	.280**	1	.245*	.614**
	Sig. (2-tailed)	.005	.010	.005		.014	.000
	N	100	100	100	100	100	100
XII5	Pearson Correlation	.254*	.473**	.405**	.245*	1	.737**
	Sig. (2-tailed)	.011	.000	.000	.014		.000
	N	100	100	100	100	100	100
Total X2	Pearson Correlation	.611**	.661**	.658**	.614**	.737**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3. Validity Test Variable *Brand Awareness* (X2)

Correlations

		XIII1	XIII2	XIII3	Total X3
XIII1	Pearson Correlation	1	.512**	.528**	.853**
	Sig. (2-tailed)		.000	.000	.000
	N	100	100	100	100
XIII2	Pearson Correlation	.512**	1	.408**	.762**
	Sig. (2-tailed)	.000		.000	.000
	N	100	100	100	100
XIII3	Pearson Correlation	.528**	.408**	1	.737**
	Sig. (2-tailed)	.000	.000		.000
	N	100	100	100	100
Total X3	Pearson Correlation	.853**	.762**	.737**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4. Validity Test Variable *Celebrity Endorsements* (X3)

Correlations

		Y1	Y2	Y3	Y4	Y5	Total Y
Y1	Pearson Correlation	1	.462**	.655**	.350**	.442**	.796**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	100	100	100	100	100	100
Y2	Pearson Correlation	.462**	1	.401**	.385**	.382**	.714**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	100	100	100	100	100	100
Y3	Pearson Correlation	.655**	.401**	1	.484**	.395**	.817**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	100	100	100	100	100	100
Y4	Pearson Correlation	.350**	.385**	.484**	1	.301**	.678**
	Sig. (2-tailed)	.000	.000	.000		.002	.000
	N	100	100	100	100	100	100
Y5	Pearson Correlation	.442**	.382**	.395**	.301**	1	.669**
	Sig. (2-tailed)	.000	.000	.000	.002		.000
	N	100	100	100	100	100	100
Total Y	Pearson Correlation	.796**	.714**	.817**	.678**	.669**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	100	100	100	100	100	100

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5. Validity Test Variable Loyalty Customer (Y)

Interpretation of validity test output based on mark its significance can be concluded that all over questions for each variable is valid because mark The significance is <0.05.

4.2. Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
.743	4

Table 6. Reliability Test Variable *Green Digital Marketing* (X1)

Reliability Statistics

Cronbach's Alpha	N of Items
.669	5

Table 7. Reliability Test Variable *Brand Awareness* (X2)

Reliability Statistics

Cronbach's Alpha	N of Items
.733	3

Table 8. Reliability Test Variable *Celebrity Endorsements* (X3)

Reliability Statistics

Cronbach's Alpha	N of Items
.789	5

Table 9. Reliability Test Variable Loyalty Consumer

Interpretation of the output of this reliability test if seen from *Cronbach's Alpha* can be concluded that variables used in this research already reliable Because mark *Cronbach's Alpha* > 0.60

4.3. Test Assumptions Classic

4.3.1. Normality test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.33796858
Most Extreme Differences	Absolute	.150
	Positive	.066
	Negative	-.150
Test Statistic		.150
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Table 10. Normality Test

4.3.2. Multicollinearity Test

Coefficients [a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	2,726	1,381		1,973	,051		

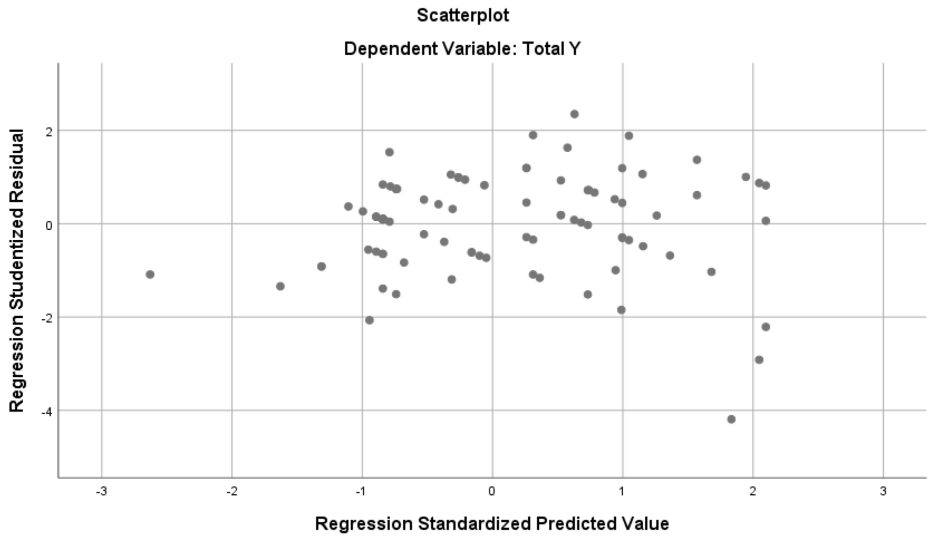
	Total X1	,070	.116	,059	,603	,548	,521	1,920
	Total X2	,364	.113	,327	3,228	,002	,492	2,033
	Total X3	,649	,171	.408	3,796	,000	,439	2,278

a. Dependent Variable: Total Y

Table 11. Multicollinearity Test

Tolerance value for the *Green Digital Marketing variable* (X1) is 0.521 , variable *Brand Awareness* (X2) is 0.492 and the *Celebrity Endorsement variable* (X 3) is 0.439 . All three values are greater than 0.10, which indicates that the data in this study does not have multicollinearity. VIF value in third The variable also has a value smaller than 10. This shows that the data in this study does not have multicollinearity.

4.3.3. Heteroscedasticity Test



Graph 1. Heteroskedasticity Test

From *the scatter plot results* above, it shows that the data points do not form a particular pattern and the data does not gather, but spreads above and below the number 0. Therefore, this research data does not have heteroscedasticity.

4.4. Feasibility Test (Goodness of fit)

4.4.1. F test

ANOVA [a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	187,684	3	62,561	33,888	,000 [b]
	Residual	177,226	96	1,846		
	Total	364910	99			

a. Dependent Variable: Total Y

b. Predictors: (Constant), Total X3, Total X1, Total X2

Table 12. F test

The significant value from the ANOVA table above is 0.00 and is smaller than 0.05. This shows that all independent variables (X1 , The calculated F value is 33.888 which is greater than the F table of 3.09. So the independent variables (X1, X2, and X3) have an effect simultaneously (together) on the dependent variable (Y).

4.4.2. Coefficient Determination

Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,717 [a]	,514	,499	1.35871

a. Predictors: (Constant), Total X3, Total X1, Total X2

b. Dependent Variable: Total Y

Table 13. Coefficient Determination

The R *Square value* from the results above is 0.499 or equal to 50 percent. That is, variable katiga variable together (simultaneously) the effect on variable Y is 25%. Meanwhile, the remainder (100%- 50 %= 50 %) is influenced by other variables not studied.

4.4.3. T test

Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	2,726	1,381		1,973	,051
	Total X1	,070	.116	,059	,603	,548
	Total X2	,364	.113	,327	3,228	,002
	Total X3	,649	,171	.408	3,796	,000

a. Dependent Variable: Total Y

Table 14. T test

This test is carried out to find out whether the independent variable (X) partially (individually) has an effect on the dependent variable (Y). From the results above, the following interpretation is obtained:

a. Influence *Green Digital Marketing* (X1) to Consumer Loyalty (Y) :
   The calculated value of the *Green Digital Marketing variable* (X1) is 0.603, smaller than the t table of 1.98. So X1 has no effect on Y. The significant value of 0.548 is greater than 0.05, so X1 has no effect on Y.
b. The influence of *Brand Awareness* (X2) on Consumer Loyalty (Y):
   The calculated value of the variable X2 is 3.228 which is greater than the t table of 1.98. So there is an influence of X2 on Y. The significant value is 0.002 which is smaller of 0.05 then variable X2 has an effect towards Y.
c. Influence *Celebrity Endorsement* (X3) against Consumer Loyalty (Y):

Calculated value from variable X3 is 3.796 greater than the t table of 1.98. So variable X3 has an effect against Y. The significant value is 0.000 smaller of 0.05 then variable X3 has an effect towards Y.

4.4.4. Multiple Linear Regression Analysis Equation

In this study, Eq Multiple linear regression was used is:

$Y = \alpha + \beta 1X1 + \beta 2\ X2 + \beta 3X3 + e$

Information:

Y	: Consumer Loyalty
α	: Constant
β1	: Coefficient regression *green digital marketing*
β2	: Coefficient regression *brand awareness*
β3	: Coefficient regression *celebrity endorsement*
X1	: *Green digital marketing*
X2	: *Brand awareness*
X3	: *Celebrity Endorsement*
e	: Error

$Y = 2.726 + 0.70X1 + 0.364X2 + 0.649$

From the results of the analysis above it can be seen the constant is 2.726 . It means found influence positive to variable independent *Green Digital Marketing, Brand Awareness,* and *Celebrity Endorsement.*

4.5. The Influence of Green Digital Marketing on Consumer Loyalty

The research results show that *Green Digital Marketing* has no has a positive and significant influence on Consumer Loyalty. This is shown with a smaller t count from t table (0.603 < 1.98)

4.6. Influence Brand Awareness on Consumer Loyalty

The research results show that Brand Awareness positively and significantly influences consumer loyalty. This shows that Wardah is easily recognized and remembered by consumers. It can be interpreted that the better the Brand Awareness that consumers have, the more influence it will have on Consumer Loyalty. This can be seen from t calculated which is bigger than t table (3.228 > 1.98)

4.7. Influence Celebrity Endorsements on Consumer Loyalty

The research results show that *Celebrity Endorsements* have a positive and significant effect on Consumer Loyalty. This shows that Wardah's *Celebrity Endorsement is getting higher* the higher the consumer loyalty. If a celebrity is trusted by fans to be a brand representative, consumers tend to associate this with the Wardah product they endorse. Apart from that, with *the Celebrity Endorsement* product promotion can attract consumer attention and increase awareness of the Wardah brand endorsed by idol celebrities , consumers more tend For choose product the in a way over and over again, eventually increase loyalty . This can be shown with the calculated t result is greater than the t table (3.796 > 1.98).

5. Conclusions

Based on the research results presented, it can be concluded that the three factors studied, namely *Green Digital Marketing, Brand Awareness, and Celebrity Endorsement,* have a positive and significant influence on consumer loyalty to the Wardah brand. Effective implementation of *Green Digital Marketing* has been proven to be able to increase consumer loyalty by forming strong emotional bonds between brands and consumers and improving marketing performance. In addition, good *Brand Awareness allows the Wardah brand to be more easily recognized and remembered by consumers, which leads to increased loyalty.* Likewise with *Celebrity Endorsements,* where the presence of celebrities as brand representatives has been proven to attract consumer attention, increase brand awareness, and influence consumer purchasing decisions.

In this research, there are still several research limitations, namely: first, this research only uses three independent variables that can influence consumer loyalty, namely *Green Digital Marketing, Brand Awareness, and Celebrity Endorsement* . The second limitation of research using questionnaires is that it only uses 100 respondents. Maybe it would be better if you used a questionnaire with more than 100 respondents and sometimes the answers given by the sample do not show the real situation.

From the research results, the advice that can be given to Wardah management is to develop an effective *Green Digital Marketing Strategy to increase environmental awareness through social media, using a tagline that emphasizes environmental awareness.* Developing good *Brand Awareness to increase brand awareness through various strategies such as advertising, promotions and events that emphasize the uniqueness and quality of the product.* As well as the effective use of *Celebrity Endorsements* to use celebrities that suit the brand and products to increase brand awareness and consumer loyalty.

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THE INFLUENCE OF PRICE AND PRODUCT QUALITY ON THE PURCHASE DECISION OF 'Le Minerale' PRODUCTS

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ABSTRACT
This research aims to examine and analyze the influence of price and product quality on the purchasing decision of Le Minerale branded Bottled Drinking Water (AMDK) products. This research is conducted because there are still many questions regarding consumer decisions in purchasing Le Minerale products. The study samples data from 100 respondents through a survey using Google Forms with the criteria that respondents have previously purchased and consumed Le Minerale products. Data testing techniques used to examine the survey results in this study include validity testing, reliability testing, normality testing, multicollinearity testing, and heteroskedasticity testing. The research model used is a multiple linear regression model. Based on the test results, it can be concluded that price and product quality have a significant and positive influence on the purchasing decision of Le Minerale products. The findings of this research imply that PT. Tirta Fresindo Jaya should always pay attention to and improve the quality of its products to attract more consumers to purchase Le Minerale products. PT. Tirta Fresindo Jaya should also consider competitive pricing that matches the quality of its products to maintain or even increase product sales.
Keyword*: Price, Product Quality, Consumer Purchasing Decision****.***

1. Introduction

In research on the influence of price and product quality on purchasing decisions, it explains the extent to which two variables (price and quality) impact one variable (purchase decision) on products to be bought or consumed. Existing research also shows varying results among the three interconnected variables.

Research by Ismayana and Hayati (2018) found that price and quality significantly impact and have a positive influence on purchasing decisions for Pixy lipstick products. Similarly, Kumala and Anwar (2020) had similar research findings that price and quality positively influence purchasing decisions for housing at PT. Hasanah Mulia Investama. According to research by Puspita and Budiatmo (2020), the price and quality of Rocket Chicken Wolter Monginsidi products in Semarang city proved to have a positive and significant impact on purchasing decisions.

Research by Mustika Sari, R., and Ganesha, P. (2021) on the influence of price and quality significantly and positively affected the purchasing decision of RISE bedsheet products. Likewise, research by Joshua, D. and Padmalia, M. (2017) on Terang Bulan-Martabak 93 products showed that price and product quality significantly influence consumer purchasing decisions. Furthermore, Rahmat Hidayat, R. (2022), who researched the influence of price and product quality on Kanzler sausage products in Sampit city, found a significant and positive impact on purchasing decisions.

Several other studies, such as those by Sumayah Nur Rohmah and Serli Oktapiani (2021) examining the influence of price and quality on the purchasing decision of Sensi medical masks among students at the University of Technology Sumbawa, and by Selvia, M., and Tumbel, A. L. (2022) studying the influence of price and quality of Scarlett Whitening products on students of the Faculty of Economics and Business, also found a significant and positive influence on purchasing decisions.

However, according to Anwar, I (2015), research on the purchase decision of kitchenware products at the Maxim Housewares Grand City Mall Surabaya showroom showed that price has a negative influence while quality has a positive influence on purchasing decisions. And according to Supu, P., Poluan, et al. (2021), the price and quality of Samsung products do not affect purchasing decisions.

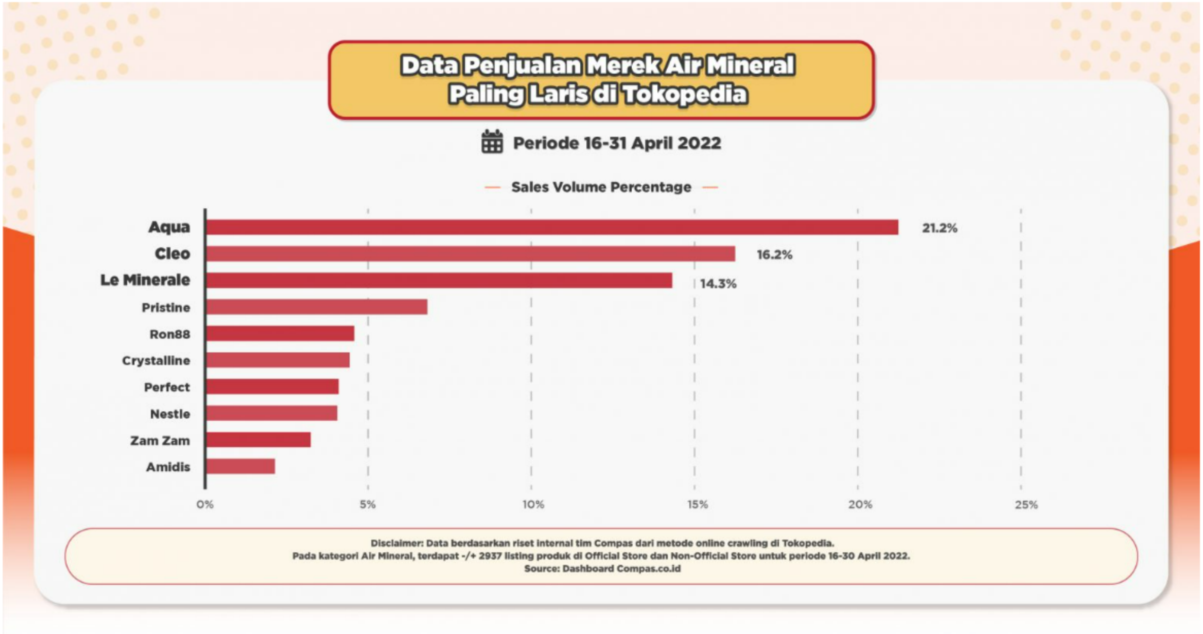

Figure 1

According to the survey results by Raga Putra Wiwaha (2022), bottled mineral water products were the best-selling on Tokopedia during the period from April 16 to April 31, 2022. This proves that Aqua is the best-selling AMDK product, followed by Cleo and Le Minerale, with a percentage of 14.3%.

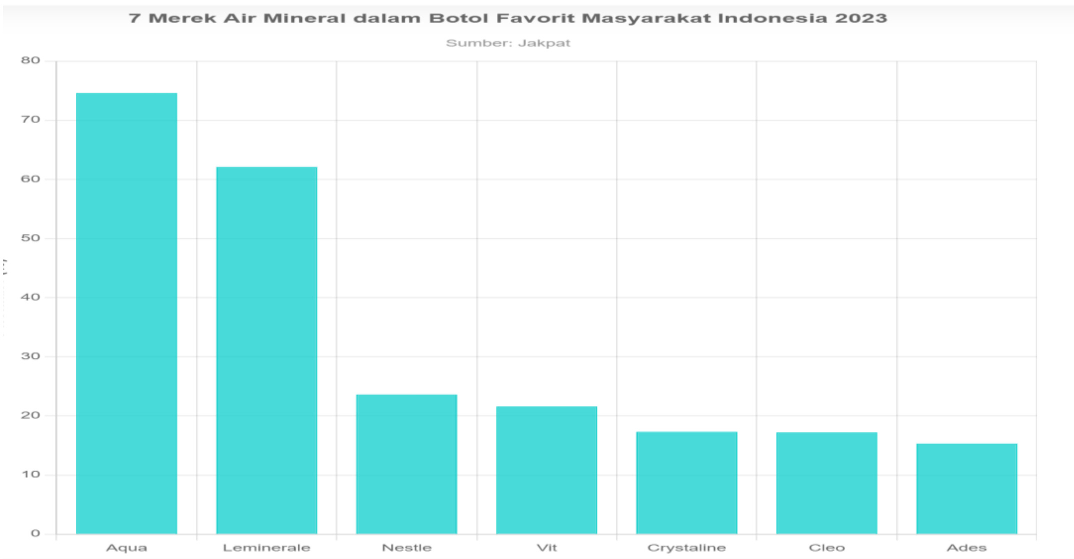

Figure 2

Meanwhile, the survey results according to IIP M. Aditiya (2023), for the survey period of September 26, 2022, conducted in supermarkets through the Jajak Pendapat (JAKPAT) survey, show that Aqua takes the first position and Le Minerale occupies the second position as the most favorite mineral water brand with a percentage of 62.1%.

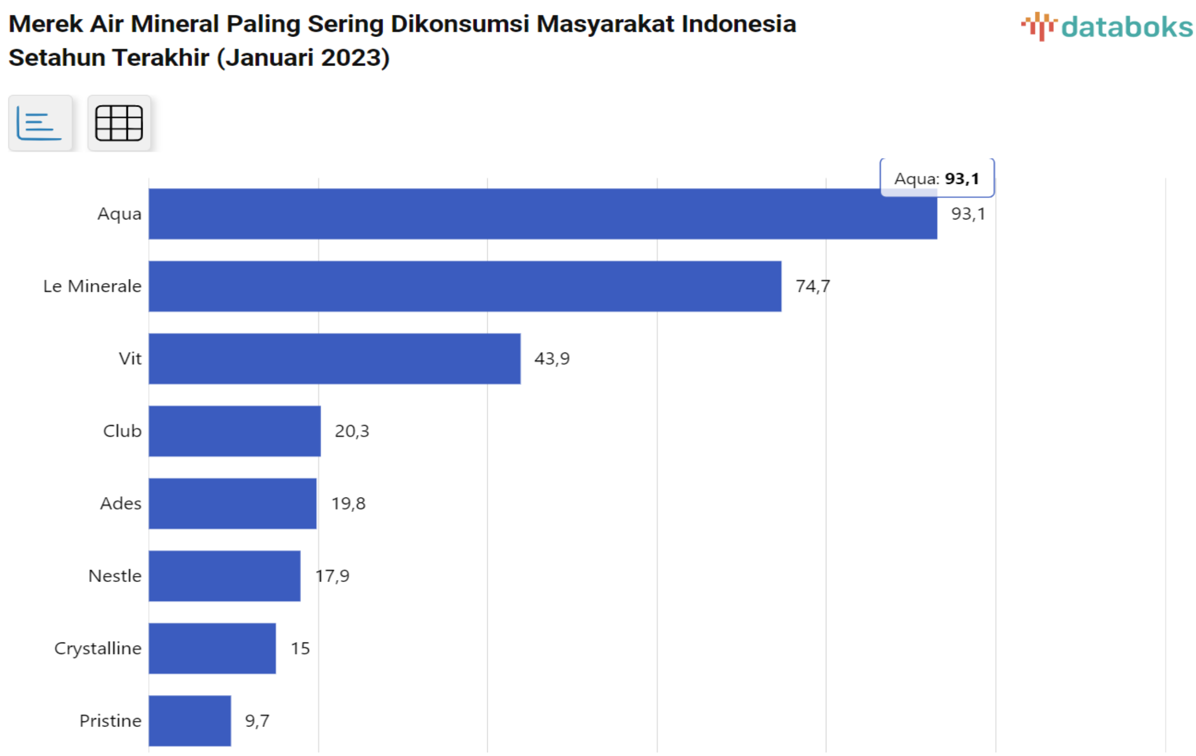

Figure 3

Le Minerale itself is the second best-selling product after Aqua according to the survey results by Cindy Mutia Annur (2023). This makes us want to further investigate because there are still questions remaining about the influence of the two variables above on purchasing decisions for Le Minerale products. Here is a data diagram regarding the most frequently consumed mineral water brands by Indonesian society in the last year (January 2023) according to the survey results from Cindy Mutia Annur.

Therefore, this article will examine the extent of the influence of price and product quality of Le Minerale mineral water on consumer purchasing decisions and the resulting impact. With 100 respondents through a survey using Google Forms. It is hoped that with the research results on the influence of price and product quality of Le Minerale, it can provide an insight into how people make purchasing decisions regarding Le Minerale bottled mineral water based on research on the price and product quality of Le Minerale.

2. Literature Review

2.1 Price

In making purchasing decisions, everyone always has considerations. Price plays a crucial role in the purchasing decision-making process because before buying a product, individuals typically consider the listed price. Moreover, many also take into account the product quality in relation to its price. According to Kotler and Armstrong (2001: 439), price can be defined as the uncertain monetary value given to acquire a good or service, or the exchange value that someone engages in to obtain ownership of a good or service for its intended use.

Products with high-quality standards generally build consumer trust in the brand. Consumers feel confident that the product will meet or even exceed their expectations, making them more likely to choose the product. Economical prices are also often seen as a sign of good value. Consumers tend to view products with prices commensurate with the benefits or quality provided as a valuable investment. Affordable prices can facilitate brands in reaching more market segments. Products with affordable prices can attract the attention of consumers from various income levels, thus expanding the market share of the brand. There are also situations where several brands offer similar products; lower prices can be a key factor in winning competition. Consumers often choose products with lower prices if their quality is considered the same.

2.1.1 Product Quality

Affordable prices naturally attract consumers. When consumers find products at prices considered appropriate for the value or benefits they seek, they tend to lean towards purchasing those products. Product quality is a function and benefit of a product; a high-quality product can undoubtedly fulfill and satisfy the needs of the user. Philip Kotler (2009:143) defines product quality as all characteristics of goods or services whose function is to meet stated or implied needs.

Products with high-quality standards tend to instill consumer confidence in the brand. Consumers can feel assured that the product will meet or even exceed their expectations, making them more likely to choose the product. Consequently, products with good quality also tend to provide a more satisfying experience for consumers. Consumers who are satisfied with the product are likely to repurchase from the same brand in the future. Products with high-quality standards also help strengthen the brand's reputation. Brands known for providing quality products tend to attract more consumers, as consumers believe they will get good value from the product. Although high-quality products may have higher prices, the long-term benefits obtained from customer satisfaction and brand loyalty can far outweigh the initial costs. Satisfied customers are likely to become loyal customers and may even recommend the brand to others.

2.1.2 Purchasing Decision

Purchasing decision is a thought in someone's mind where the person evaluates a product from various options and then decides on one product from many different products. Kotler & Armstrong (2014) state that purchasing decision is a stage in a person's decision-making process where a consumer is confident in making the purchase.

When consumers receive products or services that meet their needs or desires, it often results in satisfaction with their purchasing decisions. Good value and benefits towards purchasing decisions can provide significant value and benefits to consumers. Products or services that meet or even exceed consumer expectations can provide sustained benefits and improve their quality of life. Positive purchasing decisions can strengthen customer loyalty. Satisfied customers are likely to become loyal customers and return for future purchases, and may even recommend the brand to others.

2.1.3 Hypothesis

Based on the variables tested, "The Influence of Price and Product Quality on Purchasing Decisions," two hypotheses can be formulated as follows:

H0: Price and Product Quality do not influence purchasing decisions.

H1: Price and Product Quality have a significant and positive influence on purchasing decisions.

3. Research Method

In this study, the Empirical Research method is utilized, classified based on its explanatory level as Cause and Effect research. This study involves the collection and analysis of factual data or data based on empirical experience. The main variables we are investigating include the influence of price and product quality, measured through distributed questionnaires to provide in-depth insights into the factors affecting purchasing decisions.

This type of research utilizes primary data. The data collection technique employed in this study is through a survey using a questionnaire instrument. The questionnaire used in this research was created through Google Forms, and the results of the questionnaire dissemination were obtained by distributing the questionnaire through social media platforms such as WhatsApp and Instagram. Additionally, a sample of 100 respondents was taken, with the criteria that respondents have previously purchased and consumed Le Minerale products. The variables in this study have also undergone Validity and Reliability tests. The research model used is the Multiple Linear Regression model and has passed tests for Normality, Multicollinearity, and Heteroskedasticity.

According to Sugiyono (2013:132), it is stated that "various types of measurement scales can include: nominal scale, ordinal scale, interval scale, and ratio scale, from which nominal, ordinal, interval, and ratio data will be obtained". Scale is a tool or mechanism used to differentiate individuals into variables used in research. The scale used in this study is the interval scale. This interval scale possesses classification, order (sequence), and distance (difference between two values) properties. A Likert scale of 1–5, where the intervals 1-2 = 2-3 = 3-4, and = 4-5.

The indicator of the price variable (X1) includes 5 statements as follows: (1) In my opinion, the price of Le Minerale mineral water brand is very affordable. (2) In my opinion, the price of the Le Minerale mineral water brand is in line with purchasing power. (3) In my opinion, the price of Le Minerale is commensurate with the quality of the products offered. (4) In my opinion, Le Minerale has competitive prices compared to other mineral water brands. (5) In my opinion, the price of Le Minerale products corresponds to the packaging variations offered.

Meanwhile, the indicator of the product quality variable (X2) also includes 5 statements as follows: (1) In my opinion, the taste of Le Minerale branded mineral water is refreshing. (2) I feel that the packaging of Le Minerale mineral water is not easily damaged. (3) I feel that Le Minerale has quality that meets consumer expectations. (4) I feel that Le Minerale mineral water has relatively long durability according to the expiration date listed on the packaging. (5) In my opinion, the quality of Le Minerale branded mineral water can be trusted (it already has BPOM certification).

And, the indicators for the purchasing decision variable (Y) include 5 statements as follows: (1) I buy Le Minerale according to my needs and desires. (2) I am interested in buying Le Minerale after obtaining detailed information from a close source (family or friends). (3) I make repeated purchases of Le Minerale or more than once. (4) I have no objection to recommending Le Minerale products to others. (5) I am more interested in buying Le Minerale compared to other mineral water products.

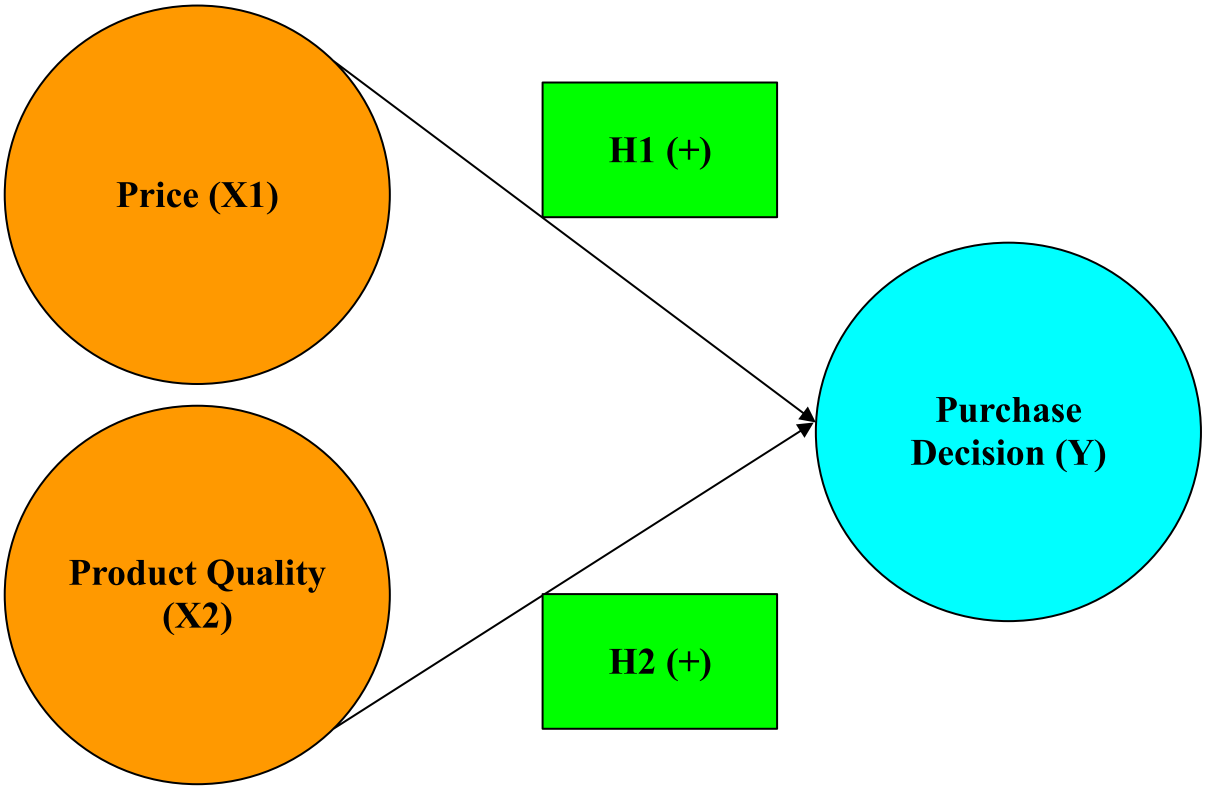

Figure 4

4. Research Findings and Discussion

The number of respondents who completed the questionnaire was 109 individuals. However, 4 of them could not be used because they did not meet the research sample criteria. Out of these 4 respondents, 2 had never consumed Le Minerale products, and 2 had never purchased products from Le Minerale. Therefore, the total number of questionnaires that could be further analyzed was 105 respondents.

The gender that completed the questionnaire was dominated by females, with 70 (64.2%) compared to males, who were only 39 (35.8%). The average age of respondents was between 19 and 22 years old, with the percentage of respondents aged 19 years being 53 (48.5%), 20 years 45 (41.2%), 21 years 9 (8.2%), and 22 years 10 (9.2%).

From the respondents who completed the questionnaire, it can be said that they agree with the price variable for the decision to purchase Le Minerale products, with 56.52% strongly agreeing. Similarly, with the product quality, 52.48% of respondents strongly agreed.

4.1 Validity Test

Based on the validity testing results using Pearson Correlation it can be concluded that the data for the price variable of Le Minerale products (HT) show valid results with a significance level not exceeding 0.05 (5%). Similarly, the data for the product quality variable of Le Minerale (KT) show valid results with a significance level not exceeding 0.05 (5%). and, the data for the purchase decision variable on Le Minerale products (KPT) show valid results with a significance level not exceeding 0.05 (5%).

Table 1. Reliability Test

No	Variable	Cronbach Alpha	Cronbach's Alpha Based on Standardized Items	Description
1	Price (X1)	0.767	0.821	Reliable
2	Product Quality (X2)	0.760	0.810	Reliable
3	Purchasing decision (Y)	0.730	0.746	Reliable

The data for the price variable of Le Minerale products (HT) indicate reliable results with Cronbach's Alpha above 0.6. The data for the product quality variable of Le Minerale (KT) indicate reliable results with Cronbach's Alpha above 0.6. The data for the purchase decision variable on Le Minerale products (KPT) indicate reliable results with Cronbach's Alpha above 0.6.

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test		
	Unstandardized Residual	
Asymp. Sig (2-tailed)	Sig.	0.069

Based on the normality test results using the One-Sample Kolmogorov-Smirnov Test with a significance level not exceeding 0.05 (5%), it can be concluded that the residuals are not normally distributed.

Table 3. Multicollinearity Test

Model	Tolerance	VIF
HT (Price)	0,518	1,932
KT (Product Quality)	0,518	1,932

Based on the test results in the table above, the data does not experience multicollinearity. With Tolerance results below 10 and VIF above 0.1.

Table 4. Heteroskedasticity Test

Model	B	t	Sig.
(Constant)	1.677	2.742	0.007
HT (Price)	-0.030	-0.670	0.504
KT (Product Quality)	-0.016	-0.374	0.709

Based on the test results in the table above, with significance values above 0.05 for the price and quality variables, it can be concluded that the data does not experience heteroskedasticity.

Table 5. Regression Test

Model	Unstandardized B	t	Sig.
(Constant)	2,534	2,416	0,017
HT (Price)	0.319	4,113	0,000
KT (Product Quality)	0,534	7,267	0,000

Based on the regression test results with a research alpha level of 0.05, it can be concluded that price significantly influences purchase decisions, and product quality significantly and positively influences purchase decisions.

4.2 Discussion

Price has a positive and significant influence on the decision to purchase Le Minerale bottled water products, as indicated by the significance value of 0.042 < 0.05. Therefore, these results indicate that the first hypothesis is supported. and it shows that more than 100 respondents who completed the questionnaire and have consumed and purchased Le Minerale products are satisfied and feel that the products are worth the market price. This result is consistent with the study by Ismayana and Hayati (2018) on the influence of price and quality on the purchase decision of Pixy products. It is also contrary to the study by Anwar, I (2015), which examined the influence of price and product quality on the purchase decision of cooking equipment at the Maxim Houseware Grand City Mall Surabaya showroom, where the result showed that price did not affect consumer purchasing decisions. Affordable prices naturally attract consumers. When consumers find products at prices considered appropriate for the value or benefits they seek, they tend to lean towards purchasing those products. Affordable prices are often considered indicators of good value. Consumers tend to view products with prices aligned with the benefits or quality provided as valuable investments. Budget Consideration: Most consumers have budget constraints when shopping. Affordable prices within their budget allow consumers to fulfill their needs without feeling financially burdened. Affordable prices allow brands to reach a broader market segment. Affordable products can attract consumers with various income levels, this expanding the market share of the brand. In situations where similar products are also offered by several brands, lower prices can be a determining factor in winning the competition. Consumers tend to choose products with lower prices if their quality is considered equal.

Product quality also yielded similar test results with a significance value below 0.05. This indicates that product quality has a significant and positive impact on the decision to purchase Le Minerale bottled water products (second hypothesis supported). More than 100 respondents also provided relatively supportive answers regarding the test results of the quality variable. This research result also supports the study by Joshua, D. and Padmalia, M. (2017) on Terang Bulan-Martabak 93 products, which found that price and product quality have a significant and positive influence on purchasing decisions. However, this result contrasts with the study by Supu, P., Poluan, etc. (2021) on Samsung products, where their research showed that price and product quality did not have a significant and positive influence on purchasing decisions. The Le Minerale product has a refreshing taste and high-quality products help build a strong brand reputation. Brands known for providing quality products tend to attract more consumers because consumers believe they will get good value from the product. Le Minerale also has relatively long packaging durability in accordance with the expiration date listed on the packaging, even though the price of the high-quality product is relatively higher. Consumers often see the long-term value of investing in the product. They consider long-term benefits, reliable performance, and product durability when making purchasing decisions.

5. Conclusions

Price has a positive and significant influence on the decision to purchase Le Minerale bottled water products. Product quality has a significant and positive impact on the decision to purchase Le Minerale bottled water products.

The findings of this research imply that PT. Tirta Fresindo Jaya should always pay attention to and improve the quality of its products to attract more consumers to purchase Le Minerale products. PT. Tirta Fresindo Jaya should also consider competitive pricing that matches the quality of its products to maintain or even increase product sales. For companies, there is a need for further evaluation regarding product price and quality to maintain and increase sales in the market by maintaining product quality. It is also hoped that sellers can enhance consumer trust in making purchases by supplementing social media accounts with testimonials from previous satisfied customers regarding the quality of Le Minerale products and their purchasing experience.

The number of respondents, which is only 108 people, is certainly insufficient to depict the actual situation. In the process of data collection, the information provided by respondents through questionnaires sometimes does not reflect their true opinions. This occurs because there are sometimes differences in thoughts, assumptions, and understandings among each respondent. However, there are also other factors such as the honesty factor in filling out respondents' opinions in their questionnaires.

Based on the results of the research, several suggestion ideas can be formulated. Future researchers who will examine purchase decisions influenced by price and product quality should reach a broader scope of research material so that the research results can be generalized. It is also recommended to gather a larger sample aiming to obtain better data accuracy in this study. It is hoped to include additional variables that may affect other aspects related to this topic.

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LIFESTYLE AND INCOME: DETERMINANTS OF GENERATION Z'S FINANCIAL MANAGEMENT

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ABSTRACT
Financial management is important to overcome financial problems. Generation Z is a generation that is responsive to technological developments, so it has a consumerist lifestyle and has an impact on behavior that is less wise in managing finances. Apart from that, the greater income generation Z gets from parents' pocket money, scholarships and work wages has an impact on financial management. Therefore, generation Z has responsible behavior in spending so they avoid debt. The determinant of financial management which is the research objective is the influence of lifestyle and income on the financial management of generation Z students of the Management Study Program at Sanata Dharma University (USD). The research sample was active students of the USD Management Study Program class of 2021 and had taken Financial Management courses, totaling 89 respondents. Multiple linear regression with the SPSS 25 application as a data analysis technique. The research results show that lifestyle and income have a positive effect on financial management of Generation Z students of the USD Management Study Program. The implication is that Generation Z has a frugal lifestyle and is responsible for their income, so they have wise behavior in managing finances.
***Keywords**: Lifestyle; Income; Financial Management; Generation Z.*

1. Introduction

Generation Z is the generation born from 1997 to 2012 and is able to utilize technology better than previous generations (Hernandez-de-Menendez, Escobar Díaz and Morales-Menendez, 2020). Generation Z grew up in the digital era with easier accessibility of information and financial services. However, the tendency to use Buy Now Pay Later (BNPL) digital financial services carries its own risks (Kenney, Firth and Gathergood, 2023). BNPL is a financial facility with a type of short-term financing that allows consumers to make purchases and pay for them over time (Johnson, Rodwell and Hendry, 2021). The Financial Services Authority noted that Non-Performing Loans (NPL) for BNPL services reached 9.7% or above the safe limit of 5% and Gen Z contributed 47.78% to this ratio (Aji, 2023). NPL describes a condition where the debtor is unable to pay ongoing installments on time (Manz, 2019). This consumption occurs in practical and small purchases such as clothing, food and restaurants. High levels of consumerism will then result in suboptimal financial behavior, such as a lack of understanding about managing personal finances and a lack of savings habits (Rahayu and Rahmawati, 2019).

Financial management is a way to manage finances by utilizing money optimally to meet current needs and desires and to prepare for future needs (Pangestu, Karnadi and Foroudi, 2020). Financial management can be done through several steps including recording assets, recording all income and expenses, finding monthly and annual expenses, making a budget, saving regularly, and planning future actions (Rahayu and Rahmawati, 2021). Financial management can create prosperity and overcome financial problems, especially for generation Z (Sconti, 2022).

Generation Z, who have a consumerist attitude and prioritize instant comfort, will be at risk of not being able to manage their finances well. This becomes worse when BNPL is used, which although practical can have a negative impact on financial management if used unwisely (Seyfi, Sharifi-Tehrani, Hall and Vo-Thanh, 2023). Apart from that, the increasing income earned by generation Z from parents' pocket money, scholarships and work wages has an impact on financial management (Amirul, Che Azmi and Jaafar, 2022). Therefore, generation Z has responsible behavior in shopping so as to avoid from debt. The determinant of financial management which is the aim of the research is the influence of lifestyle and income on the financial management of generation Z students of the Sanata Dharma University (USD) Management Study Program. Meanwhile, USD is a private university in Yogyakarta which has one study program, namely the Management Study Program with a total of 1,138 active students belonging to generation Z (Sanata Dharma University, 2023).

One of the determinants of financial management in this research is lifestyle. According to Hazari and Sethna (2023), lifestyle is a person's pattern of managing time and money which is expressed through their activities, interests and opinions. Generation Z, as a generation that is able to utilize technology better than previous generations, tends to have consumerist behavior and spend a lot of money, which carries the risk of not being able to manage finances well. A lifestyle that prioritizes instant convenience, such as the use of BNPL can lead to impulsive spending and poor financial management. Therefore, generation Z, with a lifestyle that tends to lead to a hedonic lifestyle, namely a lifestyle whose activities are to seek pleasure in life, should have an understanding of appropriate financial management so that it can improve welfare. This is in line with the Theory of Planned Behavior (TPB) which states that an individual's intention to do something is an important component in the theory of planned behavior (Ajzen, 2020). Intention is a tool used to determine whether someone has attempted to carry out a behavior (Miller, 2017). Lifestyle is a reflection of subjective norms related to attitudes towards behavior and is a component included in the TPB (Kamalian, Didarloo, Khalkhali and Maheri, 2023). Someone who has a good lifestyle tends to save and manage finances well (Zhu, 2021). This is also in line with the research results of Zhu (2021); Hazari and Sethna (2023) which show that lifestyle has a positive effect on financial management. However, this is not in line with the results of Bapat's research (2022); O'Neill, Dias, Patuleia and Pereira (2022) which shows that lifestyle does not have a positive effect on financial management.

One of the determinants of financial management besides lifestyle in this research is income. According to Kurniasari and Utomo (2023), income is a person's source of income to meet their daily needs. Generation Z's biggest income comes from pocket money given by their parents, scholarships they get every period, and working part time for companies (Katusiime, 2021). The increasing income obtained by generation Z from parents' pocket money, scholarships and work wages has an impact on financial management (Ozili, 2017). Therefore, generation Z has responsible behavior in shopping so they avoid debt. This is in line with the TPB which states that a person carries out certain behaviors because they have an intention or purpose in doing so, motivated by several factors, one of which is social factors, namely income. Someone who has a higher income is more likely to show more responsible financial behavior considering that the funds they have will give them the opportunity to take action with a sense of responsibility (Wang, Weng and Huo, 2023). This is also in line with the results of Ozili's (2017) research; Kurniasari and Utomo (2023); Wang, Weng and Huo (2023) show that income has a positive effect on financial management. However, this is not in line with the research results of Nguyen, Vu, Vo and Ha (2019); Tee (2020) shows that income has no positive effect on financial management.

Based on the phenomenon and the inconsistencies in the results of previous research, the researcher will conduct research with the title "Lifestyle and Income: Determinants of

Generation Z's Financial Management". The implication of this research is that it is hoped that generation Z will have a frugal lifestyle and be responsible for their income, so that they will have wise behavior in managing finances.

2. Literature Review

2.1 Theory of Planned Behavior (TPB)

TPB is a development of the Theory of Reasoned Action (TRA) by adding behavioral control as a determinant of a person's intentions (Sussman and Gifford, 2019). TPB explains that apart from itself, the availability of certain resources and opportunities also influences a person's behavior and attitudes are an important basis in forming behavior (Rizzo and Columna, 2020). According to Oztekin, Teksöz, Pamuk, Sahin and Kilic (2017), there are 2 aspects in relation to attitudes towards behavior, namely (1) the individual's belief that whether or not displaying certain behavior will bring certain consequences or results; and (2) aspects of individual knowledge of the attitude object can be in the form of individual opinions, so they do not necessarily correspond to reality. According to Strydom (2018), individual beliefs have a positive influence on the resulting attitudes. The more positive an individual's beliefs are, the more positive the attitude shown by the individual will be towards the object of that attitude.

2.2 Financial Management

Financial management is a way to manage finances by utilizing money optimally to meet current needs and desires and to prepare for future needs (Pangestu, Karnadi and Foroudi, 2020). Financial management can be done through several steps including recording assets, recording all income and expenses, finding monthly and annual expenses, making a budget, saving regularly, and planning future actions (Rahayu and Rahmawati, 2021). Financial management can create prosperity and overcome financial problems, especially for generation Z (Sconti, 2022). This is in line with the TPB, where there is an influence between financial knowledge and behavior on financial management (Rizzo and Columna, 2020). Someone who has more knowledge and good behavior regarding finances will carry out more focused and efficient financial management. The determinant of financial management which is the aim of the research is the influence of lifestyle and income on the financial management of generation Z students of the Sanata Dharma University (USD) Management Study Program. This research uses indicators in financial management including preparing a financial budget; record all expenses and income; manage expenses according to budget; avoid impulsive spending; have an emergency fund; and start investing with a small nominal amount (Rai, Dua and Yadav, 2019).

2.3 Generation Z

Generation Z is a generation that has the characteristics of being proficient in the digital world and the youngest generation that is currently just starting to enter the workforce and letting go of financial dependence on their parents (Amirul, Che Azmi and Jaafar, 2022). This generation was born from 1997 to 2012 and is in the age range of 12-27 years. Based on the 2023 Central Statistics Agency (BPS) census, it shows that Indonesia is being dominated by Generation Z with the number of individuals reaching 74.93 million people (Jayani, 2021). Generation Z is a generation characterized by being fluent in technology, interacting with social media, being expressive and multitasking. Therefore, with various existing technological developments, generation Z is required to have good financial behavior so that they can take positive benefits from all existing developments and can filter out the negative impacts that are also present (Seyfi, Sharifi-Tehrani, Hall and Vo-Thanh, 2023). Easy access to information regarding good financial behavior is also a supporting factor for good financial behavior in generation Z (Squires and Ho, 2023). Good financial behavior is important to implement in the lives of generation Z in their financial transition period. Generation Z during their financial transition period will certainly begin to determine the lifestyle they will choose according to their existing income. Generation Z, who have a consumerist attitude and prioritize instant comfort, will be at risk of not being able to manage their finances well. Apart from that, the increasing income earned by generation Z from parents' pocket money, scholarships and work wages has an impact on financial management (Amirul, Che Azmi and Jaafar, 2022). Therefore, generation Z has responsible behavior in shopping so as to avoid from debt.

2.4 Lifestyle

Lifestyle is a person's pattern of managing time and money which is expressed through their activities, interests and opinions (Hazari and Sethna, 2023). A person's lifestyle often indicates their attitudes, principles, and perspective on life. Apart from that, lifestyle can also show priorities and preferences in meeting daily needs and desires. Generation Z, as a generation that is able to utilize technology better than previous generations, tends to have consumerist behavior and spend a lot of money, which carries the risk of not being able to manage finances well. Therefore, generation Z, with a lifestyle that tends to lead to a hedonic lifestyle, namely a lifestyle whose activities are to seek pleasure in life, should have an understanding of appropriate financial management so that it can improve welfare. This is in line with the Theory of Planned Behavior (TPB) which states that an individual's intention to do something is an important component in the theory of planned behavior (Ajzen, 2020). Intention is a tool used to determine whether someone has attempted to carry out a behavior (Miller, 2017). Lifestyle is a reflection of subjective norms related to attitudes towards behavior and is a component included in the TPB (Kamalian, Didarloo, Khalkhali and Maheri, 2023). Someone who has a good lifestyle tends to save and manage finances well (Zhu, 2021). This is also in line with the research results of Zhu (2021); Hazari and Sethna (2023) who show that lifestyle has a positive effect on financial management. This research uses lifestyle indicators including the activity of purchasing new goods; interest or fascination with entertainment, clothing, and gadgets; as well as impulsiveness and being easily tempted (Hazari and Sethna, 2023). Therefore, the formulation of this research hypothesis is:

Ha1: Lifestyle has a positive effect on financial management of Generation Z students of the USD Management Study Program

2.5 Income

Income is a person's source of income to meet their daily needs and is one of the determinants of financial management (Kurniasari and Utomo, 2023). Generation Z's biggest income comes from pocket money given by their parents, scholarships they get every period, and working part time for companies (Katusiime, 2021). The increasing income obtained by generation Z from parents' pocket money, scholarships and work wages has an impact on financial management (Ozili, 2017). Therefore, generation Z has responsible behavior in shopping so they avoid debt. This is in line with the TPB which states that a person carries out certain behaviors because they have an intention or purpose in doing so, motivated by several factors, one of which is social factors, namely income. Someone who has a higher income is more likely to show more responsible financial behavior considering that the funds they have will give them the opportunity to take action with a sense of responsibility (Wang, Weng and Huo, 2023). This is also in line with the results of Ozili's (2017) research; Kurniasari and Utomo (2023); Wang, Weng and Huo (2023) show that income has a positive effect on financial management. This research uses income indicators including average monthly income (pocket money); basic needs (food, shelter, transportation); difficulty in meeting needs; and the need to seek additional income (Wang, Weng and Huo, 2023). Therefore, the formulation of this research hypothesis is:

Ha2: Income has a positive effect on financial management of Generation Z students of the USD Management Study Program

3. Research Methods

This research uses quantitative descriptive research methodology. The population of this research is active students of the 2021 Management Study Program at Sanata Dharma University, totaling 222 students. The sample for this research is active students from the 2021 Management Study Program at Sanata Dharma University, using sampling criteria in the form of purposive sampling in the form of students who have taken Financial Management and Portfolio and Investment Management courses. According to Sugiyono (2018:91), the sample for research is suggested as follows: the number of appropriate samples for research ranges between thirty and five hundred, and the number of samples must be divided into groups with a minimum of thirty members in each group. If the appropriate sample size for research is between thirty and five hundred, then the sample must be divided into groups with a minimum of thirty members in each group. Research that uses multivariate analysis, such as correlation or multiple regression, must have at least ten times the number of variables studied. For example, if the research variable is 3 (independent + dependent variable), then the number of participants is 20 x 3 = 60. Therefore, the sample for this research uses 89 active students of the 2021 Management Study Program at Sanata Dharma University who have taken Management courses. Finance and Portfolio and Investment Management.

This research uses independent variables in the form of lifestyle and income variables, as well as a dependent variable in the form of financial management. Indicators of lifestyle variables include purchasing new goods; interest or fascination with entertainment, clothing, and gadgets; as well as impulsiveness and being easily tempted (Hazari and Sethna, 2023). Indicators for the income variable include average monthly income (pocket money); basic needs (food, shelter, transportation); difficulty in meeting needs; and the need to seek additional income (Wang, Weng and Huo, 2023). Meanwhile, indicators for financial management include preparing a financial budget; record all expenses and income; manage expenses according to budget; avoid impulsive spending; have an emergency fund; and start investing with a small nominal amount (Rai, Dua and Yadav, 2019).

The data collection technique used in this research used an online questionnaire using Google Form as media. The research instrument was tested using validity and reliability tests. Analysis of this research data is in the form of (1) descriptive analysis of respondents including name, age, gender, and income or pocket money of respondents; and (2) descriptive analysis of variables. The data analysis technique used in this research uses multiple linear regression analysis with the SPSS 25 application, where previously classical assumption tests were carried out including normality, multicollinearity and heteroscedasticity tests. After carrying out multiple linear regression analysis, then carry out hypothesis testing including (1) F test to see the simultaneous influence of lifestyle and income on financial management of Generation Z students of the USD Management Study Program; and (2) t test to see the partial influence of lifestyle on the financial management of Generation Z students of the USD Management Study Program and the partial influence of income on the financial management of Generation Z students of the USD Management Study Program. Next, carry out the Coefficient of Determination test to measure the magnitude of the influence of the independent variable on the dependent.

4. Research Findings and Discussion

4.1 Instrument Testing Techniques

4.1.1 Validity Test

This research uses a validity test by comparing r_{count} and r_{table} with a sig value of 0.05. If r_{count} is greater than r_{table} then the instrument is significantly correlated with the total score or declared valid. Conversely, if r_{count} is smaller than r_{table} then the instrument does not correlate significantly with the total score or is declared invalid. Based on Table 1, it can be seen that each question item above has a calculated r_{count} of more than r_{table}, and both sides are also no more than a sig value of 0.05. So it can be said that the question items on the variables lifestyle (X1), income (X2), and financial management (Y) are declared valid.

Table 1. Validity Test Result

Items	r_{count}	r_{table}	Sig.	Information
X1.1	0.672	0.208	< 0.001	
X1.2	0.606	0.208	< 0.001	
X1.3	0.467	0.208	< 0.001	
X1.4	0.554	0.208	< 0.001	
X1.5	0.723	0.208	< 0.001	Valid
X1.6	0.716	0.208	< 0.001	
X1.7	0.639	0.208	< 0.001	
X1.8	0.402	0.208	< 0.001	
X1.9	0.561	0.208	< 0.001	
X1.10	0.475	0.208	< 0.001	
X2.1	0.672	0.208	< 0,001	
X2.2	0.508	0.208	< 0,001	
X2.3	0.209	0.208	< 0.049	Valid
X2.4	0.585	0.208	< 0.001	
X2.5	0.728	0.208	< 0.001	
X2.6	0.693	0.208	< 0.001	
Y.1	0.802	0.208	< 0.001	
Y.2	0.760	0.208	< 0.001	
Y.3	0.729	0.208	< 0.001	
Y.4	0.660	0.208	< 0.001	
Y.5	0.715	0.208	< 0.001	
Y.6	0.709	0.208	< 0.001	Valid
Y.7	0.699	0.208	< 0.001	
Y.8	0.702	0.208	< 0.001	
Y.9	0.605	0.208	< 0.001	
Y.10	0.722	0.208	< 0.001	
Y.11	0.495	0.208	< 0.001	

Source: Primary Data Processing Results (2024)

4.1.2 Reliability Test

Reliability testing was carried out to determine whether the questionnaire tool could be used consistently. According to Sugiyono (2018:220), an instrument is considered reliable if it has a reliability coefficient of at least 0.6. All variables examined in Table 2 show a Cronbach Alpha value > 0.6. Therefore, it can be said that the lifestyle, income and financial management variables are declared reliable.

Table 2. Reliability Test Result

Variable	Number of Items	Cronbach Alpha	Information
Lifestyle (X1)	10	0.842	
Income (X2)	6	0.606	Reliable
Financial Management (Y)	11	0,889	

Source: Primary Data Processing Results (2024)

4.2 Descriptive Analysis of Respondents

This research uses descriptive analysis of respondents to clearly determine the number of respondents who have been divided according to predetermined characteristics. The demographic characteristics of this research include age, gender, and income or pocket money of respondents in Generation Z, active students of the 2021 Management Studies Study Program at Sanata Dharma University. Characteristics of respondents based on age showed that there were 69 respondents in this study in the age range of 20-23 years; Based on gender, there were 26 male respondents and 43 female respondents; and based on the respondents' income or pocket money, it was found that the range of income or pocket money with a nominal value of IDR500,000.00 to IDR1,500,000.00 dominated 34 respondents.

4.3 Classical Assumption Tests

4.3.1 Normality Test

The residual value resulting from regression can be determined using a normality test, one of which uses the One Sample Kolmogorov Smirnov test (Sugiyono, 2018:235). The results of the One sample Kolmogorov Smirnov test, shown in Table 3, obtained a sig value. 0.090. This value is more than 0.05 so it can be interpreted that the data is normally distributed.

Table 3. Normality Test Result

Unstandaedized Residual	N	Kolmogrov Sminrov Z	Asymp. Sig (2-tailed)	Sig. *Critical	Information
Model	89	0.087	0.090	0.05	Normal

Source: Processing Results using SPSS 25 (2024)

4.3.2 Multicollinearity Test

This research uses a multicollinearity test to find out whether there is a correlation between the independent variables in the regression model, namely by looking at the tolerance value and the Variance Inflation Factor or VIF value (Sugiyono, 2018:242). If the tolerance value is more than 0.10 and the VIF value is less than 10.00, then the data does not have multicollinearity. Conversely, if the tolerance value is less than 0.10 and the VIF value is more than 10.00, then the data has multicollinearity. Based on Table 4, it shows that there is no multicollinearity in the data, where the tolerance value is 0.967 and the VIF value is 1.034.

Table 4. Multicollinearity Test Result

Variable Independent	Variable Dependent	Tolerance Value	Tolerance	VIF Value	VIF *Critical	Information
Lifestyle (X1)	Financial Management (Y)	0.967	0.10	1.034	10.0	Multicollinearity does not occur
Income (X2)		0.967	0.10	1.034	10.0	

Source: Processing Results using SPSS 25 (2024)

4.3.3 Heteroscedasticity Test

The heteroscedasticity test aims to determine whether there are differences in variables and residuals from one observation to another in the regression model (Sugiyono, 2018:256). If the sig value is more than 0.05 then heteroscedasticity does not occur. Conversely, if the sig value is less than 0.05 then heteroscedasticity occurs. Based on Table 5, it shows that there is no heteroscedasticity in the data, where the sig value for the lifestyle and income variables is more than 0.05.

Table 5. Heteroscedasticity Test Result

Variable	Sig.	Information
Lifestyle (X1)	0.518 > 0.05	Heteroscedasticity
Income (X2)	0.863 > 0.05	does not occur

Source: Processing Results using SPSS 25 (2024)

4.4 Multiple Linear Regression Analysis

The data analysis technique used in this research is multiple linear regression analysis. The dependent variable of this research is financial management (Y) and the independent variables of this research include lifestyle (X1) and income (X2). Based on Table 6, the multiple linear regression equation is as follows:

$$Y = 25.678 – 0.239\ X1 + 0.787\ X2$$

Table 6. Multiple Linear Regression Analysis

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistic	
Model		B	Std. Error	Beta	T	Sig.	Tolerance	VIF
1	(Constant)	25.678	4.365		5.885	<0.001		
	Lifestyle (X1)	0.239	0.108	0.213	2.206	0.030	0.967	1.034
	Income (X2)	0.787	0.194	0.390	4.047	<0.001	0.967	1.034
a. Dependent Variabel: Financial Management (Y)								

Source: Processing Results using SPSS 25 (2024)

4.5 Hypothesis testing

Hypothesis testing is divided into two, namely (1) F test to see the simultaneous influence of lifestyle and income on financial management of Generation Z students of the USD Management Study Program; and (2) t test to see the partial influence of lifestyle on the financial management of Generation Z students of the USD Management Study Program and the partial influence of income on the financial management of Generation Z students of the USD Management Study Program. Table 7 shows that the sig value is smaller than 0.05, so it can be interpreted that lifestyle and income simultaneously influence the financial management of Generation Z students at the USD Management Study Program. Furthermore, Table 8 shows that (1) lifestyle has a positive effect on financial management of Generation Z students of the USD Management Study Program; and (2) income has a positive effect on financial management of Generation Z students of the USD Management Study Program.

Table 7. F Test Results

Anova						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	750.459	2	375.230	12.662	<0.001
	Residual	2548.485	86	29.634		
	Total	3298.944	88			
a. Dependent Variable: Financial Management (Y)						
b. Predictors: (Constant), Lifestyle (X1), Income (X2)						

Source: Processing Results using SPSS 25 (2024)

Table 8. t Test Results

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	25.678	4.365		5.885	<0.001
	Lifestyle (X1)	0.239	0.108	0.213	2.206	0.030
	Income (X2)	0.787	0.194	0.390	4.047	<0.001
a. Dependent Variabel : Financial Management (Y)						

Source: Processing Results using SPSS 25 (2024)

4.5.1 Lifestyle has a positive influence on financial management of Generation Z students of the USD Management Study Program

Hypothesis 1 of this research is accepted, where lifestyle has a positive effect on financial management of Generation Z students of the USD Management Study Program. This can be seen in Table 8 where the sig value of the lifestyle variable is smaller than 0.05. Therefore, it can be interpreted that the increasing lifestyle will improve the financial management of generation Z students of the USD Management Study Program. Generation Z, with a lifestyle that tends to lead to a hedonic lifestyle, namely a lifestyle whose activities are to seek pleasure in life, should have an understanding of appropriate financial management so that it can improve welfare. This is in line with the Theory of Planned Behavior (TPB) which states that an individual's intention to do something is an important component in the theory of planned behavior (Ajzen, 2020). Lifestyle is a reflection of subjective norms related to attitudes towards behavior and is a component included in the TPB (Kamalian, Didarloo, Khalkhali and Maheri, 2023). A person who has a positive perception of how they use their money can act wisely and responsibly in terms of their finances. How well students manage their money and pay attention to other expenses will show their financial behavior. This is also in line with the research results of Zhu (2021); Hazari and Sethna (2023) who show that lifestyle has a positive effect on financial management.

4.5.2 Income has a positive effect on financial management of Generation Z students of the USD Management Study Program

Hypothesis 2 of this research is accepted, where income has a positive effect on financial management of Generation Z students at the USD Management Study Program. This can be seen in Table 8 where the sig value of the income variable is smaller than 0.05. Therefore, it can be interpreted that increasing income will improve the financial management of generation Z students of the USD Management Study Program. Generation Z's biggest income comes from pocket money given by their parents, scholarships they get every period, and working part time for companies (Katusiime, 2021). The increasing income obtained by generation Z from parents' pocket money, scholarships and work wages has an impact on financial management (Ozili, 2017). Therefore, generation Z has responsible behavior in shopping so as to avoid debt. This is in line with the TPB which states that a person carries out certain behaviors because they have an intention or purpose in doing so, motivated by several factors, one of which is social factors, namely income. Student expenses will be higher if they have a larger income, so it is important for students to understand finances so they can manage their income to avoid debt. The higher a person's income level, the easier it is to meet their needs and they tend to be more responsible for that income (Wang, Weng and Huo, 2023). This is also in line with the results of Ozili's (2017) research; Kurniasari and Utomo (2023); Wang, Weng and Huo (2023) show that income has a positive effect on financial management.

4.6 Coefficient of Determination Test

The coefficient of determination test is used to measure the magnitude of the influence of the independent variable on the dependent. Based on Table 9, it shows that the R Square value is 0.227 (22.7%). This can be interpreted as lifestyle and income variables simultaneously influencing financial management variables by 22.7%. Meanwhile, the remainder (100% - 22.7% = 77.3%) is influenced by other variables outside this regression equation or variables that were not studied.

Table 9. Coefficient of Determination Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.270[a]	.227	.245	6.180

a. Predictors: (Constant), Lifestyle, Income
b. Dependent Variable: Financial Management

Source: Processing Results using SPSS 25 (2024)

5. Conclusion

Based on the research results, it can be concluded that lifestyle has a positive influence on the financial management of Generation Z Students of the Sanata Dharma University Management Study Program. This can be interpreted that the more the lifestyle improves, the more students' financial management will improve. Apart from that, the conclusion of this research is that income has a positive effect on the financial management of Generation Z Students of the Sanata Dharma University Management Study Program. This can be interpreted that the more existing income increases, the greater the financial management carried out by students.

The implication of this research is that it is hoped that generation Z will have a frugal lifestyle and be responsible for their income, so that they will have wise behavior in managing finances. Apart from that, generation Z can evaluate their financial management so that generation Z can align their lifestyle and income in the context of good financial management. It is hoped that this will have an impact on reducing the NPL ratio of BNPL services which is dominated by Generation Z.

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THE INFLUENCE OF WOMEN'S INVOLVEMENT ON THE HUMAN DEVELOPMENT INDE IN THE COASTAL AREAS OF INDONESIA

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ABSTRACT

Development in Indonesia's coastal areas is challenging, with a variety of factors affecting the welfare of its communities. Women's involvement and socio-economic factors are important in formulating inclusive and sustainable development policies. This study aims to identify and analyze the influence of women's involvement and socio-economic variables, including women's income contribution, women's average years of schooling, women's labor force participation rate, women's involvement in parliament, gender inequality index, population, and number of poor people, on the Human Development Index (HDI) in Indonesia's coastal areas. The data analysis method used was a multiple linear regression approach. Secondary data were obtained from various sources. Data collection was conducted through surveys and documentation analysis. The results show that women's involvement has a significant influence on HDI in coastal Indonesia. Women's income contribution, women's labor force participation rate, and women's average years of schooling have a significant positive influence on HDI. On the other hand, gender inequality index and poverty headcount have a significant negative impact. These findings provide a deeper understanding of the factors that influence human development in Indonesia's coastal areas and provide a basis for formulating more effective policies to improve the welfare of coastal communities.
Keywords: *Human development index, female labor participation rate, gender inequality index.*

1. Introduction

Gender inequality in Indonesia continues to be a hot topic today. The government has attempted in various ways to achieve gender equality, although there are still gaps between women and men in various fields such as education, health, economics, politics and socio-culture (Lorenza, 2022). Gender is represented as a set of roles in a theater that tells other people that someone is feminine or masculine (Lusiarista & Arif, 2022). However, according to Giyono & Maemunah (2021), gender is interpreted as differences in the roles and behavior of men and women which are socially constructed. Gender is not something that is innate, gender is a social form that is formed by several factors such as region, culture, state ideology, politics and economics (Utaminingsih, 2017).

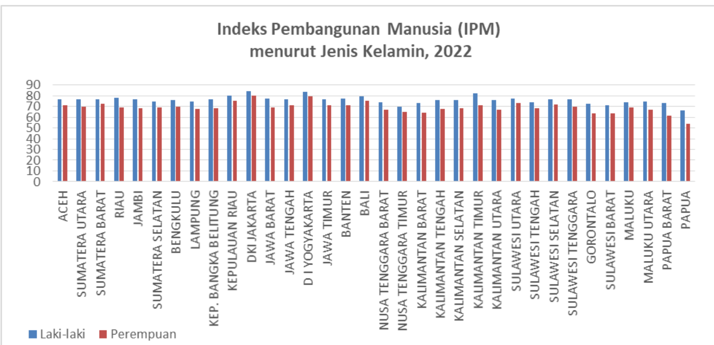

Figure 1.1 Human Development Index by gender in Indonesia's coastal areas in 2022

Source: Central Statistics Agency (processed), 2024

From the picture above you can see clear that Index Development Man (IPM) Woman in Indonesia's coastal areas are lower than men in 2022, where if specified the DKI Jakarta province has the highest HDI ranking for men , namely 84.36% and the lowest in the province of East Nusa Tenggara, namely 69.9%, while for HDI women the highest ranking in the province DKI Jakarta is 80.08% and the lowest is in West Papua province , namely 61.26%. This supports the fact that women as contributors to the human development index still have minimal contributions.

Apart from the low contribution of women to the economy, participation Women in politics in Indonesia are also still relatively low. Representation Woman in in parliament expected capable push well-being women's groups and influence more equitable and responsive policies gender (Widyaningrum, 2020).

The study, according to research from Utami & Arif (2023), shows that the involvement of women in parliament and the level of female labor force participation have a positive effect on the Gender Development Index. The higher the involvement of women in parliament and the level of female labor force participation increases, the gender development index will correspondingly increase.

According to Abdurrahmana & Tusianti (2021), the percentage of women as entrepreneurs, the percentage of women in parliament, and the percentage of women as managers, professionals, administrators and technicians have a positive and significant influence on women's HDI. If women are empowered in economic and political aspects, then the quality of Indonesian women as reflected in the HDI will certainly continue to improve.

Several previous studies reviewed the role of women's involvement in society towards quality development human life. A number of country advance in process development show that participation Woman is an important element in economic development. Broadly speaking, it is women in government and leadership can provide aspirations for other women to improve their educational attainment (Beaman *et al*., 2012).

Therefore, the level of women's education, which is reflected in the average length of schooling for women, greatly influences the increase in HDI in the future, as the results of previous research show that the average length of schooling for women has a significant positive effect in improving women's quality of life, which will later contribute to an increase in HDI. (Widiastuty, 2019).

According to (Permatasari et al., 2021), Community development and development, especially women. As the main support in the wheel of development, women's empowerment is expected to create a generation that is creative, innovative and highly competitive. The role characteristics of women are expected to be able to contribute and win global competition. And it will increase the human development index and reduce gender inequality in Indonesia.

As indicator For measure success development quality human life, the Human Development Index (HDI) shows how far public can obtain results development form enhancement income, health, and education. So researchers want to know more deeply whether these women's involvement variables have a significant positive effect and support the growth of HDI along Indonesia's coastal areas .

2. Literature Review

2.1 Human Development Index

According to the United National for Development Program (UNDP), the Human Development Index is a measuring tool for a country's achievements in three basic dimensions of development, including longevity and healthy living, measured by life expectancy at birth, knowledge or education level, measured by a combination of the expected number of years of schooling and the average number of years of schooling and decent living as measured by per capita expenditure.

2.2 The Relationship between Women's Involvement and the Human Development Index

2.2.1 The Relationship between Women's Income Contribution to HDI

An analysis of the income of female workers has been carried out by Christopher et al. The results of this research show that the level of education and number of hours worked have a positive effect on the income of female workers from poor households (Christoper et al., 2019). Other research analyzing the determinants of female workers' income was also carried out by Huruta et al using the multiple regression analysis method. This research shows that partially, age and level of education have a positive and significant influence on the income of female workers, while the number of family members, marital status and employment do not have a significant influence (Huruta et al., 2019). Women's income does not always guarantee empowerment, especially when wages are at low levels (Bhattacharjee & Goswami, 2020). Other research shows that age and education level influence the added worker income of married women, while the presence of children aged 0-14 years and husband's education do not have a significant influence (Febriani & Saleh, 2016).

2.2.2 The Relationship between Average Years of Schooling and HDI

Average years of schooling is defined as the number of years a population has been in education. It is assumed that under normal conditions the average length of schooling in a region will not decrease. The population coverage calculated in calculating the average length of schooling is residents aged 25 years and over (Soleha, 2023).

According to previous research, the relationship between average length of schooling and HDI. Formal education can provide beliefs, goals, attitudes and aspirations that occur directly or indirectly related to development problems, increase knowledge and abilities for development purposes. Formal education is stated to be more capable of guaranteeing the quality of society with an education system such as a curriculum that has been regulated by the government. The ability and opportunity for people to work to reduce the level of open unemployment increases when people take longer to complete formal education. Women's Work Participation (Havista, 2023).

2.2.3 The Relationship between Women's Work Participation and HDI

From previous research, the female labor force participation rate has a positive effect in line with the human development index in Central Java in 2015-2019. Increased productivity caused by an increase in the Human Development Index (HDI) will encourage economic growth. Increasing economic growth will increase job opportunities and demand for labor so that many people, especially women, can be absorbed into the labor market (Ningrum, 2021).

2.2.4 The Relationship between Women's Involvement in Parliament and HDI

Next is the low participation of women in public (political) decision making. It is hoped that women's representation in parliament will encourage the welfare of women's groups by representing, overseeing and influencing policies that are more equitable and gender responsive (Rahmaniah, 2016).

In research by Abdurrahman & Tusianti (2021) , the percentage of women in parliament has a positive and significant effect on women's HDI. If the percentage of women in parliament increases by 1 percent, the HDI value for women will increase by 0.196. The results of this research provide an indication that women's participation in politics has an influence on the quality of women. Women who sit as members of parliament are expected to be able to fight for women's aspirations at the legislative level.

2.3 Gender Inequality Index Relationship Against HDI

The relationship between HDI and IKG then becomes an interesting thing to discuss because gender equality is actually part of human development. As stated by UNDP (2015), equal opportunities for all groups of people in various aspects of life is the main key to human development. Therefore, ideally high human development is accompanied by equal development for all groups, both men and women.

Simply put, this connection is if an area that has low human development will also have low gender equality conditions (high IKG). Conversely, if a region has a high HDI it tends to have a low IKG Ema (Tusianti & Prihatiningsih, 2017) .

3. Research Methods

This research uses panel data, namely cross-section data collected over a certain period of time so that it has spatial and temporal dimensions. Panel data consists of balanced panels and unbalanced panels. Panel data is said to be balanced if each cross-section unit has the same number of time-series observations and is said to be unbalanced if each cross-section unit has an unequal number of time-series observations (Greene, 2012). The *Gross Section* data consists of all districts/cities along Indonesia's coastal areas, namely 409 districts/cities, with a 5 year data series from 2018 to 2022 with a total of 2,045 panel data.

This research uses secondary data taken from several publications published by the Central Bureau of Statistics in the Indonesian region: Women's Educational Contributions, Average Years of Schooling for Women, Women's Work Participation, Women's Involvement in Parliament, and the Gender Inequality Index as independent variables and control variables namely the Number of Population and the Number of Poor People, on the Human Development Index as the dependent variable.

The analytical method used is panel data regression analysis. Panel data regression is divided into 3 approaches, namely the Common Effects Model (CEM), Fixed Effects Model (FEM), and Random Effects Model (REM) approaches, which are three stages in the panel data regression model. Chow test and Hausman test are used to decide which model is best estimated. Then, a model goodness-of-fit test was carried out as well as a validity test of the influence on the best estimated model. Function is written as follows:

IP M it = 0 + β 1SPW it + β 2 R LS_Female it + β 3 $TPAKPit$ + β 4 P arlem it + β 5IKG it + β 6JP it + β 7JP_Miskin it + εit

Information:

IP M	: Human Development Index
β 0	: Constant
β 1, β 2, β 3, β 4, β 5, β 6, β 7,	: Independent variable coefficients
SPW	: Women's Income Contribution (percent)
R LS_Female	: Average Years of Schooling for Women (percent)
$TPAKP$	: Female Labor Force participation rate (percent)
P parliament	: Women's Involvement in Parliament (percent)
IKG	: Gender Inequality Index (index)
JP	: Population (number)
JP_Miskin	: Number of Poor People (number)
i	: Cross section (409 districts /cities throughout the region Coast)
t	: Time series (201 8-2022)
log	: Natural logarithm based on e : Residual

The model equation will then be modified according to the best model. So the next step is selecting the most appropriate model for panel data. To check whether the best model is a pooled regression or a fixed effect model, the Chow test is used. To check whether the best model is a random effect model or a fixed effect model, the Hausman test is used. To check whether the best model is a pooled regression or random effect model, the Breusch-Pagan Lagrange Multiplier test is used.

If the model chosen is a pooled regression or fixed effect model, it is necessary to check the homoscedasticity assumption and check for cross-sectional correlation to find out whether OLS is the appropriate estimation method. If the model chosen is a random effect model then GLS is the appropriate estimation method.

Next, a model significance test was carried out by looking at the coefficient of determination value, F test and t test. The coefficient of determination is used to measure the proportion of the total variation in the dependent variable that can be explained by the independent variables in the regression model. The F test is used to test the significance of the overall regression equation. The t test is used to test whether an independent variable has a significant effect on the dependent variable partially.

After testing the significance of the model, classical linear regression assumptions were tested on the model formed. These assumptions are normality, non-multicollinearity, non-autocorrelation and homoscedasticity. If the selected model is a pooled regression or fixed effect model then checking the homoscedasticity assumption has been carried out to select the best model.

4. Research Findings anf Discussion

This research describes the research results based on statistical descriptions and logistic regression test results. This description can be seen in table 2 below

Table 1. Statistical Description of Research Data

Variable	Obs	Mean	Std. Dev	Min	Max
Women's Income Contribution	2041	33.88238	7.439384	12.48000	77.73000
Female Labor Force Participation Rate	2041	65.69844	23.87433	4.700000	60.14000
Gender Inequality Index	2041	0.557822	2.020489	0.050000	62,00000
Women's Involvement in Parliament	2041	15.83235	10.63993	0.000000	26.50000
Average Years of Schooling for Women	2041	7.363145	2.311971	1.190000	7.38831
Total population	2041	669125.1	2511606.0	13804.0	49935858
Number of Poor People	2041	24009.63	30382.00	6.630000	196870.0
Human Development Index	2041	69.86664	5.143063	51.95000	87.69000

Source: Eviews data processed by the author, 2024

Based on table 1, it can be seen that the lowest contribution to women's income is 0.12% with the highest contribution to women's income being 0.77% with an average of 0.33%. The Human Development Index variable has a minimum value of 0.51% and a maximum value of 0.87% with an average of 0.69% and a standard deviation of 0.051%. The variable female labor force participation rate has a minimum value of 0.047% and a maximum value of 60.14% with an average of 0.65% and a standard deviation of 2.38%. The Gender Inequality Index variable has a minimum value of 0.05 % and a maximum value of 62.00% with an average of 0.005% and a standard deviation of 0.02%. The variable Average Years of Schooling for Women has a minimum value of 0.011% and a maximum value of 7.388% with an average of 7.36% and a standard deviation of 2.31%. Meanwhile, the control variable Population has a minimum value of 6,630.00 thousand people and a maximum value of 196,870.0 thousand people with an average of 669,125.1 thousand people and a standard deviation of 30,382.0 thousand people.

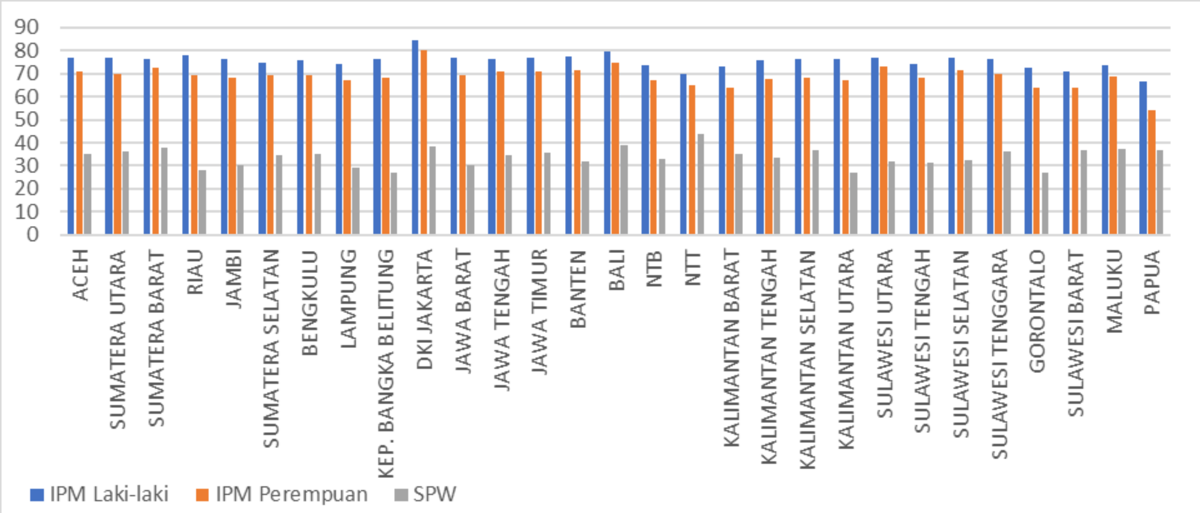

Figure 1.2 Relationship between HDI based on gender and women's income contribution in 2022
Source: Central Statistics Agency (processed), 2024

The picture above shows that HDI has a relationship with women's income contribution in coastal areas of Indonesia. where when the HDI increases each year it is followed by a fluctuating increase in Women's Income Contribution. Several coastal areas in Indonesia continue to experience an increase in HDI every year and also an increase in women's income contribution. When HDI continues to increase, women's income contribution will also increase.

Table 2. Classic Assumption Test

Multicollinearity Test

	SPW	IKG	*P* arlem	*TPAKP*	*R* LS_Female	JP	JP_Poor
SPW	1,000000	-0.02974	-0.028756	0.021809	-0.014323	- 0.078258	-0.005057
IKG	-0.02974	1,000000	-0.019075	-0.002306	-0.000371	0.002902	-0.018879
P arlem	- 0.028756	- 0.019075	1,000000	0.010551	0.000600	- 0.026795	-0.166976

$TPAKP$	0.021809	-0.002306	0.010551	1,000000	0.000314	-0.004262	-0.029534
R LS_Female	-0.014232	-0.00371	0.000600	0.000314	1,000000	-0.005381	-0.007864
JP	-0.078258	-0.002902	-0.026795	-0.004262	-0.005381	1,000000	-0.038555
JP_Poor	-0.005075	-0.018879	-0.166976	-0.029534	0.007864	-0.038555	1,000000

Heteroscedasticity Test

	Coefficient	Prob
SPW	0.032322	2,0999
R LS_Female	-2.130000	0.9641
$TPAKP$	-0.000214	0.6426
P arlem	0.096859	0.1209
IKG	-0.187081	8.8017
JP	1.720000	0.5891
JP_Poor	-1.480000	0.7110

Source: Eviews data processed by the author, 2024

Based on table 2, the results of the heteroscedasticity test using the Glejser test, it can be seen that there is no heteroscedasticity problem. This is because the probability value of each independent variable is greater than 0.05, so there is no heteroscedasticity problem.

Table 3. Correlation and Regression Results

Variable	Human Development Index		
	Fixed Effects	Random Effects	Common Effects
Women's Income Contribution	0.042157** (0.0105)	0.039649** (2.698788)	0.032459** (2.181964)
Female Labor Force Participation Rate	-2.04E-05 (0.8430)	-2.43E-05 (-0.236916)	-0.000221*** (-0.479301)

Gender Inequality Index	-0.010648**	-0.012510**	-0.184745**
	(0.3794)	(-1.034187)	(-3.383852)
Average Years of Schooling for Women	1.95E-07	1.77E-07	-1.56E-07
	(0.8536)	(0.1698183)	(-0.032647)
Women's Involvement in Parliament	1.82E-07	0.009522**	0.096564**
	(0.0251)	(2.681028)	(9.181220)
Total population	1.82E-07	1.73E-07	1.72E-07
	(0.0251)	(2.793044)	(3.899755)
Number of Poor People	-5.18E-05	-2.52E-05	-1.48E-05
	(0.0025)	(-3.51049)	(-4.023911)

Description: Significance Level 1%(<0.001)***, 5%(<0.05)**,10%(0.1)*
Source: Eviews data processed by the author, 2024

From the regression results using fixed effect, random effect and common effect models through the Chow test and Hausman test, the best regression results were obtained, namely using the fixed effect model.

Table 4. Fixed Effect Regression Results

Variables	**Coefficient**	**Prob**
SPW	0.042157	0.0105
R LS_Female	1.95E-05	0.8536
$TPAKP$	-2.04E-05	0.8430
P arlem	0.007286	0.0421
IKG	-0.010648	0.3794
JP	1.82E-07	0.0251
JP_Poor	-5.18E-05	0.0025

Value Test	
R-squared	0.970712
Adjusted R-squared	0.963232
F-statistic	129.7789
Prob(F-statistic)	0.000000

Source: Eviews data processed by the author, 2024

Based on the table above, the correlation value between X1 (Women's Income Contribution) and X2 (Gender Inequality Index) is -0.02 = -0.02, so there is no multicollinearity problem.

Based on the table, the F-statistical test is obtained with a calculated F value of 129.7789 > F table 2.014077 and a significant value of 0.0000 < 0.05, so H0 is rejected and Ha is accepted, meaning that the independent variables in this study have an effect on the Human Development Index in Indonesia's coastal areas. The adjusted R Square value is 0.963232 or 96%. The coefficient of determination value shows that the independent variables in this study are able to explain the Human Development Index variable in Indonesia's coastal areas.

From the regression results above, the following multiple linear regression equation is obtained:

IP M it = 69.45081 + 0.0042157 (SPW) +1.95(LS_Female) - 2.04 ($TPAKP$) + 0.007286 (P arrangement) -0.010648 (IKG) + 1.82 (JP) - 5.18 (J P_Poor it) + εit

Based on this equation, it can be explained that when the constant has a positive value of 69.45081, this shows that if the independent variable changes, the HDI will have a constant effect of 69.45081. The regression coefficient for Women's Income Contribution is positive at 0.0042157 This shows that when SPW increases, HDI will also increase by 0.0042157 assuming the other independent variables are constant. The regression coefficient for the Average Years of Schooling for Women is positive at 1.95 This shows that if the regression for the Average Years of Schooling for Women increases, the HDI will also increase by 1.95.

The Prob (F-Statistics) value of 0.000000 shown in the table above indicates that the value is less than the significance level (<0.05) . So, H1 is accepted and Ho is rejected. So the independent variables used in this research simultaneously have a big impact on the Human Development Index.

5. Conclusions and Recommendations

Based on the studies that have been carried out, it can be concluded that the results of the research show that the factors Contribution to Women's Education, Women's Involvement in Parliament, Population and Number of Poor People greatly influence the growth of the Human Development Index in Indonesia's coastal areas. However, there are 3 variables that apparently do not influence HDI growth, namely the Average Years of Schooling for Women, Women's Work Participation, and the Gender Inequality Index in Indonesia's coastal areas.

Therefore, we admit that this research still has many shortcomings and in the future it is highly recommended to examine more deeply why the 3 variables of Average Years of Schooling for Women, Women's Work Participation, and the Gender Inequality Index cannot influence the growth of the Human Development Index in the region. Indonesian coast.

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$PM_{2.5}$-AIR POLLUTION: DETERMINING FACTORS OF AIR QUALITY IN PROVINCES ON THE ISLAND OF JAVA

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ABSTRACT
This study focuses on analysing the determining factors of particulate matter ($PM_{2.5}$) air pollution in provinces on the island of Java. Air pollution is a phenomenon of environmental damage that continues to occur in line with human activities which have an impact on humans themselves, including health, global warming, and climate change. $PM_{2.5}$ particulate matter pollution parameters were chosen because these micro particles easily enter through inhalation and pose a big risk to human health. Quantitative research methods were employed to make sense of the available secondary data. Econometric models-Panel Data Regression Analysis were used to examine the sources causing air pollution-$PM_{2.5}$. The results showed that population density and manufacturing industrial production were important factors in increasing air pollution-$PM_{2.5}$. This can be explained by the fact that population density creates complexity in handling garbage and household waste which has the potential to increase emissions, while the manufacturing industry is associated with industrial waste and factory chimney smoke which directly pollutes the air. This research is useful for strengthening control policies and mitigation efforts for air pollution that is harmful to the environment and human health more effectively. Therefore, controlling emission sources and disturbances is necessary to prevent air quality degradation caused by these sectors.
Keywords: *$PM_{2.5}$, Real GRDP, manufacturing industrial production, population density*

1. Introduction

Air pollution is the contamination of the indoor or outdoor environment by various substances, objects and any particles that change the natural characteristics of the atmosphere. The phenomenon of environmental damage occurs every day throughout the world with varying levels of pollution. The root of the problem can be divided into two: natural (disasters, volcanic eruptions, and forest fires) and human activities (industrial production, consumption, transportation and so on). Human activity is believed to be the main cause, both directly and indirectly, of climate change and various threats to the natural environment, including air pollution.

Air pollution is environmental damage that greatly affects human health. The presence of one or more contaminants in the atmosphere such as dust, smoke, gas, mist, odor, smoke, or steam in certain amounts and for a certain duration can endanger human health. The main route of exposure to air pollution is through the respiratory tract. Inhaling pollutants causes inflammation, oxidative stress, immunosuppression, and mutagenicity in the human body which results in impaired function of the lungs, heart, brain, and other organs, as well as causing various diseases that can cause premature death. The World Health Organization report (WHO, 2018) recorded a figure of around 7.3 million premature deaths every year and millions of people are at risk of health due to declining air quality and the effects of greenhouse gases.

Overall, this provides a warning about the importance of carrying out mitigation measures to prevent environmental risks to humans and other life.

This study explains human actions that can mitigate air pollution which is dangerous for humans and life. In various studies on mitigating the risk of environmental damage, factors causing a decrease/increase in ambient air quality CO2, SO2, NO2 gases have received the most attention from researchers (Masito, 2018; Angelia, et.al, 2019; Uniplaita, et.al 2020; Khioron, at .al, 2022; Winatama, et.al, 2023). Different thinking stated that controlling particulate matter is more urgent because particulate matter (PM) has a significant role in increasing the risk of heart disease, lung disease and other respiratory problems (Pope & Dockery, 2006; Greenstone & Fan, 2018). According by Greenstone and Fan (2018), particulate air pollution reduces global life expectancy by almost 2.3 years compared to if particulate concentrations in all locations were at levels considered safe by the World Health Organization (WHO).

The impact of exposure to $PM_{2.5}$ particulates is much more serious for health than some types of disease. Exposure to $PM_{2.5}$ is more serious than infectious diseases such as HIV/AIDS, tobacco and alcohol use behavior that can be stopped, as well as conditions such as malnutrition in children and pregnant women, mental disorders, and others (Greenstone and Fan, 2018). $PM_{2.5}$ is a complex mixture of chemical compositions of various particles with a diameter of less than 2,5 μm ($PM_{2.5}$). With its very small size plus exposure to $PM_{2.5}$ levels exceeding the WHO reference limit guideline of 5 μg/m3 (WHO, 2021), it greatly determines human survival. Even exposure to $PM_{2.5}$ creates an economic burden on health financing, at least the state budget needed reaches IDR 10 trillion to finance population health care per year (Wiratmaja, 2023). Therefore, this study focuses on observing human activities which have a major contribution to the increase in $PM_{2.5}$ particulates.

Apart from that, this study chose location for provinces on the island of Java with various considerations. This is considered because Java Island has dominant economic activity with the Gross Domestic Product contribution of 57.06 percent and the remainder contributed by provinces outside Java (Central Bureau of Statistics, 2022). It is certain that the dominant economic activities are sources of provincial air pollution on the Island of Java which are also relatively high. By examining activity factors, sectoral results, demographic conditions, and residential density using econometric modelling simulation methods, can find factors that cause $PM_{2.5}$ concentrations to occur. This study is useful for strengthening control policies and mitigation measures for air pollution which is dangerous for the environment and human health more effectively.

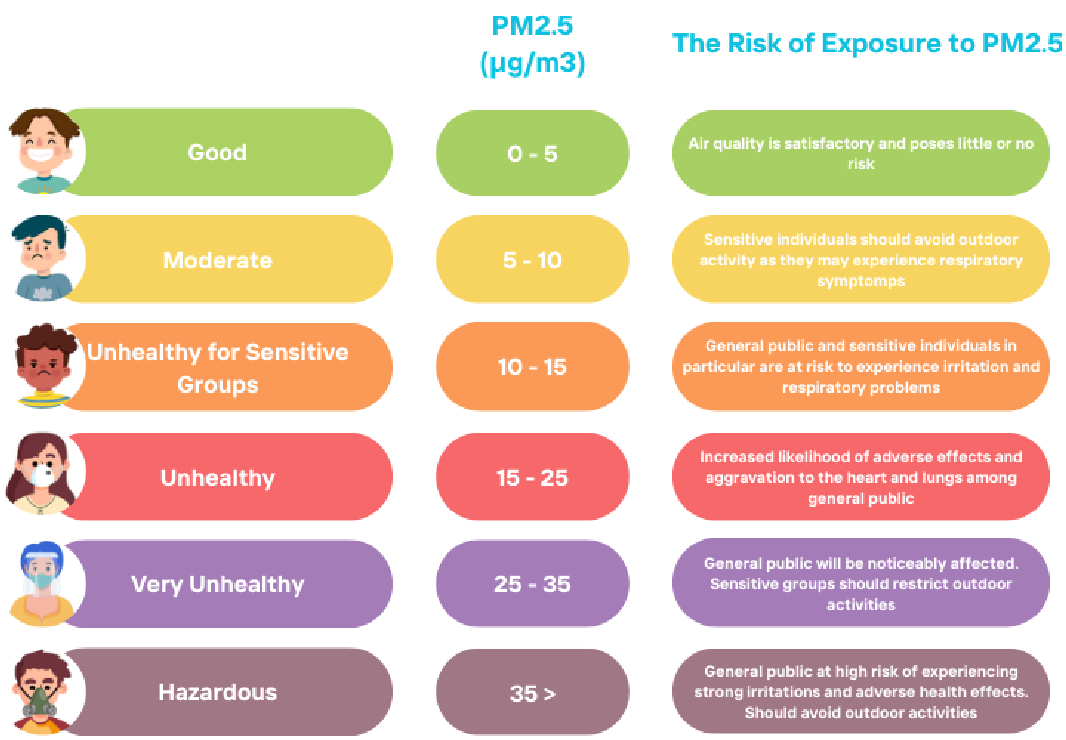
2. Literature Review

2.1 Particulate Matter ($PM_{2.5}$) as Dependent Variable

PM (Particulate Matter) is classified according to the diameter of the particulates. WHO has two PM parameters: particulates less than 2.5 μm/m^3 ($PM_{2.5}$) as hazardous particles and 10 μm (PM_{10}) which is defined as the long-term average safe level of particulate pollution. The two types of PM are different in size and have different risks related to human health. In the 1980-90s, epidemiological research in the US showed that PM with a diameter of less than 10 μm (PM_{10}) was the focus of health impacts, both acute and chronic. Recent research highlights that small particle, especially $PM_{2.5}$ are more significant in terms of negative impacts on health (Pope & Dockery, 2006). This is because small particles more easily enter the human body through the respiratory tract as the main source.

Air quality criteria are determined by the concentration of $PM_{2.5}$ in the air of area. The air quality index (AQI) ranges from 0 to 500, although air quality can be indexed over 500 if there are higher levels of air pollution. Good air quality ranges from 0 to 50, while measurements above 300 are considered dangerous. $PM_{2.5}$ measurement concentration is a determinant of AQI readings because $PM_{2.5}$ is widely available and is considered the most dangerous pollutant that impacts human health (AQI,2024).

$PM_{2.5}$ is measured in micrograms per cubic meter (µg/m3). The United States Environmental Protection Agency's (EPA) National Ambient Air Quality Standards (NAAQS) categorized any measurement greater than 9.0 µg/m3 (US AQI 50) as being harmful to human health (Figure 1)



Source: https://www.iqair.com/id/newsroom/what-is-aqi

Figure 1. Categories of $PM_{2.5}$ Values, Air Quality, and Health Implications

The annual $PM_{2.5}$ indicator is used to determine the air quality category each year as follows. Air quality using $PM_{2.5}$ is categorized into 6 clusters. $PM_{2.5}$ value of 0.0-5.0 µm/m3 is in the very good or very healthy category according to WHO provisions, while $PM_{2.5}$ value of 0.51-10.0 µm/m3 is categorized as moderate (healthy). This category may be vulnerable to individuals who are sensitive to pollution and develop respiratory symptoms. At the value of 10.1-25.0 µm/m3, air quality is categorized as somewhat unhealthy. This category requires general discretion and caution in sensitive individuals, as it has the potential to cause respiratory problems and irritation. In the category of $PM_{2.5}$ values above 25.1-35.0 µm/m3 and above 35.1-50.0, the air quality status is unhealthy and very unhealthy. Finally, at a value above 50.0, air quality has entered a condition that is dangerous to health.

The sources that cause $PM_{2.5}$ generation are the focus in this research. By knowing the source of the generation of these dangerous particles, studies can find the policies and mitigation actions needed to prevent a decline in public health status. Previous studies have identified and explained the factors causing $PM_{2.5}$ generation, mainly originating from the following social and economic activities: secondary industry (Yan, et.al, 2020), electricity/energy consumption (Huang, et.al, 2023; Yan, et. .al, 2020), Public Buses/Public Transportation (Yosritzal, et.al; 2023 Yan, et.al, 2020), population or population density (Huang, et.al, 2023; Yan, et.al, 2020; Sarkodie, et.al, 2019), urbanization (Yan, et.al, 2020;

Sarkodie, et.al, 2019; Foreign Direct Investment or FDI (Yan, et.al, 2020); GDP per capita (Huang, et. al, 2023; Yan, et.al, 2020; Sarkodie, et.al, 2019), and meteorological factors (Melinda & Nuryanto, 2023).

By replicating this, this study focused on observing three main factors causing pollution at the level of provinces on the island of Java. This consists of (a) Real Gross Regional Domestic Product (Real GRDP), (b) Population Density (PD) and what has not been studied by previous researchers is Manufacturing Industrial Production (MIP). These factors are explained in the following sections.

2.2 Gross Regional Domestic Product (Real GRDP)

Gross Domestic Product (GDP) reflects the monetary value of all final goods and services produced within a country's territory during a certain period, usually one year (Sukirno, 2004). Economic growth is often used to display economic development which is characterized by an increase in capacity to meet needs. economic goods for society and is measured by the increase in national output or gross domestic product (GDP over time (Todaro, 2000). In the production or business aspect, Real GDP is the result of the added monetary value of goods and services from all sectors in each year with constant prices in the base year. Economic activity sectors covered in GDP include primary sector, secondary/manufacturing sector, and service sector. In the expenditure sector, GDP is expenditure from various institutions in the economy, such as: household consumption, non-government expenditure and government, investment and exports and imports. The aggregation of the monetary value of goods and services divided by the population in a particular region/region is called GDP per capita, which shows how much average economic output is available for everyone.

At the provincial level, provincial/regional output at constant prices is known as Real Gross Regional Domestic Product (Real GRDP). This has the same approach and calculation techniques as the national economy with production coverage and population based on provincial areas. This indicator provides an overview of the average level of welfare of a region and is often used to compare economic levels between different regions. GDP per capita is important because it allows more meaningful comparisons between one region and another with different population sizes.

2.3 Manufacturing Industrial Production

The manufacturing sector provides great opportunities for economic growth in developing countries. Manufacturing is the activity of processing materials or raw materials into finished goods. More precisely, the Central Bureau of Statistics (2020) defines the manufacturing industry as economic activities that change basic goods mechanically, chemically or by hand so that they become semi-finished goods or finished goods, and/or goods of less value into goods of higher value and closer in nature to with end users. In the processing process, activities involve the mobilization of resources (raw materials, human resources, technology, machines, and equipment used to process raw materials. The manufacturing industry is an important sector that produces goods and semi-finished goods en masse (mass production), absorbing labor many, and is the main motor of growth in many countries.

Although the manufacturing industry is important to the economy, it is often associated with high levels of pollution and environmental degradation. The manufacturing industry is also often associated with the use of excess energy for burning, heating, and mixing materials that have negative externalities, such as smoke, dust, hazardous and toxic waste (B3), and rubbish. In fact, the manufacturing industry is a significant contributor to global air pollution, with industrial emissions releasing hazardous waste fumes that pose serious risks to both human health and the environment (Oskouian, 2023). This encourages the importance of government regulations and policies to control industrial areas, pollution, and various technological/technical, ecological, and social requirements to prevent dangers that disrupt the safety of workers, surrounding communities, the environment and excessive use of fossil energy (Hernándes, et.al, 2019).

The condition of the manufacturing industry encourages the importance of a sustainable manufacturing industry development agenda. Sustainable Development Goals (SDGs) place the importance of sustainable manufacturing production. The production system that aims to reduce energy consumption, emissions, disposal, and use of non-recyclable materials (SDGs - 12). An approach that looks at the product, process and life cycle starting from the acquisition of raw materials to the final stage of the product's useful life or end of life (see https://sdgs.bappenas.go.id/metadata-indikator-sdgs/).

2.4 Population Density

Population density is an indicator in many studies, but is often accompanied by only a cursory explanation of the reasons. Population density has various implications for the environment and human health. Population density is the ratio of population to land area. In general, population density is the ratio of the number of residents to the area of land based on a certain unit area. The use of population density variables in research often invites debate. In the case of the Covid-19 pandemic, for example, some researchers point to population density as a predictor of incidence or death rates after exposure to the corona virus, but other studies confirm that this is not the case in many areas with high population density. Population density in an area does not result in high exposure to Covid-19 by showing other factors, so population density needs to be explained more thoroughly. Population density may not necessarily mean higher infection rates by referring to issues of public policy, personal behavior, socioeconomic status, health care, transit, and other factors driving the spread of infection (Greenberg& Scheneider, 2023).

The illustration of the relationship between population density, environment and health above reminds that the relationship between population density and $PM_{2.5}$ generation requires caution. Population density in an area accompanied by the ability to suppress the growth of greenhouse gas emissions may have the opportunity to cause low particulate generation. However, areas that have not succeeded in addressing settlement and housing arrangements, the large number of slum areas, the availability of green open spaces, sanitation and waste handling problems, high energy use, and other real mitigation actions have the potential to produce high exposure to particulates.

2.5. Theoritical Framework

The description above can be depicted in the following theoretical framework diagram (Figure 2). Regarding production, Real Gross Regional Domestic Product (Real GRDP) reflects increased economic activity and has the effect of increasing $PM_{2.5}$ generation. This can be explained by the fact that businesses in various economic, social, and public service sectors that produce goods and services in aggregate have the potential to increase air pollution, especially $PM_{2.5}$.

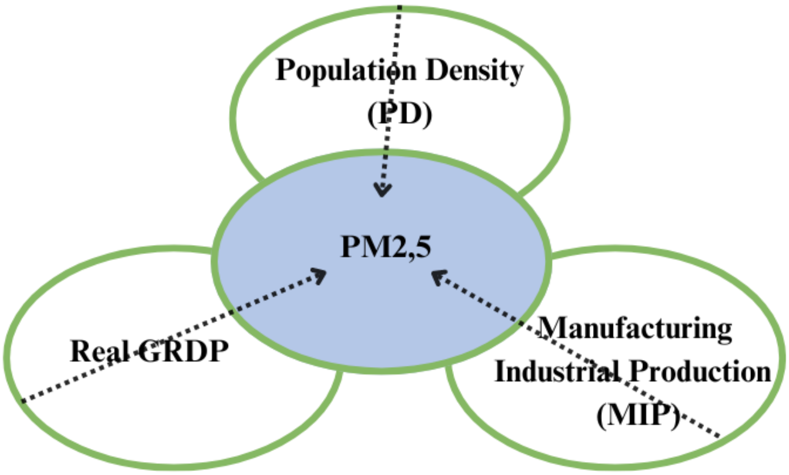


Figure 2: Theoritical Approach (adapted from Yan, et.al, 2020; Sarkodie, et.al, 2019)

In densely populated provincial areas, high population activity has the potential to produce greater emissions such as consumption, transportation, poor sanitation, household waste and garbage, as well as the complexity of handling them in residential areas. Manufacturing industrial production provides great opportunities for economic growth in developing countries but is often associated with high levels of pollution and environmental degradation, including air pollution in the form of $PM_{2.5}$ particles. This can be seen in real terms in manufacturing industrial areas producing pollution through industrial waste, factory chimneys, the use of fossil-based energy and the use of environmentally unfriendly materials such as plastic and fabric.

3. Research Methods

Quantitative model research methods with panel data regression analysis were used in this research. This study analysed the relationship between real GRDP (GRDPit), manufacturing industrial production (MIPit), and population density (KPit) on air pollution ($PM_{2.5}$). The data used is cross section data for 6 provinces on the island of Java (Banten Province, DKI Jakarta, West Java, Central Java, DI Yogyakarta, and East Java) for the 2012-2021 data series (10 years). The panel data regression model used is as follows.

$$LnPM_{2.5it} = \beta_0 + \beta_1 LnPDB_{it} + \beta_2 LnPIM_{it} + \beta_3 LnKP_{it} + e_{it}$$

$PM_{2.5}$	=	Particulate Matter measures 2.5 μm/m3 in each province of the Java Island
β_0	=	Constant
$\beta_1 \beta_2 \beta_3$	=	Independent variable coefficient
GRDP	=	Gross Domestic Product in each province of Java Island, often called Gross Regional Domestic Product (GRDP). In this study it is often used interchangeably to refer to the meaning of GDP at the provincial level.
MIP	=	Manufacturing Industry Production in every province of the Java Island
PD	=	Population Density in every province of the Java Island

i = *Cross section*

t = *Time series*

Panel data regression modeling was estimated to ensure the best model between the common effect model (CEM), fixed effect model (FEM), and random effect model or REM (see figure 3)

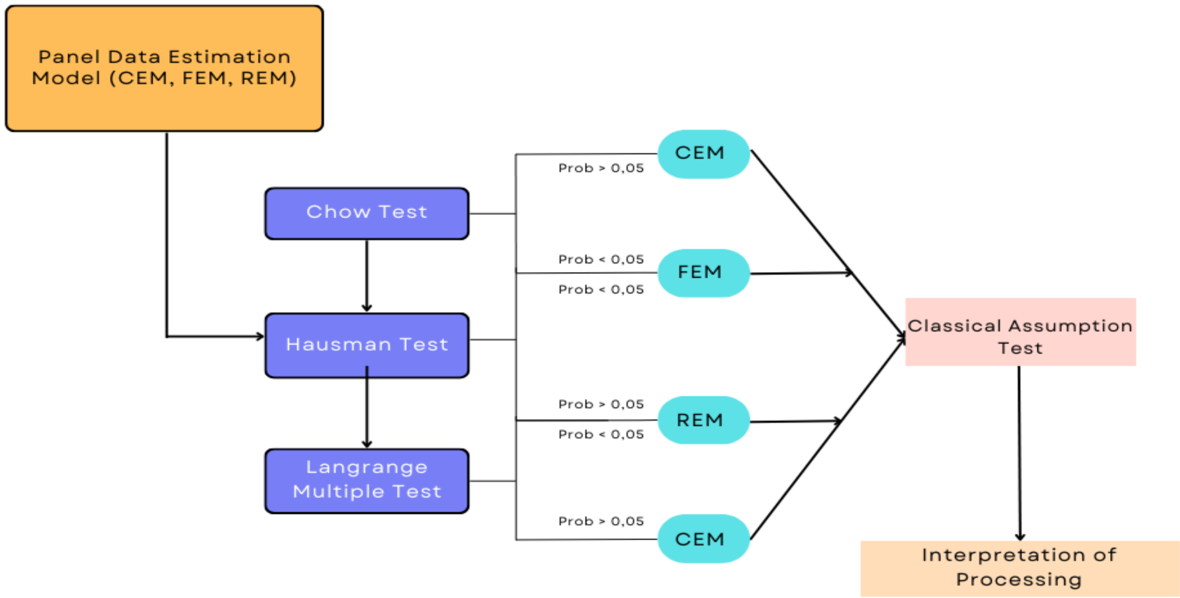


Figure 3: Flowchart of data processing steps

Futhermore, the Chow test, Hausman test, and LM test were carried out to determine the most appropriate model. The classical assumption test is carried out according to the selected model. The process of panel data regression analysis, including model selection, and significance testing of individual effects and combined effects (via t-statistics and F-statistics, with $\alpha = p = 0.05$) was also carried out. The final section carried out data analysis and interpretation.

4. Research Findings and Discussion

4.1 Descriptive Analysis

As an initial illustration of the study results, the average $PM_{2.5}$ values and determining factors for air quality are stated in Table 1 and Table 2 below. The overall average of the data shows that $PM_{2.5}$ has approached a diameter of 2.5 µg/m3 per cubic meter with an average of 22.79 µg/m3 for the entire island of Java. This reflects unhealthy air quality conditions. This is worrying because residents live, work and carry out activities in polluted areas, and cannot do much to avoid particulate pollution and continue to breathe unhealthy air. Therefore, regulations and policies accompanied by real mitigation, supervision and control actions must continue to be implemented.

Table 1: $PM_{2.5}$ Values and Air Quality Determinants for 2012-2021

Variabel	Unit	Max	Min	Mean	Std. Deviasi
$PM_{2.5}$	µg/m^3	37.53	11.32	22.79	6.16
Real GRDP	Thousand trillion rupiahs	1,856.00	71.70	941.39	565.37
MIP	Percent	43.72	10.85	28.08	11.78
PD	People/Km^2	15,978	797	3,524.23	5,410.24

Source: Eviews 12 (processed) 2024

Economic and social factors can be explained. Regional income reflected through Provincial Gross Domestic Product has an average for a decade of IDR 941.39 thousand trillion or around US$ 58.64 billion at an exchange rate of 1 US$ = 16.055 (https://www.bi.go.id/id/statistics/information-kurs/transaksi-bi/default.aspx, accessed May 11, 2024, 15.00). There are high differences in income between provinces which are reflected in the standard deviation. The average contribution of the manufacturing industry reaches 28.08 percent of the total provincial GDP. Population density reached an average of 3,524.23 people/km2.

Table 2: Average $PM_{2.5}$ Values and Air Quality Determinants by Province in 2012-2021

Provinces	$PM_{2.5}$	Real GRDP	MIP	PD
Banten	26.02	394.97	36.03	1,247.4
DKI Jakarta	31.96	1,574.22	12.41	15,509.8
West Java	25.25	1,296.94	43.12	1,337.6
Central Java	19.65	862.77	34.56	1,052.1
DI Yogyakarta	14.01	90.19	12.77	1,176.2
East Java	19.85	1,429.27	29.62	822.3

Source: Processed with Eviews, 2024

Based on region, provinces have a variety of $PM_{2.5}$ pollutants in the somewhat unhealthy and unhealthy categories. This can be seen in the very unhealthy category experienced by the provinces of DKI Jakarta, Banten and West Java. These three areas are concentrations of economic growth due to the expansion of capital and metropolitan development. The somewhat unhealthy category occurs in the provinces of Central Java, East Java and DI Yogyakarta.

4.2 Panel Data Regression Analisis

4.2.1. Model CEM, FEM, and REM

Table 3 shows the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). The constant can be negative and positive and can be accounted for theoretically, because the relationship between $PM_{2.5}$ and its determining factors has a positive slope, so the constant can be above or below the zero point. Negative and positive constants can be used as long as the regression model being tested meets the assumptions (for example normality) or other classic assumptions for multiple regression (Dougherty, 2002).

Table 3. The Estimation Result of Demand with Common, Fixed and Random Effect

Variabel	**Common Effect Model (CEM)**	**Fixed Effect Model (FEM)**	**Random Effect Model (REM)**
Constant (C)	-0.6685	4.776	-0.2228
Ln $GRDP_{it}$	-0.0155	-0.4502	-0.0403
Ln MIP_{it}	0.4962	-0.3663	0.4990
Ln PD_{it}	0.3318	1.1589	0.1349
R-Squared	0.8353	0.9019	0.3384
Adj R-Squared	0.8264	0.8866	0.3030
F-Statistic	94.6543	58.6551	9.5499

Source: Preceded with Eviews, 2024

The model that best suits the research objectives will be selected from the three models that have been estimated. The three estimation models are the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) (see Table 3). Model selection is carried out with two types of tests which are used as a means to select a panel data regression model (CEM, FEM or REM) based on the characteristics of the data; namely the F Test (Chow Test) and Hausmann Test.

4.2.2. Model Selection Test

Based on Table 4, it can be seen that the best model selected is the Random Effect Model (REM). For the t and F test results, we will use the calculation results from the Random Effect Model (REM). ***The Selection CEM vs FEM Model.*** Decision making in the Chow test is based on the Probability F value of Prob. F 0.0001 < 0.05 then H_0 will be rejected and H_1 accepted.Thus, it can be concluded that the Chow test, Fixed Effect Model (FEM) was selected.

Table 4: Model Selection Test

Model Test	**Prob**	**Result Model**
Test Chow	0.0001	Fixed Effect Model (FEM)
Test Hausman	0.0748	Random Effect Model (REM)
Test Langrange Multiplier	0.0001	Random Effect Model (REM)

Source: Preceded with Eviews, 2024

The Selection of FEM vs REM Model. The basis for decision making in the Hausman test is also based on Probability F. In the output value Prob. F=0.0748 > 0.05 then H_0 will be accepted and H_1 rejected. It can be concluded that the Random Effect Model (REM) was chosen.

The Selection of REM vs CEM Model. The basis for decision making in the Langrange multiplier test is also based on Probability F. In the output value Prob. F 0,0001 < 0.05 then H_0 will be accepted and H_1 rejected. It can be concluded that the Random Effect Model (REM) was chosen.

4.2.3. Classical Assumption Test

4.2.3.1 Multicollinearity Test

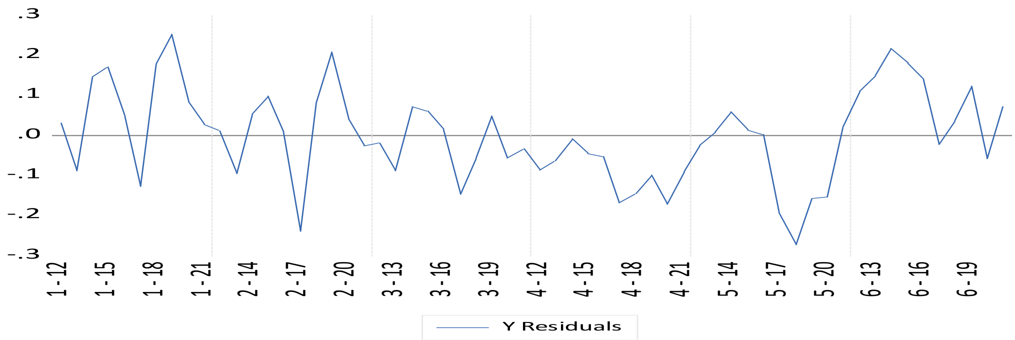
If we look at Table 5, the correlation coefficient for GRDPit and MIPit is 0.3605 < 0.85, GRDPit and PDit is 0.3255 < 0.85, MIPit and PDit is -0.6109 < 0.85, it can be stated that multicollinearity does not occur.

Table 5: Multicollinearity Test

	Ln $GRDP_{it}$	Ln MIP_{it}	Ln PD_{it}
Ln $GRDP_{it}$	1	0.3605	0.3255
Ln MIP_{it}	0.3605	1	-0.6109
Ln PD_{it}	0.3255	-0.6109	1

Source: Preceded with Eviews, 2024

4.2.3.2 Heteroscedasticity Test



Source: Processed with Eviews, 2024

Figure 4: Multicollinearity Test

Based on the image above, the residual graph does not exceed the limits (500 and -500), meaning that the residual variance is the same, so that the data does not experience symptoms of heteroscedasticity (Napitupulu et al., 2021).

4.3 Hypothesis Test

Table 6. T-test on Random Effect Model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant (C)	-0.222810	0.844061	-0.263974	0.7928
Ln $GRDP_{it}$	-0.040309	0.053083	-0.759364	0.4508
Ln MIP_{it}	+0.499018	0.134945	3.697929	0.0005
Ln PD_{it}	+0.338370	0.072124	4.691491	0.0000

Source: Preceded with Eviews, 2024

The REM model equation model can be stated as follows.

$\text{Ln}(PM_{2.5})_{it} = -0.2228 - 0.040 \text{ Ln } GRDP_{it} + 0.4990 \text{ Ln } MIP_{it} + 0.3384 \text{ Ln } PD_{it} + \varepsilon_{it}$, $R^2 = 0.3384$

4.3.1. R2-Test

The coefficient of determination shows the extent to which the contribution of the independent variable in the regression model is able to explain variations in the dependent variable. This equation has a determination coefficient R2 of 0.3384. This figure shows that the independent variables in the model are only able to explain 33.84 percent of the dependent variable as explained by Ghozali (2016). This still requires a further identification process regarding the determining factors of $PM_{2.5}$.

4.3.2 F-Test

The F test is carried out to see the influence of all independent variables together on the dependent variable. To determine that all independent variables have the ability to explain the dependent variable in the Random Effect Model (REM), the calculated F value of 9.5499 in the model is compared with the statistical F value (α, df1, df2). With α = 5% and degrees of freedom for $df_1=k-1=3$, and $df_2=n-k-1= 55$, the F value (5%,3.55) in the F distribution table is 2.773. Comparison of calculated F and F (5%, 3.55) in the table confirms that the test rejects H_o and accepts H_a where all independent variables have a significant influence on the dependent/dependent variable.

4.4. Analysis of the selected REM Model

4.4.1. The effect of real GRDP on $PM_{2.5}$

In the REM model above, GRDP does not significantly influence the generation of $PM_{2.5}$ concentrations. This can be seen from the probability value of this variable being more than 0.05. This is in line with research by Zhu, et.al (2022) that there is an insignificant negative relationship between real GRDP and $PM_{2.5}$ concentrations. There are symptoms that show that the higher the provincial GDP, the higher the concentration of $PM_{2.5}$ in the region, but this relationship does not have a significant effect throughout the year. In other words, the incidence of high concentrations of $PM_{2.5}$ in large cities is seasonal or does not occur on all days of the year, and is determined by factors outside the model such as: climate and meterology in the area, such as: wind speed, humidity, rainfall and others.

4.4.2 The Effect of Manufacturing Industry Production on $PM_{2.5}$

Manufacturing industrial production has a significant effect on the formation of $PM_{2.5}$ particulates. Statistically, significance is shown by the probability value of less than 0.05. This is in line with research by Zhu et.al (2022) where the stochastic impacts by regression on population influence and technology of pollutant- $PM_{2.5}$ model has been used to examine the importance of socio-economic factors on $PM_{2.5}$ pollution and the findings show that the industrial sector secondary has the greatest impact. This shows that the existence of manufacturing industries in big cities such as Jakarta, West Java and Banten has the potential for the formation of $PM_{2.5}$ and has implications for health. In contrast, DI Jogjakarta, which does not have many large manufacturing industries, has relatively the lowest $PM_{2.5}$.

4.4.3. The Effect of Population Density on $PM_{2.5}$

Population density (PD) on REM model has a significant influence on the concentration of pollutant- $PM_{2.5}$. This is tested from a probability value of less than 0.05, which means PD has a significant effect on $PM_{2.5}$. Panuju & Usman (2023) found that areas with high population density tend to have higher $PM_{2.5}$ concentrations compared to areas with low population density. This cannot be overgeneralized, because population density accompanied by good settlement and housing arrangements, adequate green open space, settlement of slums, excellent management of rubbish, waste and sanitation, use of low-carbon energy and other concrete actions can correct the relationship of KP and $PM_{2.5}$. However, most provinces on the Java Island have various settlement and housing conditions that are not yet sustainable, so population density is still a challenge that must be solved, especially the contribution of dense settlements to the formation of high $PM_{2.5}$ concentrations. This indication can be stated that the top three positions in $PM_{2.5}$ particulate concentrations are in provinces that have high population density.

5. Conclusion and Recommendation

This study found that provinces on the island of Java have high air quality and concentrations of $PM_{2.5}$ particulates. This showed that air quality is in the moderate, somewhat unhealthy, and not healthy categories. The REM model confirms that the factors that determine the formation of $PM_{2.5}$ are manufacturing industrial production activities and population density.

Manufacturing Industrial Production and population density are stated to be the main sources of $PM_{2.5}$ pollutants. This is related to the activity of using excess energy for burning, heating, and mixing materials that have negative externalities, such as factory chimney smoke, dust, hazardous and toxic waste (B3), and other industrial waste (including plastic). Regarding population density, it needs to be examined carefully, because in areas of provinces or big cities in the world that have succeeded in arranging housing/housing, adequacy of green open space, handling rubbish and waste, as well as good sanitation systems, the use of low-carbon energy can have the potential to reduce emissions. and particulate concentration- $PM_{2.5}$. However, this research confirmed that provinces on the island of Java that have not yet scheduled mitigation actions and concrete steps been at great risk of producing high levels of $PM_{2.5}$.

This study recommends the importance of regulations and policies to control and supervise increasingly resilient manufacturing industry activities, as well as further strengthening the action agenda and concrete steps to mitigate emissions, including $PM_{2.5}$. The same thing related to the aspect of population density requires hard work and real action to reduce emissions, especially sanitation and waste management, as well as handling household waste which still haunts cities on the Java Island.

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THE INFLUENCE OF PRICE, PROMOTION, AND SERVICE QUALITY ON BUYING INTEREST IN ONLINE CLOTHING ON THE SHOPEE PLATFORM

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ABSTRACT

In the digital era that continues to develop, the phenomenon of online sales has become the center of attention in the realm of e-commerce. One of the main platforms that stands out is Shopee, which has become a favorite destination for millions of consumers looking for a variety of products at competitive prices. In this look, researcher will explore changing trends in online selling, especially in the context of Shopee, as well as how this phenomenon affects consumer behavior and the development of e-commerce as a whole. This research aimed to determine: 1) The effect of price simultaneously on buying interest, 2) the effect of simultaneous promotion on buying interest, 3) the simultaneous influence of service quality on buying interest. The sampling technique used a purposive sampling method of 100 respondents who meet the criteria. The data analysis techniques in this research are descriptive analysis, classical assumption testing, and multiple linear regression analysis using the SPSS application program. The research results showed that price, promotion and service quality simultaneously influence purchasing interest. This journal contributes to a deeper understanding of e-commerce dynamics and provides recommendations to help business professionals develop and implement effective strategies to increase consumer purchasing intentions.
***Keywords**: Price, Promotion, Service quality, and Purchase interest*

1. Introduction

In the ever-evolving digital era, the phenomenon of online selling has taken center stage in the realm of *e-commerce*. One major platform that stands out is Shopee, which has become a favorite destination for millions of consumers looking for a wide range of products at competitive prices. In this outlook, researcher will explore the changing trends in online selling, especially in the context of Shopee, as well as how this phenomenon affects consumer behavior and the overall development of *e-commerce* (Aprianto et al., 2022).

Shopee, as an *e-commerce* platform that provides buying and selling services, has facilitated interactions between thousands of sellers and millions of buyers online. However, behind the ease of access and variety of products, several issues arise that need to be understood from the consumer's perspective. Economic theories of consumer behavior such as rational preference theory and price and demand theory can provide insights in answering this question (Fachrina & Nawawi, 2021).

Aside from price, promotions also play an important role in attracting consumer interest. Shopee offers various types of attractive promotions, such as discounts, vouchers, and cashback programs. Consumer marketing theory, especially the stimulus-response concept, can provide a framework for evaluating the effectiveness of promotions offered by Shopee (Napitupulu et al., 2022).

Service quality is also an important consideration for consumers in choosing an *e-commerce* platform. From responsive *customer* service (*CS*) to logistical reliability and payment features such as Shopeepay, the concept of service quality management and customer satisfaction theory can provide the necessary framework to evaluate the quality of service offered by Shopee from a consumer's perspective (Nurakhmawati et al., 2022).

In addition to understanding the phenomena and problems that arise, it is also important to explore consumers' purchase intention for products in Shopee. Justifying previous purchase experiences, identifying deficiencies or weaknesses in services and products, and gaining insights from previous research regarding consumer preferences in the context of *e-commerce* can provide a deeper understanding of consumer behavior in Shopee. Previous research has shown that factors such as previous shopping experience, brand trust, and service quality are key factors in shaping consumer purchase intention (Salsyabila et al., 2021).

However, even though there have been previous studies, there is still a need to dig deeper into consumer behavior in the context of Shopee. By analyzing transaction data, customer feedback, and shopping trends, further research can provide more detailed insights into what factors influence consumer buying interest and how the ever-changing changes in online shopping trends can be leveraged by sellers to improve marketing and service strategies.

By strengthening this understanding, it is expected to make a significant contribution to the future development of the online selling industry. This research is also expected to provide a more holistic view of online selling trends, provide solutions to emerging issues, and assist in improving the overall consumer experience. Thus, it can be concluded that a deep understanding of the phenomenon of online selling, especially in the context of Shopee, is very important in facing challenges and taking advantage of opportunities in the ever-evolving world of *e-commerce* (Pratiwi et al., 2023).

2. Theoretical Foundation

2.1 Price

According to Kotler (2016), the definition of price is the amount charged for a product or service. This means that price is the value that consumers have to pay to own or benefit from a product or service. Price is one of the determining factors for brand selection and is relevant to consumer purchasing decisions. When consumers choose an existing brand, they indirectly evaluate price by comparing several price criteria and use it as a purchase reference. According to Anwar (2015), The price of a product or service is a determining factor in market demand. Price is a very important thing that consumers pay attention to when buying products or services. Price is one of the elements of the marketing mix and plays an important role in the success of marketing efforts. According to Kotler and Armstrong (2018), the following are *indicators of* a price:

a. Price depends on the quality of service provided
b. Appropriateness of the level of price shock to people's purchasing power
c. Price is competitive with competitors
d. Price is determined by customer benefits and added value

2.2 Promotion

According to Tjiptono (2016), advertising is a form of marketing communication. to inform, influence, and persuade the target market about the company and its products to be willing to adopt, buy, and remain loyal to the company's respective product marketing efforts, intended to remind you.

Promotion is a specific combination of personal advertising, sales promotion, and public relations activities that businesses use to achieve their advertising and marketing objectives (Kotler & Keller, 2016). Babin (2015). Promotion is a communication function of a company whose role is to inform and persuade / invite buyers. The main objectives of advertising are to inform, influence, persuade, and remind target consumers about the company and its marketing mix (Tjiptono, 2016). Promotion Indicators according to Buchari (2016):

- Product advertisements that are displayed are attractive
- Continuous company promotion
- Advertising materials used can provide information about the product.

2.3 Service Quality

Kotler and Keller (2016) stated that service quality must start from customer needs and end with customer perceptions, and customer perceptions of service quality are an overall evaluation of service quality called a good evaluation, which is claimed to be an evaluation. Five dominant factors or determinants of service quality according to Kotler (2016)

- Equipped with the latest equipment and technology
- Provide services as promised
- Employees do not feel busy answering questions
- Employees can convey trust to customers
- Employees look out for the interests of customers

2.4 Purchase Intention

According to Simamora (2016), interest is personal and also related to attitudes. A person who is interested in an object will gain the strength and courage to take various actions to approach or obtain that object. According to Keller's theory (2016), purchase interest indicates the likelihood that consumers will accept the purchase interest. According to Kotler (2016), interest is a reaction or process of effectively feeling or liking a product but not yet making a purchase decision.

According to Supriono (2017), consumer buying interest is the actions and actions taken by individual consumers, groups, and organizations to evaluate, obtain, and use goods through the exchange or purchase process, including the decision-making process. Indicators of Purchase Interest According to Indriyo (2020), the indicators of buying interest of a prospective consumer are as follows:

- *Attention,* namely the attention of potential consumers to the products offered by producers.
- *Interest*, the *interest* of potential consumers in the products offered by producers.
- *Desire*, the desire of potential consumers to own the products offered by producers.
- *Action*, i.e. potential customers make purchases of the products offered

2.5 Development and Hypothesis

2.5.1 H 1: There is a simultaneous effect of price on buying interest

Price is an important factor in supporting the success of consumer buying interest. Research on price variables on buying interest has been conducted by several researchers such as Bakti (2020), proving that price affects buying interest in Lazada Online Stores. Satria (2017) The results of research in Company A-36 prove that Price has a positive or significant effect on Purchase Interest, where high Purchase Interest can be formed by the price offered by service providers or products. Fauzan (2019) in research on the Effect of Price and Product Quality on Interest in Buying Kawasaki Motorbikes has proven the hypothesis which states that the Price Variable has a positive effect on Purchase Interest.

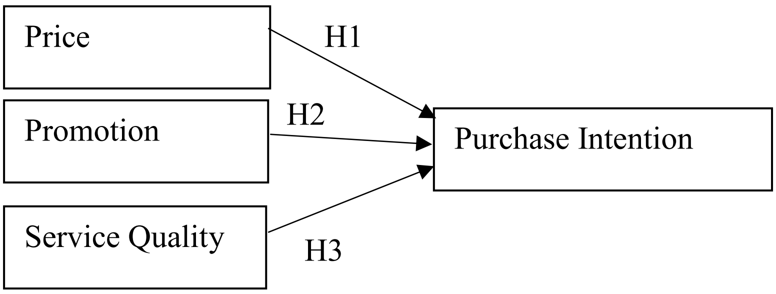
2.5.2 H 2: There is a simultaneous influence of Promotion on Purchase Intention

Good promotion is believed to increase the sales of a product. this statement has been supported by several research results that prove the influence of promotion on buying interest in an item. Septiani (2018) Proves that promotion has a positive and significant effect on buying interest in PT. Recapital Life Insurance Jakarta. Salsyabila (2021) concluded that promotion has a partial and significant effect on buying interest. Vania (2021) proves that there is a significant influence or effect between the ShopeeFood promo variable and the Shopee user purchase interest variable.

2.5.3 H 3: There is a simultaneous effect of Service Quality on Purchase Intention

A business must have good service quality so that it can meet the needs of its customers. Of course, this will affect consumers' buying interest in certain products. Arianto (2020) proves in research on the Effect of Service Quality and Product Quality on Consumer Purchase Interest in Pt Nirwana Gemilang Property that service quality has a positive and significant effect on buying interest. Permana (2020) said that bukalapak's service quality has a positive effect on buying interest of bukalapak customers in his research. Caniago (2022) also strengthens this statement in research on the Effect of Service Quality on Consumer Purchase Interest in MSMEs in Jakarta (Case Study of Purchases Through Shopee) with the conclusion that there is an effect of service quality on consumer buying interest.

2.6 Theoretical Framework



3. Research Model

This research was conducted quantitatively with survey instruments. The research was conducted in Yogyakarta Special Region Province from March 2024 to April 2024. The general population of Yogyakarta Special Region became the population with 100 research respondents who had been adjusted to the existing criteria. This questionnaire instrument then became the primary data in this study. This sample collection technique uses *purposive sampling* method. Respondents in this study have criteria for people domiciled in the Special Region of Yogyakarta who are 12 years and over and have bought clothes on shopee at least 2 times in the last 1 year.

Table 1. Operational Definition

No.	Variables	Operational Definition	Indicator
1.	**Price**	According to Kotler (2016), the definition of price is the amount charged for a product or service. Price is the amount that *Shopee e-commerce* users have to pay to get the desired clothing.	• The price of Clothing products sold by Shopee is affordable • Product prices vary from several sellers on Shopee with the same type of clothing product • Shopee Online Store has a price comparison that can compete with other Online Stores • The price offered by Shopee Online Store is in accordance with the product benefits obtained by customers (Kotler and Armstrong (2018)
2.	**Promotion**	Promotion according to Buchari Alma in Hurriyati (2018; 58) is "A form of marketing communication that seeks to disseminate information, influence or persuade, remind the target market of the company and its products to be willing to buy and be loyal to the products offered by the company". Promotion is a marketing medium offered by *Shopee e-commerce* to attract the attention of its users.	• Shopee often holds promotions periodically • Shopee sites often provide more attractive sales promotions than other sites • The promotions provided by shopee such as shopping discounts are always interesting and right according to the wants and needs of consumers. • The promotion held by Shopee attracts consumers to transact through Shopee Buchari (2016)

3.	**Service Quality**	The definition of service quality according to Tjiptono (2016) focuses on efforts to fulfill customer needs and desires and delivery accuracy that meets customer expectations. Service Quality is an effort *Shopee e-commerce* offers to fulfill the desires of its users.	• Shopee has a system that makes it easy to search for products • Shopee is quick to respond when there is a delay in delivery • Shopee provides a free return guarantee for every product purchase, especially fashion products (clothing) • Shopee has an easy and flexible payment transaction system that can be reached by all consumers. • Shopee has the suitability of the products that customers order and receive Kotler (2016)
4.	**Purchase Intention**	According to the theory from Keller (2016), purchase interest is how likely consumers are attached to the purchase interest. Purchase intention is the possibility of *Shopee e-commerce* users to buy products that are sold.	• I intend to repurchase fashion products, especially the latest clothing in the future according to my needs. • I am interested in buying other items on the Shopee website because the products are quality and trustworthy • I will be more interested in buying pakalian products on the Shopee website than other places • I would recommend Shopee clothing products to friends and family Indriyo (2020)

Instrument testing involves validity and reliability tests. The validity test is an instrument to determine the existing or valid data from the sample to collect the desired results. The questionnaire consists of questions that are intended to be answered by respondents to obtain results. The reliability test is conducted after conducting the validity test to ensure the research conducted can be trusted. The instrument is considered valid if the calculated r value is greater than r table with a confidence level of 95%. Conversely, the instrument is invalid if the calculated r value is smaller than r table. If the *Cronbach's Alpha* value for a variable is greater than 0.60, then the variable is considered reliable. The classical assumption tests used in this study include normality, multicollinearity, and heteroscedasticity tests. Data were analyzed using multiple linear regression analysis techniques. According to Sanusi (2017), multiple linear regression analysis is an analytical technique that is an extension of simple linear regression, which is used when there is more than one independent variable.

$$\boldsymbol{Y} = \boldsymbol{aa} + \boldsymbol{b11X1}+\boldsymbol{b2X2}+\boldsymbol{b3X3}+\mathrm{e}$$

Description:

Y	= Purchase Intention
a	= Constant
$b1b2b3b$	= Partial Regression Coefficient
X	= Price
X	= Promotion
X	= Service quality
e	= Error

The research was conducted with the F test, which was used to see the feasibility or simultaneous influence between price, promotion, and service quality on the purchase interest variable used in a study. The T test aims to determine whether the price, promotion, and service quality variables (Xi, Xz, X3) partially (individually) affect the purchasing decision variable (Y). The coefficient of determination test in linear regression can be interpreted as how much the ability of all independent or independent variables (price, promotion, and service quality) to influence the dependent variable (purchase intention).

4. Finding and Discussion

The survey results have found that all respondents meet the predetermined criteria. Respondents who have made purchases at shopee more than 2 times are mostly between 18 - 23 years old with a percentage of 72.3%, followed by 24-30 years old with 22.8%. The rest came from ages 30 and over by 2% and ages 12-17 years by 3%. Most of the respondents are women with a percentage of 62% and the rest are men with a percentage of 38%.

The average price variable shows 3.32 and is included in the very affordable category. Promotion has an average variable of 3.26 which is in the very good category. Service quality gets a very good category with an average variable of 3.28. The average purchase interest variable shows 3.39 and is included in the very interested category.

The validity test that has been carried out on all question items in the questionnaire shows that the calculated r value is greater than the table r value so that all question items are declared valid. Based on the Cronbach's alpha value reliability test, it is known that the price variable is moderately reliable with a point of 0.51. Putri (2024) also conveyed the same thing in her journal that the price and Cronbach's alpha points of 0.500 indicate moderate reliability. Meanwhile, the promotion variable is 0.635, the service quality variable is 0.768, and the purchase interest variable is 0.718 and is said to be reliable because the variables are greater than 0.60.

The normality test results produced an asymp significance value (2-tailed) of 0.186> 0.05 so that the data is normally distributed. The VIF value of each variable is smaller (<) than 10 so it can be concluded that the model in this study does not occur symptoms of multicollinearity. The Sig value of each variable is greater (>) than 0.05, so it can be concluded that the model in this study does not occur symptoms of heteroscedasticity.

TABLE 2. T Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.462	1.466		1.679	.096
	Price	.173	.116	.138	1.492	.139
	Promotion	.302	.103	.289	2.920	.004
	Quality_Service	.274	.070	.361	3.942	.000
a. Dependent Variable: Purchase Intention						

Multiple linear regression equation:

$\boldsymbol{Y} = \mathbf{2{,}4626 + 0{,}173}\boldsymbol{X}\mathbf{1}\mathbf{+0.32}\boldsymbol{X}\mathbf{2}\mathbf{+0.274}\boldsymbol{X}\mathbf{3}$

The regression equation with a value of 2.4626 shows that if the value of the price, promotion and service quality variables is 0 then consumers will still have good buying interest. With a positive value, each independent variable coefficient shows a unidirectional relationship with the dependent variable. However, in the T test the price variable shows that it has no partial effect on the dependent variable, so the positive coefficient of the price variable is not meaningful. The promotion and service quality variables show that there is a partial influence on purchasing interest. The positive coefficient in the Promotion and Service Quality variables can be interpreted as meaning that with promotions and better service quality for consumers, consumers will become more interested in buying clothes at Shopee.

TABLE 3. F Test Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.787	3	40.929	23.085	.000[b]
	Residuals	170.203	96	1.773		
	Total	292.990	99			
a. Dependent Variable: Purchase Intention						
b. Predictors: (Constant), Quality_Service, Price, Promotion						

Based on the data above, F count 23.085 is greater than F table 2.70. This shows that Price, Promotion, and Service Quality **simultaneously affect** buying interest in *Shopee.* This is in line with the hypothesis that has been submitted by the researcher.

The t test shows that the calculated t value of the price variable is 1.752, which is lower than the t table of 1.98498. This means that this calculation shows that the price variable partially does not have a significant effect on buying interest. Even though price is considered important, in the context of this research, price does not directly motivate consumers to buy clothes on Shopee. This result is in line with research conducted by Powa (2018) where the price variable partially has no effect on buying interest. Research respondents also stated that the prices of Shopee clothing products are almost the same as on other e-commerce platforms, even with fellow sellers on Shopee. So according to respondents, price is not always a consideration when purchasing clothing products on Shopee.

The t test shows that the calculated t value for the Promotion variable is 2.373, the value is greater than the t table of 1.98498. This means that this calculation shows that the promotional variable partially has a significant effect on purchasing interest. An effective promotional strategy can increase consumer interest in making purchases. Research conducted by Puspitasari (2023) also shows similar results where promotions have an influence on purchasing interest. Thus, it is important for Shopee to pay attention to promotional strategies to maximize customer buying interest.

The t test shows that the calculated t value of the service quality variable is 4.569, which is greater than the t table of 1.98498. This means that this calculation shows that the service quality variable partially has a significant effect on purchasing interest. Good and satisfying service can encourage consumers to buy clothes on Shopee. Rahmat (2022) in research conducted by him shows that the service quality variable partially influences purchasing interest.

5. Conclusions

Based on the discussion in the article, it can be concluded that Price, Promotion, and Service Quality have a significant influence on consumer buying interest on the Shopee platform. Promotion and service quality are proven to have a partial effect on purchase intention, while price does not show a partially significant effect. Overall, the three variables simultaneously influence buying interest. This study emphasizes the importance of an attractive promotional strategy and good service quality to increase consumer buying interest in e-commerce.

The advice given to Shopee regarding prices is to maintain prices so that they can compete and provide more competitive discounts. Price has an influence on consumer buying interest in the Shopee marketplace. In addition, it is hoped that there is a need to educate Shopee customers about the price directly proportional to the quality of an item. So that in the future customers who shop at Shopee do not feel disappointed with the price and quality of the goods offered.

The advice given to Shopee regarding promotion is to improve the promotional strategies needed by consumers, and provide clearer and more accurate information regarding the products that will be introduced to the wider community so that they are easily accepted by the public. The advice given to Shopee regarding service quality is that it should provide excellent service to consumers or potential consumers which will later affect their buying interest. The better the quality of service, the more it will increase buying interest by, for example, being responsive in handling consumer complaints, serving consumers in a friendly and polite manner, and so on.

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THE INFLUENCE OF ABILITY, MOTIVATION, AND OPPORTUNITY (AMO) ON EMPLOYEE PERFORMANCE

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ABSTRACT

The purpose of this study was to determine the effect of Ability, Motivation, and Opportunity on employee performance. In this study using saturated sampling because it uses the entire population as a sample. The results of this study are Ability, Motivation, and Opportunity do not have a positive influence on employee performance and will provide benefits for Credit Union Lestari, Credit Union Kasih Sejahtera, and Credit Union Mulia Sejahtera in an effort to improve employee performance. In addition, the results of this study can also be a recommendation for other business fields, especially in small and medium scale regarding strategies that can be used to improve employee performance.
Keywords*: Ability, Motivation, Opportunity, and Employee Performance, Credit Union.*

1. Introduction

Developments in science accompanied by support from technology increase competition between organizations according to Adha et al., (2019). Progress in organizations is seen in the practices and work patterns of high-performing employees who symbolize a high performance system as well (Edgar and Everett, 2021). According to Riniwati (2016), performance is a process of human behavior in doing work that produces a thought to achieve a goal. Armstrong and Brown (2019) performance depends on employee abilities, motivation, and opportunities.

Research by Gracia and Tomas (2016) explains that the Ability, Motivation, and Opportunity (AMO) framework has been widely accepted to explain the relationship between Human Resources (HR) management and performance. According to Blumbreg and Prigle (1982), ability is also understood as physiological and cognitive abilities that enable employees to perform tasks effectively. Furthermore, motivation can be understood as a force that directs, energizes, and sustains behavior (Van Iddkinge et al., 2017) as well as conditions that encourage or cause someone to take an action (Nawawi, 2003). Finally, employment opportunities, according to Blumbreg and Prigle (1982), include environmental factors within the organization.

This finding is different from the research findings of Adha et al., (2019) on employees of the Jember Regency Social Service, which shows that motivation has no effect on employee performance. Meanwhile, research conducted by Adha et al. (2019) said that motivation, leadership, and organizational culture have a positive and significant effect on employee performance at the Jember Regency Social Service. Meanwhile, the work environment has a significant effect on the performance of employees of the Jember Regency Social Service and work culture has a significant effect on employee performance. The description above shows that, although many studies have been conducted, the relationship between Ability, Motivation, and Opportunity (AMO) with employee performance is not yet clear. In these studies there are findings that show a significant relationship between Ability, Motivation, and Opportunity (AMO) and employee performance, and findings that show an insignificant relationship.

2. Literature Review

2.1 Human Resource Management

Priyono (2010) states that the most important resource element is its human resources. According to Dessler (2013), an organization consists of people with tasks that have been clearly defined in their roles to achieve organizational goals; then, to support this success, it is necessary to plan, manage, and control human resources; and a managerial tool called human resource management (HRM) is also needed. Human resource management functions to ensure employee performance, namely by examining how the quality and quantity achieved by employees in carrying out their duties and responsibilities (Mangkunegara, 2000).

2.2 Employee Performance

According to Byars (2004) performance is the relationship between effort, ability, and task perception. Based on this description, employee performance is a measure to see individuals in achieving the goals of an organization. Siagian (1988) revealed that there are several factors that affect employee performance, namely: aggressiveness, having high creativity, believing in oneself, as well as the ability to control oneself, and innovate.

2.3 Ability, Motivation, dan Opportunity (AMO)

Fu et al., (2013) define ability as knowledge and skills that can later improve the components of Ability, Motivation, and Opportunity (AMO) itself. Based on this explanation, ability is a combination of knowledge and skills possessed by individuals. In short, ability is one of the reinforcers and enhancers in the AMO framework. According to Garcia et al., (2016) motivation can be improved extrinsically and intrinsically. Intrinsic motivation is a desire that comes from oneself, for example, such as interest in doing something. Meanwhile, extrinsic motivation is a desire that comes from outside the individual, such as a reward. The opportunity dimension for job design theory according to Garcia et al. (2016) not only considers an individual but also the work environment with examples of quality environments and teams.

2.4 Previous Research and Hypothesis Formulation

AMO is an interrelated component and has an influence on employee performance. In previous studies there are different results, there are significant and insignificant studies of AMO on employee performance. The following is a description of several scientific articles that show the effect of AMO on employee performance.

Edgar, Blanker and Everett, (2021) conducted a study entitled “The HPWS and AMO: a dynamic study of system and individual level effects” on 250 employees working in the service sector in New Zealand. This study aims to examine the effect of AMO and HPWS on employees. The results of Edgar and Everett's research (2021) show that Ability and Motivation have a significant effect on employee performance, while Opportunity's effect on employee performance is not significant. Researchers have an understanding that ability has the broadest influence so that opportunities are seen as a combination of individual and system characteristics, and make their influence on performance insignificant. Edgar, Zhang and Blaker (2021) conducted a study entitled “Gender and job performance: Linking the high performance work system with the ability-motivation-opportunity framework.” This research was conducted by means of a survey of organizations in New Zealand. This research explores whether context is useful in explaining these findings. In this study, the influence of context on employee behavior was considered at two levels, descriptive (demographic, social, and gender) and analytical (community and national culture). The findings of this study show that employee demographics based on gender influence the relationship of the variables under study. The effect of ability on performance was significant for men, while opportunity was the strongest predictor of performance for women. This is because men attribute job performance to internal factors while women attribute work outcomes to the external environment in which they work. This is an important finding as it has the potential to contribute to understanding why motivation as an AMO element was not prominent in this study. In addition, this study also considered the influence of the national culture in New Zealand.

Fadli (2020) conducted research with the title "The effect of motivation, ability, and opportunity on employee performance at the Nanga Pinoh Regional General Hospital, Melawi Regency." This study aims to determine the effect of motivation, ability, and opportunity on employee performance at the Nanga Pinoh Melawi general hospital with 63 respondents and data collection in the form of a questionnaire. The findings show that all AMO variables have a significant influence on performance. This happens because leaders pay attention in the form of rewards, incentives, and factors that shape employee performance.

Based on the three previous studies described above, it can be seen that the influence between Ability, Motivation, and Opportunity on performance is still unclear. In Fadli's research (2020) the effect of AMO on performance is significant. However, research by Edgar and Everett (2021) and Edgar, Zhang and Blaker (2021) concluded that not all AMO dimensions have a significant effect on performance. Although previous research shows inconsistent results on the effect of AMO on improving employee performance, on the basis of theory (Garcia et al., 2016) and Fadli's research (2020) this study still formulates the following hypothesis:

H1a: Ability has a positive effect on employee performance.
H1b: Motivation has a positive effect on employee performance.
H1c: Opportunity has a positive effect on employee performance.

3. Research Methods

3.1 Respondent

Population is an area that includes subjects and objects with qualities determined by the researcher and aims to study and conclude the characteristics possessed by subjects and objects (Sugiyono, 2018). The population of this study were employees who worked at Credit Union Lestari as many as 55 employees, Credit Union Kasih Sejahtera as many as 150 employees, and at Credit Mulia Sejahtera as many as 76 employees. The sample is part of all the characteristics possessed by the population (Sugiyono, 2018). In this study using saturated sampling because it uses the entire population as a sample. Saturated sample is a sampling technique when all members of the population are used as samples (Sugiyono, 2018). The sample of this study were employees who worked at Credit Union Lestari as many as 51 employees, Credit Union Kasih Sejahtera as many as 150 employees, and at Credit Mulia Sejahtera as many as 76 employees.

Respondent characteristics are an overview of respondents in this study including gender, education level, age, and tenure. The results of this general description of the respondents can describe the condition of the respondents who were sampled in the study, namely employees at Credit Union Lestari, Credit Union Kasih Sejahtera, and Credit Union Mulia Sejahtera.Based on the research data obtained from 165 respondents related to gender, the data obtained can be presented as follows:

Table 1. Responden

Characteristic		**Frequency**	**Percentage**
Gander	Male	88	53,3%

	Female	77	46.7%
	Total	**165**	**100%**
Age	19-30 Years Old	63	24,3%
	31-41 Years Old	162	62,5%
	42-53 Years Old	26	10%
	Total	**165**	**100%**
Education	Senior High School	77	46,7%
	Diploma	5	3,03%
	Bachelor	82	49,7%
	Master	1	0,6%
	Total	**165**	**100%**
Working Period	1-5 Years	41	24,84%
	6-10 Years	88	53,33%
	11-15 Years	23	13,93%
	16-10 Years	9	5,45%
	> 20 Years	4	2,42%
	Total	**165**	**100%**

Source: Data processed by researchers, 2024

3.2 Instrument

In this study using a Likert scale. The Likert scale is used to measure the perceptions of a person or group regarding social events by looking at their attitudes and opinions (Sugiyono, 2018). The Likert scale is appropriate for use in this study because it can measure the dimensions of this research variable (AMO and employee performance) and the Likert scale provides a subjective assessment. The explanation of the Variable Measurement Scale is Strongly Agree with a score of 5, Agree with a score of 4, Neutral with a score of 3, Disagree with a score of 2, and Strongly Disagree with a score of 1.In this study, data analysis used Smart PLS version 4.1.0.1. All data generated in this study will be carried out with instrument tests such as convergent validity tests, reliability tests, validity and hypothesis testing.

Table 2. Measurement Tools

Variable	Item	Loading Factor	α	AVE	Composite Reliability
Ability	A1 A2	0.866 0.855	0.931	0.784	0.948

	A3	0.900			
	A4	0.894			
	A5	0.912			
Motivation	M1	0.856	0.938	0.824	0.950
	M2	0.877			
	M3	0.888			
	M4	0.764			
	M5	0.887			
	M6	0.868			
	M7	0.836			
Opportunity	O1	0.873	0.964	0.731	0.969
	O2	0.867			
	O3	0.806			
	O4	0.886			
	O5	0.862			
	O6	0.868			
	O7	0.857			
	O8	0.881			
	O9	0.847			
	O10	0.875			
	O11	0.843			
	O12	0.699			
Employee Performance	KK1	0.893	0..957	0.720	0.966
	KK2	0.917			
	KK3	0.922			
	KK4	0.912			
	KK5	0.934			
	KK6	0.866			

Source: Data processed by researchers, 2024

4. Research Findings and Discussion

4.1 Discriminant Validity

This measurement is carried out to ensure that each latent variable is different from other variables. Discriminant Validity is assessed based on cross loading measurements with their constructs or by comparing the roots of the AVE.

Table 3. Measurement Tools

Variable	Ability	Motivation	Opportunity	Employee Performance
Ability	**0.886**			
Motivation	0.752	**0.855**		
Opportunity	0.762	0.842	**0.849**	
Employee Performance	0.714	0.733	0.792	**0.908**

Source: Data processed by researchers, 2024

4.2 Hypothesis Testing

The path significance test is used to determine how much influence the exogenous variables have on the endogenous variables. This test uses the bootstrapping procedure. Bootstrapping is a procedure used to generate a T-statistic to see the significance of the inner model and outer model.

After finishing calculating the T-statistic, the Path Coefficient appears. The T-statistic value can be said to be significant if it is greater than 1.96. Furthermore, for the original sample value if it is more than 0, the direction of influence is positive and if it is less than 0, the direction of influence is negative. The test values are shown in Table 4:

Table 4. Hypothesis Testing

Hypothesis	Original Sample	Std Dev	T-Statistic	P-values	Hypothesis Test Results
H1: A → EP	0.093	0.063	1.468	0.142	Not Accepted
H2: M → EP	0.147	0.083	1.759	0.079	Not Accepted
H3: O → EP	0.060	0.111	0.541	0.589	Not Accepted

Source: Data processed by researchers, 2024

The results of the first test, namely the effect of ability on employee performance, show a coefficient value of 0.093, a p-value of 0.142> 0.05 and a t-statistic of 1.468 < 1.960. The second test result, namely the effect of motivation on employee performance, shows a coefficient value of 0.147, a p-value of 0.079> 0.05 and a t-statistic of 1.759 < 1.960. The third test result, namely the effect of opportunity on employee performance, shows a coefficient value of 0.060, a p-value of 0.589> 0.05 and a t-statistic of 0.541 < 1.960. These results indicate that ability, motivation, and opportunity have no positive effect on employee performance.

5. Conclusion

Based on the research, ability, motivation, and opportunity did not directly and significantly affect the performance of credit union employees. This is contrary to the general expectation that these three factors have a positive influence on performance. This research has several important implications for credit union management. First, the emphasis in employee development should not only be on improving capabilities and providing opportunities, but also on developing intrinsic motivation and creating a conducive work environment. Second, the employee performance appraisal system needs to consider other factors beyond ability, motivation, and opportunity, such as leadership, organizational culture, and work stress. Limitations in this study such as a small sample and focus on three types of credit unions.

Therefore, further research is needed with a larger. By understanding these factors, credit union managers can develop more effective strategies to improve employee performance and achieve organizational goals.

Research on the influence of ability, motivation, and opportunity on employee performance in credit unions has significant managerial implications. The findings of this study can help Credit Union leaders to make better decisions about recruitment, selection, motivation, and employee development. This research is also relevant to the theme "Human Resources Management and Leadership" as it provides insights into how credit unions can effectively manage their human resources to improve employee performance. By applying the findings of this research, credit unions can create a positive and supportive work environment that will encourage employees to give their best performance.

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UTILIZATION OF ANALYTICAL HIERARCHY PROCESS (AHP) AS A DECISION SUPPORT SYSTEMFOR STUDENT ORGANIZATIONS DEVELOPMENT PRIORITY (CASE STUDY AT JKMK SANATA DHARMA UNIVERSITY)

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ABSTRACT
The COVID-19 pandemic has presented significant challenges for organizations worldwide, urging them to undertake post-pandemic development. These changes are also profoundly felt by student organizations (ORMAWA). With the limited resources available in such small organizations, it is challenging for ORMAWA to carry out organizational development in response to these changes. This article focuses on the Jalinan Kasih Mahasiswa Katolik (JKMK) organization at Sanata Dharma University as the research object. This paper will attempt to explore organizational development by determining development priorities through the Analytical Hierarchy Process (AHP) method, referencing interviews with parties directly involved with JKMK such as administrators, JKMK members, and also JKMK's patron organizations. It also involves four development criteria: member involvement, organizational culture, organizational reciprocity, and organizational reputation. Thus, a decision support system for JKMK development priorities will be produced from the AHP priority synthesis.
***Keywords**: post-pandemic development, student organizations, JKMK, analytical hierarchy process (AHP), Decision Support System.*

1. Introduction

The COVID-19 pandemic has presented significant challenges for organizations worldwide. Changes in the situation that require organizations to evolve can backfire when organizations are deemed unprepared to face a change. Weick (1969:243) defines an organization not only about formal structure, but also about interactions between individuals and daily communication activities. Thus, communication becomes a major issue for an organization when a pandemic occurs, where when a pandemic occurs, very significant changes then occur in the way humans communicate. According to previous research (Bachrir, Achdan, and Zelfia 2020), this shift also affects social relations among students. In their research, it was found that the COVID-19 pandemic has changed student social relations that were previously face-to-face into relations that involve more communication technology. This massive change in communication behavior among students then brings challenges for student organizations.

Jalinan Kasih Mahasiswa Katolik (JKMK) is a student organization based on social and religious concerns at Sanata Dharma University. This organization is under the Campus Ministry, which supports the operational activities of Sanata Dharma University. In addition, JKMK is also a Faculty Activity Unit (UKF) of the Faculty of Pharmacy at Sanata Dharma

University. JKMK has at least 358 members who are part of the organization. JKMK has two regular activities, namely Koor and Kamisan. Koor or choir is JKMK’s responsibility in service tasks under the Campus Ministry, this choir activity is held every month in the Drost room of campus 3 of Sanata Dharma University.

Kamisan is an abbreviation for “Sanata Dharma Catholic Student Gathering” which is intended to carry out the recreational and spiritual functions of JKMK. The requirements for JKMK membership are quite easy, which is only by filling out the Google Drive membership link on the JKMK Instagram link, the prerequisites are only being Catholic, willing to participate in JKMK activities and being a student of Sanata Dharma University.

Decision-making plays an important role in responding to changes in an organization. In a dynamic and uncertain context, such as the COVID-19 pandemic, the ability to make accurate and effective decisions becomes very important (Sharma, 2023). According to Springer (2021), good decision-making can facilitate successful adaptation to change, allowing organizations to remain relevant and effective in achieving their goals.

From the changes that occurred in JKMK, the urgency of change and relevant development in this organization occurred due to the shift in social interaction behavior. Social interaction behavior among students has been an important research subject during the transition from the COVID-19 era to the post-pandemic era. A study (Frontiers,2022) shows that the pandemic has disrupted patterns and opportunities for social interaction, increasing the level of loneliness among students. In this context, it is important for organizations like JKMK to understand these changes and adjust their activities and interactions to support the social needs of students.

The Analytical Hierarchy Process (AHP) method is one of the multi-criteria decision-making methods developed by Saaty (2008). This method helps decision-makers in solving complex and unstructured problems. AHP uses a mathematical approach to break down problems into simpler sub-problems in the form of a hierarchy. Each element in the hierarchy is evaluated based on its relative priority to other elements in the same hierarchy. This method has been widely used to solve decision-making problems.

Bourgeois (2005) states that AHP is typically applied to determine the priority order of various complex and multi-criteria options. Broadly speaking, the use of AHP results in priorities that are consistent with theory, logical, transparent, and involve participation. With the increasing demand for transparency and participation, AHP is a very suitable method for setting priorities in public policies that require transparency and participation.

This article aims to demonstrate the use of AHP in determining the decision support system (DSS) for the priority development of the JKMK organization. After this introduction section, the article will explain the basic concepts of AHP. Then, it will show how AHP is used to select development priority alternatives, with a case study in the Jalinan Kasih Mahasiswa Katolik (JKMK) Organization. The article then concludes with an argument as a consideration for the priority development of the JKMK organization.

2. Literature Review

The Literature Review chapter in this research presents a synthesis of various relevant scientific literature related to the research topic, namely ‘Application of AHP as a Decision Support System for Student Organization Development Priorities’. This chapter includes an in-depth exploration of the AHP method, including its origins, previous applications, and its use in decision support systems. Furthermore, this chapter also discusses the concept of student organization development and how it is relevant to the context of this research. A critical analysis of relevant previous research is also presented, focusing on identifying gaps in the existing literature and how this research seeks to fill those gaps. Thus, this chapter provides a strong theoretical framework for this research and shows how this research contributes to existing knowledge.

2.1 Decision-Making System

A decision-making system is an important process in company management. It is a computer-based information system aimed at assisting certain parties in handling problems using data and models. In an article titled "Decision Making: a Theoretical Review" published in November 2021, Morelli, Casagrande, and Forte explain that decision-making is an essential skill needed to adapt to the environment and autonomy (Morelli, Casagrande, & Forte, 2021). Decision-making refers to the deliberate process of evaluating various alternatives and choosing the most adaptive one to achieve one or more goals, based on an individual's abilities, values, preferences, and beliefs (Morelli et al., 2021). This article reviews various theoretical models of decision-making and identifies application areas, the significance of decision support systems, and the methods, approaches, frameworks, or algorithms used to solve complex problems (Morelli et al., 2021).

2.2 Decision Support System (DSS)

DSS is a concept of the role of computers in the decision-making process (García-Alcaraz et al., 2022). DSS is used to assist the decision-making process in various fields, including health (Ali et al., 2023). Developing an effective DSS is a challenging task that can benefit from previous evaluations of the most promising theories, techniques, and methods currently available (Ali et al., 2023). One method often used in DSS is the Analytic Hierarchy Process (AHP). AHP is used to integrate scientific knowledge and expert knowledge in the decision-making process, and to explicitly include several criteria (e.g., social impact) that are highly relevant during crises but often difficult to consider in the most commonly used methods and tools (Pagano et al., 2021).

2.3 Organizational Development

Organizational development is an important and widely researched field. In an article titled "Research in Organizational Change and Development," published by Emerald Insight (2020), the authors review various aspects of organizational development, including organizational change, organizational dynamics, and organizational development itself. Organizational development is defined as a deliberate and planned process to improve organizational effectiveness and employee well-being through deliberate changes in procedures, structures, and work processes. The article also discusses how social media influences organizational development and how professional identities are formed in the context of organizational change.

2.4 Analytical Hierarchy Process (AHP)

As previously explained, the Analytical Hierarchy Process (AHP) is a method that assists in setting priorities from various options by considering multiple criteria. Due to its ability to handle multi-criteria, AHP is often used in the priority determination process. Susila and Munadi (2007) explain that there are four basic principles in the AHP method used to solve problems, namely:

Decomposition of the problem;
Data collection;
Assessment to compare the elements resulting from decomposition; and
Synthesis of priorities.

3. Research Methods

The research method used in this study is a combination of quantitative and qualitative methods. The quantitative method is used to collect and analyze numerical data, while the qualitative method is used to understand phenomena from the subjective perspective of participants. In the context of this research, the quantitative method is applied in the implementation of the Analytic Hierarchy Process (AHP) as a decision support system. The numerical data obtained through AHP is then qualitatively analyzed to determine the development priorities of the Jalinan Kasih Catholic Student Association at Sanata Dharma University. With this approach, this research aims to provide deep and holistic insights into the topic being studied.

3.1 Problem Decomposition

In the process of setting priorities, the problem must be broken down into the objectives of the activity, identification of various existing options, and the establishment of criteria for selecting priorities (Susila & Munadi, 2007). This article will take criteria based on the results of random interviews with active JKMK members representing each routine activity and JKMK administrators. After that, from the many criteria that are the result of the interview, criteria relevant in the context of "changes in the way students communicate" will be selected. The result of the criteria will then be considered as a problem solution or solution. The results of these criteria will be elaborated again through several alternative choices that can be used as answers to the changes that occur in JKMK (Figure 1).

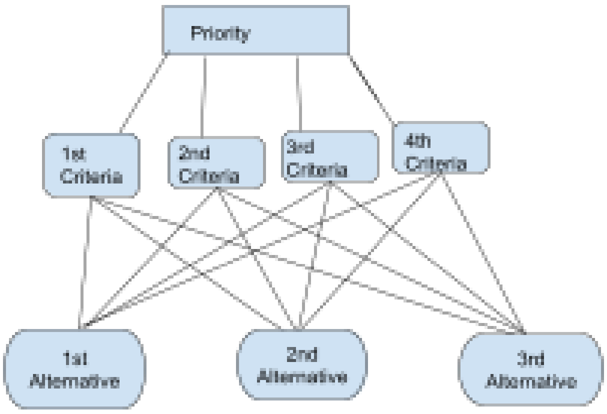

Figure 1. AHP Modeling

3.2 Data Collecting

The data to be used in this research will be taken from interviews with several samples from 3 categories, namely the JKMK organization committee, active members of JKMK, and also stakeholders from the JKMK organization. The previous samples will be informed about the scope of the research and various interview procedures.

3.3 Assessment to Compare the Elements Resulting from Decomposition

The comparative assessment of the elements resulting from the criteria will be compared through a scale of comparison choices, which is intended to determine the weight of a criterion to be selected (Saaty, 2008). The pairwise criteria comparison is then used to fill an AHP matrix. Each matrix will be tested for its consistency through 3 indices, namely:

3.5 Consistency Index

The Consistency Index (CI) is a metric in the Analytical Hierarchy Process (AHP) method used to measure the extent of consistent assessment. CI is calculated with the formula:

$$CI = \frac{\lambda max - n}{n - 1}$$

3.6 Random Index

In the Analytical Hierarchy Process (AHP), the Random Index (RI) or Random Index (IR) is a value used to evaluate the consistency of the assessment. RI is the average value of the random consistency index for an n x n pairwise comparison matrix. The Random Index value is a stipulation as follows (Table 1):

Table 1. Random Index Condition

Random Index	
Amount of Matrix Variable	Value
1	0
2	0
3	0,58
4	0,90
5	1,12
6	1,24

3.7 Consistency Ratio

Consistency Ratio The Consistency Ratio (CR) is a metric in the Analytical Hierarchy Process (AHP) method used to evaluate the consistency of the assessment. CR is calculated with the formula:

$$CR = \frac{CI}{RI}$$

where CI is the Consistency Index and RI is the Random Index. The CR value is used to determine the extent to which the assessment is consistent. If CR is less than or equal to 0.1, then the assessment is considered consistent. Conversely, if CR is more than 0.1, then the assessment may not be consistent and needs to be reviewed. After the weight for each variable is known, then the criteria will be made a context to compare the alternatives that will be used. This assessment process will be carried out on all choices of criteria and alternatives.

3.8 Priority Synthesis

Priority synthesis is the final stage of the AHP method. This process aims to determine the relative weights for the elements in decision-making. Priority synthesis is obtained from the sum of the weights obtained from each choice (alternative) from each criterion then multiplied by the weight of the criterion. In other words, it can be described as follows:

$$\text{Assessment}= \sum_{i=1}^{n} (w_{ij} \times w_j)$$

w_{ij} = The weight of an alternative with respect to a criterion

w_j = The weight of a criterion

Next, the assessment results will be sorted according to their rank as a consideration for decision-making

4. Research Findings and Discussion

The Results and Discussion in this research focus on the interpretation and analysis of the data that has been collected through the research methods previously explained. This section includes the presentation of research results, including the main findings obtained through the application of the AHP method as a decision support system. Furthermore, these results are discussed in depth to show how they contribute to our understanding of Student Organization development priorities. This discussion includes the interpretation of findings, explanations of how these findings align or differ from previous research, and implications of these findings for future practice and research. Thus, this chapter provides valuable insights into the research topic and shows how this research contributes to existing knowledge.

4.1 Problem Decomposition

In this research, the Analytical Hierarchy Process (AHP) method is used as a decision support system in the development of the Jalinan Kasih Mahasiswa Katolik (JKMK) organization at Sanata Dharma University. Four main criteria have been identified as important factors in organizational development, namely: 1) Member Involvement in the Organization, 2) Organizational Culture, 3) Reciprocity, and 4) Organizational Reputation. These criteria are then decomposed into four alternatives that become the steps of organizational development, namely: 1) Event Procurement, 2) Changes in Meeting Format, 3) Collaboration with other organizations, and 4) Procurement of new divisions.

4.2 Data Collection

Data collection using the interview method was conducted in the period of April 29-30, 2024 with 4 informants. Before data collection, the informants were explained about the abstract of the paper to fully capture the research overview. Then, the informants were given open and closed questions so that the results can later be used as a reference. The statements obtained from the interview will then be assessed based on the pairwise comparison scale (Table 2).

4.3 Assessment to Compare the Elements Resulting from Decomposition

The interview statements that have been evaluated for their comparisons are then processed through the AHP method by comparing and assessing each criterion pairwise in a matrix. This matrix is then normalized, and the value of a criterion within the group of criteria is determined. The results of the assessment are as follows (Table 3):

Criterion	Value	Alternative	Value
Member Involvement	0.5710	Event Procurement	0.5579
		Changes in Meeting Format	0.2633
		Collaboration with other organizations	0.0569
		Organizational Reputation	0.1219
Organizational Culture	0.2655	Event Procurement	0.4065
		Changes in Meeting Format	0.1950
		Collaboration with other organizations	0.2307
		Organizational Reputation	0.1678
Reciprocity	0.1152	Event Procurement	0.3889
		Changes in Meeting Format	0.0687
		Collaboration with other organizations	0.3889
		Organizational Reputation	0.1535
Organizational Reputation.	0.0482	Event Procurement	0.3829
		Changes in Meeting Format	0.1423
		Collaboration with other organizations	0.1276
		Organizational Reputation	0.3472

4.4 Priority Synthesis

The assessment of each criterion obtained is then calculated and sorted according to the hierarchy based on the pairwise comparison assessment. The hierarchy obtained with the AHP method is as follows (Table 4):

Table 4. Hierarchy based on the AHP method

Priority Synthesis		
Alternative	**Synthesis**	**Hierarchy**
Event Procurement	0.4897	1
Changes in Meeting Format	0.2169	2
Collaboration with other organizations	0.1447	4
Organizational Reputation	0.1486	3

5. Conclusion

In this research, problem decomposition was carried out by considering four main criteria in the development of the Jalinan Kasih Mahasiswa Katolik (JKMK) organization at Sanata Dharma University, namely: Member Involvement, Organizational Culture, Organizational Reciprocity, and Organizational Reputation. Member Involvement and Organizational Culture are key in building internal commitment and cohesion, while Organizational Reciprocity and

Organizational Reputation play an important role in building relationships and a positive image outside the organization. Through the Analytical Hierarchy Process (AHP) approach, this research has successfully identified priorities and strategic steps in responding to post-pandemic challenges.

In this research as well, the results show that Member Involvement has the highest synthesis point of 0.5710, indicating that this is the most important criterion in the development of the Jalinan Kasih Mahasiswa Katolik (JKMK) organization at Sanata Dharma University. This is followed by Organizational Culture with a synthesis point of 0.2655, indicating the importance of a strong culture in the organization. Meanwhile, Organizational Reciprocity and Organizational Reputation have lower synthesis points, each at 0.1152 and 0.0482, indicating that although these two criteria are important, they do not have the urgency of Member Involvement and Organizational Culture. These results provide valuable insights into the priorities and focus in the development of the JKMK organization.

The results show that the priority synthesis for the Jalinan Kasih Mahasiswa Katolik (JKMK) organization at Sanata Dharma University lies in the Event Procurement alternative, which has the highest value, namely 0.4897. This value indicates that Event Procurement is considered the most important organizational development step. Meanwhile, other alternatives such as Changing Meeting Format, Collaboration with Other Organizations, and New Management Division have lower values, namely 0.2169, 0.1447, and 0.1486 respectively. Nevertheless, all four alternatives are still important and need to be considered in the JKMK organizational development strategy. This conclusion provides valuable insights into the priorities and focus in the development of the JKMK organization.

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THE EFFECT OF UNEMPLOYMENT, EMPLOYMENT, AND INVESTMENT ON POVERTY IN BENGKULU PROVINCE

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ABSTRACT

Poverty is a problem in various parts of the world, which is caused by various factors such as the unemployment rate which is still very high so that the workforce is not absorbed enough, because investment is still lacking and many more. This research will determine the impact of unemployment, the labor force and investment on the poverty in Bengkulu. The method used by this research is multiple linear regression with panel data. This type of research is quantitative descriptive with secondary data. The results of the research show that if the unemployment rate is reduced it will have a significant influence on poverty in Bengkulu province, if the level of labor force participation continues to be increased it will have a significant influence on poverty, and if investment is increased it will reduce the poverty level in province Bengkulu.
Keywords*: poverty; unemployment; labor force; and investment*

1. Introduction

One of the crucial challenges that faces almost all countries in the world is caused by poverty. Solving the problem of poverty is at the core of the sustainable development agenda (Pratama et al, 2019). Poverty is caused by a person's limitations in meeting their needs (Basorudin et al, 2019).Poverty also occurs due to several causes including, due to disparities in resource ownership which results in income disparities, it is also triggered by inequality in the quality of human resources, where low quality of human resources results in low productivity as well.(Pratama et al, 2019). Several factors cause this, such as investment which is still below standard and slowing economic growth (Arjuntara & Sudibia, 2022). Apart from that, there is also a lack of assets and income needed to meet basic needs such as food, health, clothing, education and shelter (Annisa & Nasruddin, 2022). Poverty arises from a lack of job opportunities which causes many people to become unemployed and have no source of income (Ainunnisa & Hidayat, 2019). Economic growth is an important condition for creating human development. With economic growth, population productivity and income can be increased through the creation of job opportunities. (Hastin & Siswadhi, 2021).

Another factor that is one of the causes of poverty is unemployment. If living needs are met through high employment opportunities, then poverty can be reduced significantly. A low unemployment rate or high employment opportunities can reduce poverty levels(Alviano et al, 2020). Many workers face difficulties in obtaining work due to limited job opportunities (Human et al, 2022). The government is trying to increase the labor force participation rate because low participation can have an impact on increasing the number of poor people, which can be a source of poverty problems if many people do not work in an area. (Basorudin et al, 2019).Apart from that, poverty can also be overcome by increasing capital investors (investment).(Supratiyoningsih et al, 2022).

Investment is the expenditure or purchase of capital goods and production equipment by investors or companies with the aim of increasing the production capacity of goods and services in the economy. Investment objectives are not only limited to increasing output, but also include determining the distribution of labor and income, population growth and quality, and technological development (Pratama et al, 2019). With increasing workforce abilities and skills, it is hoped that there will be an increase in labor productivity and the level of educational investment (Hasibuan et al, 2021). According to the Central Statistics Agency, the poverty rate and unemployment rate are as follows;

Based on the poverty data graph and also the open unemployment rate data graph above, it is divided into 10 districts/cities from each year 2020-2022. It can be seen from the graph above that the poverty unit is greater than the unemployment rate itself. The poverty rate data in South Bengkulu in the graph is the highest, namely in 2021 with a figure of 18.16%, but the unemployment data has decreased, namely 2.55%, in The Rejang Lebong area has the same high poverty and unemployment rates, while North Bengkulu in 2022 has a high unemployment rate of around 4.16% and poverty is 11.48%, the unemployment rate in 2020 decreased and rose again in 2022 and the poverty rate was the lowest in 2022 with a figure of 18.1%, the Seluma region for 2022 is the same as all of unemployment and poverty, namely 1.78% and 18.36%, muko-muko all increased in 2021, namely 3.68% and 11.93%, and for Lebong from year to year until 2022 the unemployment rate decreases but the poverty rate increases in 2022 from 11.85% to 12.3%, kepahiyang from 2021 the unemployment rate decreases but poverty increases, and Central Bengkulu and Bengkulu City are the same The unemployment rate is low but poverty is still high.

Based on the poverty graph and workforce/labor force level above, there are 10 districts/cities whose data was taken from 2020-2021. From the graph above, it can be seen that the opposite occurs from the previous graph, namely that the labor level is higher in terms of unit value than the poverty level. From South Bengkulu and Rejang Lebong from 2020-2022 the workforce level increases and poverty decreases, North Bengkulu in 2022 the workforce increases but poverty also increases, namely 4.16% and 11.48%, Kaur, Seluma, Muko-Muko, Lebong, Kepahiyang, and Central Bengkulu are almost the same, the labor force level has increased and poverty has decreased, but in the city of Bengkulu, the labor force level has increased but the poverty rate has also increased.

Several studies have explored the relationship between unemployment and reduced poverty levels. (Prasetiya & Sumanto, 2022) found that the unemployment rate has a significant negative impact on poverty. However, the unemployment and labor rates apparently do not have a significant influence on poverty through the economic growth channel. (Hastin & Siswahdi, 2021) States that for the most part, the unemployment rate has no effect on this poverty ratedThis is because unemployed people are not always poor, as long as they are still able to meet their basic needs, the increase in educated unemployment, where educated unemployment comes from high school graduates and above.Based on existing research, this study aims to analyze the impact of unemployment, labor and investment on poverty in Bengkulu province.

2. Literature Review

2.1 Poverty

Saying the term "poverty" may be easy, but determining what characteristics make someone poor, who is included in the poor category, and similar questions are not easy. Apart from that, the phenomenon of poverty has expanded along with the development of the factors that cause poverty itself (Pratama et al, 2019). Poverty is measured using two methods, namely absolute and relative poverty.

1) Absolute poverty refers to the comparison between the income received by an individual and the income required to meet basic needs. The real income used to meet basic needs is called the poverty line. Absolute poverty occurs when an individual's income is below the poverty line, so it is insufficient to meet their basic needs.
2) Relative poverty assesses poverty based on the distribution of income in a population. Even though a person's income may be sufficient to meet their basic needs, if that income is much lower than the income of other individuals in the same environment, that individual is still considered relatively poor. This is caused by gaps in income distribution in a region (Safitri & Efendi, 2019).

2.2 Unemployment

Economic growth tends to have a positive impact on the unemployment rate. These results indicate that the increase in population and labor force, stable wage levels, and economic growth simultaneously contribute to an increase in the unemployment rate. On the other hand, there is no relationship between the inflation rate and the unemployment rate (Astuti et al, 2019).

2.3 Labor

According to the Central Statistics Agency (BPS), labor is every person who is able to do work to produce goods and services to meet their own needs and those of society. A person is said to be working if they carry out economic activities producing goods or services with the intention of obtaining or helping to obtain income or profit, for at least 1 hour (uninterrupted) in the past week (Basorudin et al, 2019).

2.4 Investment

Investment is one of the main factors that has a positive impact on the economic growth of a region (Safitri & Efendi, 2019). Investment always goes hand in hand with technological progress, which in turn increases people's productivity and per capita income. Through investment activities, a society has the opportunity to continue to increase investment and employment, which will ultimately increase national income and community prosperity (Wulandari et al, 2022). Investment is a key element in advancing a country's economy. A simple but important relationship is that increasing investment will theoretically encourage per capita trade growth and improve community welfare (Nujum & Rahman, 2019). Continuous investment activities by the community will increase economic activity and employment opportunities, and will raise national income and the community's standard of living (Hastin & Siswahdi, 2021). Investment is always followed by technological developments (Ainunnisa & Hidayat, 2019).

2.5 The relationship between unemployment and poverty

Retnowati and Hastuti (2015) found that the poverty rate is highly dependent on the economic situation, where an increase in unemployment leads to an increase in poverty. Other research also confirms that the importance of growth in reducing poverty is beyond doubt, but many studies show that policies that support growth actually cause inequality, which is contrary to the purpose of growth itself.

2.6 The relationship between labor levels and poverty

Kiha et al (2021) stated that with the existence of various needs in society, people try hard to fulfill them by working to earn income. The level of people's income will reach its peak when the unemployment rate is minimal, otherwise unemployment will occur which will have an impact on reducing people's welfare and increasing the risk of poverty.

Hastin & Siswahdi (2021) shows that investment has a negative influence on poverty levels in Jambi Province. This is due to the increase in investment from year to year by the Jambi Provincial government which has had a positive impact on reducing the poverty level in Jambi Province.

(Astuti et al, 2019) shows that economic growth tends to have a positive impact on the unemployment rate. These results indicate that the increase in population and labor force, stable wage levels, and economic growth simultaneously contribute to an increase in the unemployment rate. Conversely, there is no relationship between the inflation rate and the unemployment rate.

Labor contributes to economic growth and prosperity, so the more labor is absorbed, the lower poverty is. However, if the workforce that is ready to work does not match the available jobs, then the workforce that is absorbed will not be balanced with the workforce that is ready to work, and this will have an impact on poverty. The negative influence of labor on poverty occurs when workers who are not ready to work are still waiting to start, or when workers cannot find work according to their qualifications. The positive influence of labor on poverty occurs when workers can take jobs and earn sufficient income to meet their needs, so that the more labor is absorbed, the lower poverty.

2.7 Investment relationships against poverty

(Rahajeng et al, 202) stated that there was a lack of investment impact on poverty in East Java Province due to the inability of regions in the province to compete. Investment is still concentrated in areas that are economic and industrial centers, such as Surabaya City, Pasuruan Regency, Gresik Regency and Sidoarjo Regency.

(Nujum & Rahman, 2019) shows that although the investment variable has an influence on the level of economic growth, this influence is not significant. This is likely due to the allocation of regional government spending which is greater for consumption than for capital formation, so that the role of investment in economic growth is limited. Apart from that, this is also caused by a lack of attractive economic potential such as natural resources and a lack of bureaucratic services, security, and socio-cultural conditions of the workforce that limit development. As a result, the influence of investment on economic growth is very small.

3. Research Methods

This research adopts a quantitative descriptive approach. The descriptive approach aims to describe and interpret data results in detail from the data and number processing process. Meanwhile, the quantitative approach aims to analyze hypotheses by measuring data so that the parameters of the variables used in the data are measured (Nopiah, 2024).Research data comes from the Central Statistics Agency (BPS) for the 2020-2022 period. Based on the data analysis method used, namely the panel data regression model. Combining cross section and time series data can solve the problem of missing variables (Wulandari et al, 2022). The type of data used is panel data which includes variables such as unemployment rate, labor force, investment and poverty rate. Data analysis was carried out using the multiple linear regression analysis method (Susanto et al, 2020). Multiple Linear Regression (RLB) is used to analyze the influence of the unemployment rate, number of workers, and investment on the poverty level (Azmi & Panjawa, 2022).

Panel data analysis stages consist of three stages, namely:

3.1 Correlation analysis test

Correlation test is a statistical method used to measure the extent of the relationship between two or more variables. F Statistical Test (Chow Test) in selecting the best model for testing panel data, it can be seen that the intercepts are different and can be tested with the F statistical test with the addition of dummy variables. This test can determine the best method

between fixed effect methods without random effect variables. The null hypothesis is accepted if the critical F value is greater than the calculated F value, it can be said that the random effect model is the appropriate model in panel data regression, whereas if the critical F value is smaller than the calculated F, it means that the null hypothesis is rejected, then the correct model is the fixed effect model in panel data regression. The hypothesis in the Chow test is as follows:
H0: Random Effect Model
H1: Fixed Effect Model
H0 is rejected if the P-value is smaller than the value of a.
Conversely, H0 is accepted if the P-value is greater than the value of a.
The value of a used is 5%.

3.2 Choose the best model

Data analysis methods can use three methods in panel data regression, namely Common Effects, Fixed Effects, and Random Effects (Ainunnisa & Hidayat, 2019).

a. Common Effects. (Fixed Coefficient Across Time and Individuals): Ordinary Least Square. This technique combines cross-section data and time series (pool data). The Ordinary Least Square (OLS) method is known as Common Effect estimation. Combining this data does not look at differences between time and between individuals. Or this approach does not look at the time and individual dimensions and it can be stated that the data behavior between districts/cities is similar over various time periods.
b. Fixed Effect (Fixed Effect Model) there is an assumption in the previous discussion that between time and between districts/cities there is an equality between the intercept and slope. However, this assumption is not true. The existence of an intercept that is not constant is caused by the presence of variables that are not included in the model equation. Or there are changes for each individual and time to the intercept. This is the basis of the fixed effects model.
c. Random Effect (Random Effect Model) in the Random Effect model there are differences with the fixed effect model where the differences are between times or individuals which are seen through the intercept, while the random effect model is accommodated through error. This is able to take into account that errors may exist in correlation throughout the cross section and time series.

The choice of the Fixed Effect method or the Random Effect method is considered based on the objective of the analysis, if the number of individuals is greater than the amount of time then it is recommended to choose the random effect method, whereas if the amount of time is greater than the number of individuals then the best model that must be used is the fixed effect method. (Ainunnisa & Hidayat, 2019). The models I use are fixed effects and random effects

3.3 Hypothesis test

Based on researched data. I use multiple linear data with the following regression model:

$$KIt = B0 + \beta 1(TPT)It + \beta 2(TPAK)It + \beta 3(I)It + e$$

The regression model can be written as follows:
K = Poverty
It = time series data from 2020-2022 and cross section of 10 districts and cities of Bengkulu province (panel data)
B0 = Constant
TPT= unemployment
TPAK= labor
I= Investment

e = standard error (nuisance variable)
And by using the multicollinearity test and heteroscedasticity test.

a. The multicollinearity test is a test carried out to ascertain whether in a regression model there is an intercorrelation or linear relationship between an independent variable or predictor variable and the dependent variable. The multicollinearity test aims to test whether in the regression model a correlation is found between the independent variables. The basis for decision making in the multicollinearity test is a decision guideline based on tolerance and VIF values. If the tolerance value is > 0.10 and the VIF value is < 10, it can be concluded that there is no multicollinearity between the independent variables in the regression model. If the tolerance value is <0.10 and the VIF value is > 10, it can be concluded that there is multicollinearity between the independent variables in the regression model. If the tolerance value is <0.10 and the VIF value is > 10, it can be concluded that there is multicollinearity between the independent variables in the regression model.
b. The heteroscedasticity test is a test used to test whether in the regression model there is inequality in the variance of the residuals for all observations in the linear regression model. The heteroscedasticity test aims to determine whether in the regression model there is an inequality of variance from the residuals of one observation to another. If the variance from the residual from one observation to another is constant, it is called homoscedasticity, whereas if it is different it is called heteroscedasticity. The basis for decision making using the Glejser test is as follows:
c. If the significance value (Sig.) is > 0.05, then there are no symptoms of heteroscedasticity in the regression model.
d. If the significance value (Sig.) <0.05, then symptoms of heteroscedasticity occur

Table 1. Analysis variables

No	Variable name	Variable description	Unit
1	Poverty	Number of poor people	Percent
2	unemployment	Open unemployment rate	Percent
3	Employment	Workforce participation rate	Percent
4	Investment	Bengkulu province investment 2020-2022	Percent

4. Results and Discussion

This research describes the research results based on statistical descriptions and logistic regression test results. This description can be seen in table 2 below

Table 2. Statistical Description of Research Data

Variable	Obs	Mean	Min	Max
Poverty	30	14.72	9.30	18.56
Workforce	30	70.81	62.72	78.99
Unemployment	30	3.53	1.74	6.82
Investment	30	13.56	3.00	48.00

Based on Table 2, it can be seen that the lowest poverty is 9.30% with the highest poverty being 18.56% with an average of 14.72%. The labor force variable has a minimum value of 62.72% and a maximum value of 78.99% with an average of 70.81% and a standard deviation of 3988226 billion rupiah. The unemployment variable has a minimum value of 1.74% and a maximum value of 6.82% with an average of 3.53% and the investment variable has a minimum value of 3.00% and a maximum value of 48.00% with an average of 13 .56%

Table 3. Correlation and Regression Results

Variable	Poverty level	
	Fixed Effects	Random Effects
Labor force level	151.8708***	0.041638*
	0.7664	0.8368
Unemployment rate	163.3383***	0.003271
	0.9579	0.9556
Investment	215.2997***	6.203253***
	0.0244	0.0210

Classic assumption test:

a. Multicollinearity test

Multicollinearity tests need to be carried out on regressions that use more than one independent variable, this is to find out whether there is a mutual influence between the independent variables studied.

Table 2. Correlation relationship data between variables

TPK	TPAK	INVESTMENT
1	-0.1911759...	0.64500357...
-0.1911759...	1	-0.2880079...
0.64500357...	-0.2880079...	1

So it can be seen from the data above with the multicollinearity test that the independent variable is less than 0.8, that is, the variable has a correlation relationship between other variables so it passes the test. Thus we can proceed to the next test.

b. Heteroscedasticity test

The heteroscedasticity test needs to be carried out to determine whether or not there is inequality in the variance of the residuals of the panel data regression model

Variable	Coefficient	Std. Error	t-Statistics	Prob.
Poverty	9.493507	3.932735	2.413970	0.0234
Unemployment	-0.111602	0.662549	-0.168443	0.8676
Workforce	0.000764	0.000465	1.642941	0.1129
Investment	0.036238	0.058116	0.62542	0.5386

From these results it can be concluded that all variable data is above 0.05, which is > 0.05, meaning it passes the heteroscedasticity test. With the tests above, it can be seen that the results show that they pass the test so that the data from the dependent and independent variables are related and have similarities.

5. Conclusion

From the results of the analysis carried out, there are several significant findings related to the relationship between unemployment, labor, investment and poverty levels in Bengkulu Province. Based on panel data from 2020 to 2022, and using multiple linear regression analysis methods, several things were found that are worth paying attention to.

First, a multicollinearity test was carried out to determine whether there was an interplay between the independent variables studied. The results show that there is no significant correlation between the independent variables. The unemployment, labor and investment variables have a correlation value of less than 0.8, so it can be concluded that these variables do not influence each other significantly.

Second, the heteroscedasticity test was carried out to determine whether there was inequality of variance in the residuals of the panel data regression model. The test results show that all variable data has a significance value greater than 0.05. This means that there are no symptoms of heteroscedasticity in the regression model used.

From the results of the classical assumption test, it can be concluded that the dependent and independent variable data have significant relationships and similarities, and there are no serious problems such as multicollinearity or heteroscedasticity in the regression model.

Then, based on the regression results, it can be seen that independent variables such as the unemployment rate, number of workers, and investment have a significant influence on the poverty level in Bengkulu Province. In this context, reducing the unemployment rate, increasing the number of workers, and increasing investment will have the potential to reduce the poverty level in the province.

Thus, the conclusion that can be drawn is that there is a significant relationship between unemployment, labor and investment and the poverty level in Bengkulu Province. Policy steps that support increasing employment opportunities, increasing workforce skills, and increasing investment can be an effective strategy in reducing poverty levels and encouraging sustainable economic growth in the province. However, further research needs to be carried out to understand more deeply the dynamics of the relationship between these variables and the effectiveness of the policies implemented in overcoming the problem of poverty in Bengkulu Province.

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THE INFLUENCE OF BRAND AWARENESS, PERCEIVED QUALITY, BRAND ASSOCIATION, AND BRAND LOYALTY ON BRAND EQUITY OF APPLE PRODUCTS (CASE STUDY OF STUDENTS OF THE FACULTY OF ECONOMICS, SANATA DHARMA UNIVERSITY)

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ABSTRACT

This study investigates the impact of brand awareness, perceived quality, brand association, and brand loyalty on the brand equity of Apple products among students at the Faculty of Economics, Sanata Dharma University. Utilizing a quantitative approach, both confirmatory and exploratory research methods were employed. The study population comprised 168 respondents from the university's Faculty of Economics, spanning the classes of 2020-2023, who had used at least two Apple products. Purposive sampling was used to select participants. Data were collected through an online survey questionnaire. Data analysis included normality, multicollinearity, and heteroscedasticity tests, as well as multiple linear regression analysis, and simultaneous (F test) and partial (T test) tests. The findings reveal that brand awareness and brand association significantly and positively influence Apple product brand equity. However, perceived quality and brand loyalty did not show a significant positive effect on Apple product brand equity.
Keywords: *Brand Awareness, Perception of Quality, Brand Association, and Brand Loyalty, Brand Equity.*

1. Introduction

In the era of information and communication technology, technology has become a primary need that cannot be separated from human life. The industrial revolution that continues to experience development also changes consumer behavior (Shabrina, 2019). According to thekeenfolks, technological developments have an impact on the relationship between consumers and products and consumer needs for many technological devices. The generation 4.0 industrial revolution makes agility an achievement that a company must develop to face these developments (Kominfo, 2019).

The digital transformation that occurs affects companies to be able to maintain and increase their competitive advantage (Oktavenus, 2019). Realizing this, technology companies emerge and dominate the global market with advanced features in their products. According to iNews.id, companies in the technology sector dominate the top list of the world's largest companies. (Databoks, 2023) 10.71% of the 10 largest shopping categories in Indonesian E-Commerce are occupied by electronic products. The data shows significantly that the need for electronic products in society is very high and provides dependence on each individual for ownership of at least one electronic device. Apple as one of the electronic brands with a significant transformation, with some of its flagship products, Apple has a very significant development. Present as a "pioneer" of advanced electronic products, Apple always returns with products with the latest features. In (cbsnews.com) Apple was launched in 1976 as a personal computer that sells on its journey, Apple continues to transform with its innovations, until 1986 Apple comes with more sophisticated graphics and design. In 1998 the iMac appeared with a more attractive design and brought the Internet to the public. The launch of this product brought much more rapid development to Apple products. It wasn't until 2007 that the iPhone was launched, bringing big changes as a revolutionary smartphone. More and more Apple products were launched with innovations that made Apple the leading electronic brand to date.

People's dependence on electronic products and their relatively fast development has an impact on a more impulsive desire for electronic products with more sophisticated features. These electronic product features give positive preference to consumer purchase interest (Yeang & Rahmawati, 2023). Therefore, the importance of brand awareness as the foundation of brand equity is widely recognized in marketing theory. High brand awareness helps companies to build a strong image in the minds of consumers. There are four categories of brand equity that help us assess the effectiveness of assets in products such as brand awareness, brand association, perceived quality, and brand loyalty (Binus, 2020).

Brand awareness encourages a brand to make efforts so that consumers can recognize the brand. (Stevi & Artina, 2022) states that a brand is recognized depending on the level of brand communication, this can increase brand equity. On the other hand, consumer perceptions cannot be concluded empirically. This relates to what is important to these consumers (Felita & Valerian, 2019). Perceptions of quality can determine the value of a brand, especially in consumer purchasing decisions. Brand association refers to the brand image in the minds of consumers. Strong brand associations can provide an established position compared to competitors (Haryanto, 2010: 68). Brand loyalty is related to the possibility of consumers switching to other products. Loyal consumers will generally use the brand for a long time, and are willing to make repeat purchases even when faced with different alternatives.

Apple as an icon in the world of technology has built extraordinary brand equity that attracts the attention of marketing researchers and practitioners. The brand equity of Apple products affects consumers' quality perceptions of these products, this arises because of consumers' personal experiences when using Apple products, they assume that although this brand tends to be expensive, the quality, design, durability and performance are superior when compared to others. (Dharma & Sumaatmadja, 2015) shows that apple products with simple names and distinctive logos make it easier for consumers to recognize Apple products. Strong brand awareness makes it easy for Apple to build a strong brand image in the minds of consumers. Apple also always presents innovation and creativity in the features and appearance of its products (Keller, 2001). This gives a positive perception of Apple products as products that have a superior image and quality in accordance with consumer desires. Apple, which is known as a superior product with the best innovation in its class, builds strong brand associations. Apple has succeeded in building a very loyal user base, which continues to choose Apple products with each new product launch. Consumers are loyal because products can provide pleasure and comfort for consumers (Haseeb, 2015).

Lito & Selamat, 2022) found that brand awareness, brand association, perceived quality, and brand loyalty play a positive role in brand equity. Research also confirms that brand awareness, perceived quality, brand association and brand loyalty significantly have a positive effect on brand equity. (Nugroho, Insani, & Cahyaningrum, 2020) state that brand association and brand loyalty have a positive effect on brand equity, but brand awareness and brand image have no effect on brand equity. The difference is an interesting thing to examine the most appropriate variables of brand equity.

This study aims to examine in depth the influence of brand awareness, perceived quality, brand association, and brand loyalty on brand equity of apple products on students of the Faculty of Economics, Sanata Dharma University. Testing the hypothesis of this study using regression analysis. Discussion of the research, its practical implications, and further research suggestions are explained later.

The rapid advancement of information technology now makes consumer demand for electronic products such as Apple products increase rapidly. This increase in demand is built by the premium value built by the brand that encourages consumers to pay high prices for these products. This brand value generates high brand awareness with positive quality perceptions, strong brand associations; andcustomer loyalty. This has led to the emergence of various studies related to brand equity and its relationship with the four elements in various perspectives but some studies use different elements.

Consumers realize and are embedded in the minds of consumers that Apple products have good quality and performance and have features that distinguish them from other products, thus becoming the added value of this product in the eyes of its consumers. According to Aaker (2020) brand awareness of brand equity depends on the context and the level at which awareness is achieved. In research conducted by Stevi et al., (2022) stated that brand awareness has a positive and significant effect on brand equity.

According to Keller (2013: 187) Perception of quality is the customer's perception of the overall quality or superiority of a product or service compared to alternatives and predetermined goals. The results of research conducted by Muhammad Doddy et al., (2020) suggest that perceived quality has a positive and significant effect on brand equity.

A well-built association between the company and consumers who buy Apple products can increase consumer awareness and loyalty to the brand itself. According to research conducted by Arnold et al., said that brand association has a positive but insignificant effect on brand equity.

Apple builds its brand loyalty by building emotional relationships with its consumers in the form of quality, design, exclusivity and content so that Apple consumers not only buy its products because of the function but the values provided by the brand itself and make consumers loyal to make repeat purchases. The results of research conducted by Vincy Lito et al. state that brand loyalty has a positive and significant effect on brand equity. This study aims to determine how the influence of brand awareness, perceptions of quality, brand association, and brand loyalty on brand equity of Apple products on students of the Faculty of Economics, Sanata Dharma University.

This research provides practical and theoretical benefits for Apple, the results of this study can help Apple to understand the factors that influence brand equity among students of the Faculty of Economics, Sanata Dharma University to improve marketing strategies, consumer loyalty and market share. For students, this research is useful to help understand brand equity and the factors that influence it and this information can help students make more rational purchasing decisions.

2. Literature Review

2.1 Brand Equity

According to Kotler and Keller (2017: 263) argue that brand equity is the added value given to products and services. This can be reflected in the way consumers think, feel and act with respect to the brand as well as the price of market share and profitability obtained from the brand. Meanwhile, according to Aaker (2019: 266) argues that brand equity is brand awareness, brand loyalty, and brand associations that together add or reduce the value provided by a product and service.

2.2 Brand Awareness

According to Kotler and Keller (2012), brand awareness is the ability of consumers to identify brands under different conditions, as reflected in their brand recognition or recall performance. Rate (2016), brand awareness will help a brand understand how the brand has value.

2.3 Perception of Quality

Perception of quality according to Keller (2013: 187) is the customer's perception of the overall quality or superiority of a product or service compared to alternatives and predetermined goals. According to Effendy and Rubiyanto (2019), defining the perception of quality is the overall characteristics and characteristics of a product or service whose ability depends on meeting stated or implied needs.

2.4 Brand Association

Kotler and Keller (2018) suggest that brand associations are all thoughts, feelings, perceptions, images, experiences, beliefs, attitudes, and so on related to brands and brand nodes. Brand association according to Tjiptono (2015: 49) is all things related to memories of a brand.

2.5 Brand Loyalty

According to Kotler (2016) brand loyalty is a firmly held commitment to buy or support a preferred product or service again in the future even though the influence of the situation and marketing efforts has the potential to cause customers to switch. Schiffman and Kanuk in Sudaryono (2016: 82) suggest that brand loyalty is one of the consistent choices or purchases of the same brand made by consumers for a particular product

2.6 Hypothesis development

2.6.1 The Effect of Brand Awareness on Brand Equity

If customers can recognize or remember a brand well, it will have an impact on purchasing decisions. Brand awareness is a form of recognition of a brand and memories related to the brand, this brand recognition encourages consumers to recognize the brand as something different from other brands (Syaidah, Jauhari, Fauzia, & Safitri, 2020). Previous research shows that increasing brand awareness can have a positive impact on brand equity (Rudi Yacub, 2020). In addition, Ermawati et al., (2016) stated that brand awareness affects brand equity. Brand awareness can form a signal of presence, commitment, and substance to a

brand. This is in line with research conducted by (Nadhiroh, Nurhajati, & Wahono, 2020) which suggests that brand awareness has a positive and significant effect on brand equity. The higher the brand awareness that customers have will contribute positively to increasing their brand equity. Based on this explanation, a hypothesis can be formulated:
H1: Brand awareness has a positive effect on brand equity.

2.6.2 The Effect of Perceived Quality on Brand Equity

High perceived quality indicates that consumers take a long time to find differences and benefits of products compared to similar products (Nofriyanti, 2017). Previous research found that perceived quality has a significant effect on brand equity (Pandiangan, Masiyono, & Atmogo, 2021). In addition, (Nofriyanti, 2017) shows that perceived quality has a significant effect on brand equity. This is in line with research conducted by (Hidayati, 2019) which suggests that perceived quality has a positive effect. Perceptions of quality create value for consumers by providing reasons to buy products and differentiating brands from competitors (Brangsinga & Sukawati, 2019). Based on this explanation, a hypothesis can be formulated:
H2: Perceived quality has a positive effect on brand equity.

2.6.3 The Effect of Brand Association on Brand Equity

The brand association of a product provides an opportunity for the product to be remembered by consumers and consumers will be loyal to use the product (Nugroho et al., 2020). In (Litto et al., 2022), Kim & Kim (2004) state that strong brand associations can support brand positions to be attractive and competitive. Previous research found that brand association has a positive effect on brand equity (Hidayati, 2019). In addition, Nugroho et al. suggest that brand association has a positiveand significant effect on brand equity. This is in line with research conducted by (Litto et al., 2022) which states that brand association has a positive effect on brand equity. Based on this explanation, a hypothesis can be formulated:
H3: Brand association has a positive effect on brand equity.

2.6.4 The Effect of Brand Loyalty on Brand Equity

Loyal consumers will respond better to a brand. Consumers will buy regularly and are reluctant to deal with other brands (Litto et al., 2022). The results of the study (Litto et al., 2022)show that brand loyalty has a positive effect on brand equity. Hidayati (2019) also suggests thatloyalty has a positive effect on brand equity. This research is in line with the research of Aim & Ahmad (2016) in (Nugroho et al., 2020) which suggests that brand loyalty has a positive andsignificant effect on brand equity. Based on this explanation, a hypothesis can be formulated:
H4: Brand loyalty has a positive effect on brand equity.

This research model illustrates the framework of the brand awareness model, perceptions of quality, brand association, and brand loyalty affect brand equity.

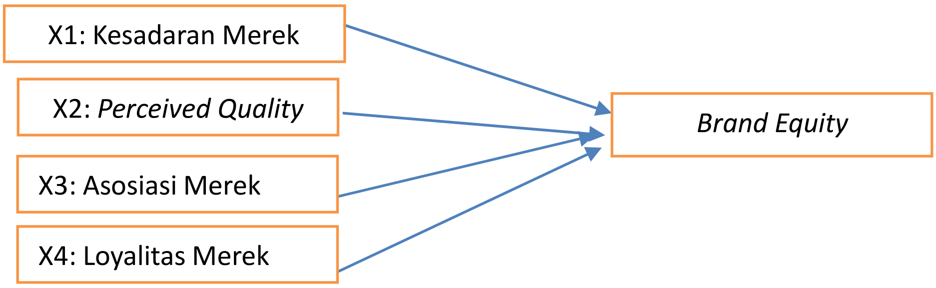

Figure 1. Framework of Thought

3. Research Methods

3.1 Research Design

This research is included in confirmatory quantitative research and explanatory research methods. This research design aims to explain the causal relationship between the independent variables (brand awareness, perceived quality, brand association, and brand loyalty) and the dependent variable (brand equity).

3.2 Population and Sample

The population of this study were all students of the Faculty of Economics, Sanata Dharma University. The research sample was taken using *purposive sampling* technique with the criteria that active students of the Faculty of Economics, Sanata Dharma University, Class of 2020-2023 and have used apple products at least 2 products.

3.3 Research Data and Data Analysis Techniques

The survey method, used to collect data for research by distributing questionnaires to respondents *online.* The total questionnaires that can be used to analyze in this study are 168 questionnaires. The data collected in this study were tested using normality test, multicollinearity test, heteroscedasticity test, multiple linear regression analysis, simultaneous test (F test) and partial test (T test). The variables used in this study are brand awareness, perception of quality, brand association, and brand loyalty. The analysis carried out was processed using SPSS with the *multivariant* analysis technique formulated:

$$\mathbf{Y = \alpha + \beta1.x1 + \beta2.x2 + \beta3.x3 + \beta4.x4 + e}$$

Description:

Y	= *Brand Equity*
A	= Constant
b1, b2, b3, b4	= Regression Coefficient of *Independent Variable*
X1	= Brand Awareness
X3	= Brand Association
X4	= Brand Loyalty
e	= *Standard Error*

3.4 Normality Test

The normality test aims to test whether in the regression model, confounding or residual variables have a normal distribution. According to Ghozali (2016) the normality test is carried out to test whether in a regression model, an independent variable and a dependent variable or both have a normal or abnormal distribution. The T and F tests are known to assume that the residual values follow a normal distribution, statistical tests performed on very small samples will be invalid if this assumption is violated. Graph analysis and statistical tests are two methods to determine whether residuals are normally distributed.

3.5 Multicollinearity Test

Multicollinearity testing, according to Ghazali (2016) aims to determine whether there is a correlation between independent variables or independent variables in the regression model. The effect of this multicollinearity is to cause high variables in the sample. This means that the standard error is large, as a result when the coefficient is tested, the t-count will be smaller than the t-table. This indicates that there is no linear relationship between the independent variables affected and the dependent variable.

3.6 Heteroscedasticity Test

The purpose of this test is to determine whether variance discomfort in the regression model occurs when residuals move from one observation to another. Heteroscedasticity occurs when there are differences in variance. One way to determine whether there is heteroscedasticity in multiple linear regression models is to look at the scatterplot graph or the predicted value of the dependent variable, SRESID, and the residual error value, ZPRED.

3.7 *Multiple Linear Regression Test*

Multiple linear regression analysis is performed to determine the direction and how much influence the independent variable has on the dependent variable (Ghozali, 2018). Data is declared normal, if there is no multicollinearity and no heteroscedasticity so that the data is processed for research purposes. Interpretation of the regression equation will be more accurate after knowing its significance, preferably after the analysis is complete.

3.9 Simultaneous Test (F test)

The F test is a *goodness of fit* test that must be performed in linear regression analysis. Test conditions for the F test:

Based on the significance value of the Anova Output

- If the Sig value is <0.05 then there is a simultaneous influence of X1, X2, and X3 on Y.
- If the Sig value> 0.05 then there is no simultaneous influence of X1, X2, and X3 on Y.

Based on the comparison of the value of F Count with F Table

- If the value of F count> F table then there is an effect of X1, X2, and X3 simultaneously on Y.
- If the value of F count < F table then there is no simultaneous influence of X1, X2, and X3 on Y.

3.10 Partial Test (T Test)

Partial tests are used to determine whether the *independent* variable regression model partially has a significant effect on the dependent variable.

Basis for taking the Partial t Test:
Based on the significance value (Sig.)

- If the Significance value (Sig.) <0.05 then there is an influence of the independent variable (X) on the dependent variable (Y).
- If the Significance value (Sig.) > 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y).

Based on the comparison of the t value with the t table

- If the value of t count> t table then there is an influence of the independent variable (X) on the dependent variable (Y).
- If the value of t count < t table then there is no influence of the independent variable (X) on the dependent variable (Y).

4. Research Findings and Discussion

4.1 Data Analysis

4.1.1 Respondent Characteristics

This research does not limit any particular gender. Dynamic technological advances encourage the need for technology products that can keep up with the latest trends with the latest features. Respondents in this study were mostly women, namely 111 people (65.3%) and male respondents totaling 59 people (34.7%). With the target consumer apple students of the Faculty of Economics, Sanata Dharma University class of 2020-2023. This shows that apple products are dominated by female consumers, especially at the Faculty of Economics, Sanata Dharma University. Respondents who use apple products in this study are mostly aged 18-24 years, as many as 164 people (97.4%), this is because the respondents of the research objectives are students with this age range. Respondents aged 25-34 years were 2.6%.

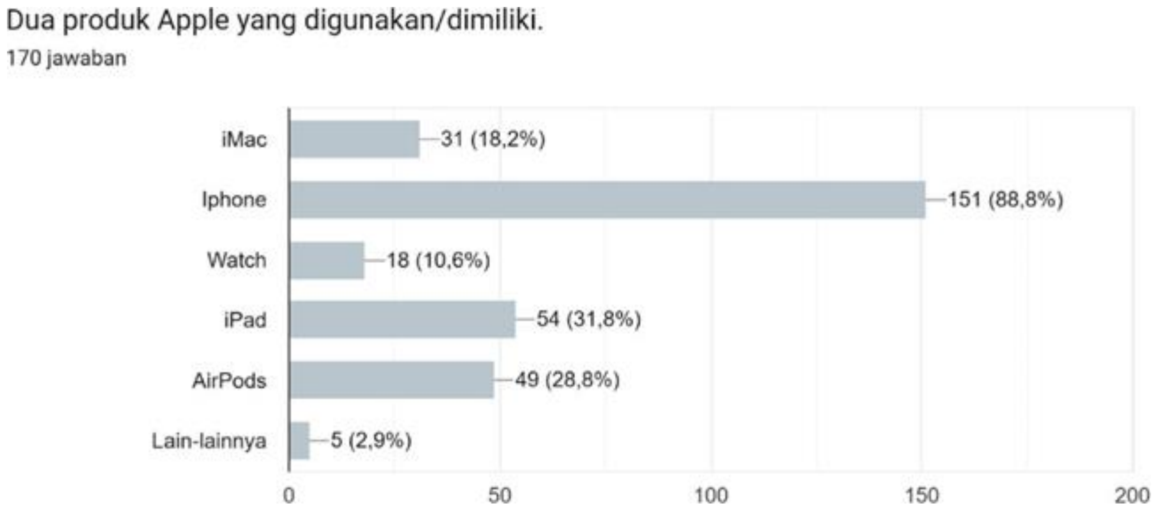

Figure 2. Diagram

Respondents in this study have an average of two Apple products, with the product most owned by respondents is the Iphone as much as 88.8%. iPad ranks second as the most owned apple product by respondents, namely 31.8%. Furthermore, respondents who use other apple products are AirPods as much as 28.8%, iMac as much as 18.2%, Watch as much as 10.6%, and other apple products as much as 2.9%. Respondents from the Management study program dominated the total respondents in this study, totaling 82 people (48.2%). Then, respondents from the Economics study program were 49 people (28.8%). Finally, there were 39 people (22.9%) from the Accounting study program.

Respondents with an income level / month of IDR 1,000,000 - IDR 5,000,000 have the largest percentage, namely 89.4% of the total respondents. Respondents with an income level / month of < Rp1,000,000 amounted to 8.6% and respondents with an income level / month of Rp5,000,000- Rp10,000,000 as much as 2%.

Mourad (2012) in (Diva, 2020) found that the factors that influence brand equity significantly differ in income levels. Mujiono, 2018 suggests that income has a positive effect on consumer preferences in making purchasing decisions on a product. This shows that consumers of apple products are inseparably related to income levels.

4.2 Instrument Testing Results

4.2.1 Validity Test

(Cooper & Schindler, 2014; Hair, Jr, 2015) in Diva (2020) argue that validity testing is used as a measuring tool to measure what should be measured and how accurate it is in presenting an indicator in assessing something. The validity test was carried out on the five variables, namely brand awareness, perception of quality, brand association, brand loyalty, and brand equity. Table 1. Shows the results of the brand awareness validity test.

Table 1. Brand Awareness Validity Test Results

Variables	**Grain**	**rcount**	**Rtabel**	**Description**	**Sig (2 tailed)**	**Sig**	**Description**
	X1.1	0,514	0,1515	Valid	0,000	0,05	Valid
Brand Awareness (X1)	X1.2	0,447	0,1515	Valid	0.000	0,05	Valid
	X1.3	0,667	0,1515	Valid	0,000	0,05	Valid
	X1.4	0,651	0,1515	Valid	0,000	0,05	Valid
	X1.5	0,495	0,1515	Valid	0,000	0,05	Valid
	Total XI	1	0,1515	Valid	0,000	0,05	Valid

Source: Primary data processed 2024

Table 1 shows that all Brand Awareness variable statement items are valid. All statement items show **rcount** greater than **rtable,** which is 0.1515. Furthermore, Table 2 will present the results of testing the validity of perceptions of quality.

Variables	**Grain**	**rcount**	**rtabel**	**Description**	**Sig tailed)**	**(2Sig**	**Description**
	X2.1	0,550	0,1515	Valid	0,000	0,05	Valid
Perception of Quality (X2)	X2.2	0,724	0,1515	Valid	0,001	0,05	Valid
	X2.3	0,733	0,1515	Valid	0,000	0,05	Valid
	Total X2	1	0,1515	Valid	0,000	0,05	Valid

Source: Primary data processed 2024

Based on testing the validity of perceptions of quality, Table 2 shows that all statement items for the perception of quality variable are valid. All statement items show rcount greater than rtable, which is 0.1515. Furthermore, Table 3 will show the results of testing the validity of brand association.

Table 3. Brand Association Validity Test Results

Variables	Grain	rcount	rtabel	Description	Sig (2 tailed)	Sig	Description
	X3.1	0,500	0,1515	Valid	0,000	0,05	Valid
Brand Association (X3)	X3.2	0,533	0,1515	Valid	0,000	0,05	Valid
	X3.3	0,614	0,1515	Valid	0,000	0,05	Valid
	X3.4	0,630	0,1515	Valid	0,000	0,05	Valid
	X3.5	0,628	0,1515	Valid	0,000	0,05	Valid
	X3.6	0,609	0,1515	Valid	0,000	0,05	Valid
	Total	1	0,1515	Valid	0,000	0,05	Valid

Source: Primary data processed 2024

Table 3 shows that all brand association variable statement items are valid. All statement items show **rcount** greater than **rtable,** which is 0.1515. Furthermore, Table 3 will show the results of testing the validity of brand loyalty.

Table 4. Brand Loyalty Validity Test Results

Variables	Grain	rcount	rtabel	Description	Sig (2 tailed)	Sig	Description
	X4.1	0,702	0,1515	Valid	0,000	0,05	Valid
	X4.2	0,620	0,1515	Valid	0,000	0,05	Valid
Brand Loyalty (X4)	X4.3	0,759	0,1515	Valid	0,000	0,05	Valid
	X4.4	0,748	0,1515	Valid	0,000	0,05	Valid
	X4.5	0,679	0,1515	Valid	0,000	0,05	Valid
	Total X4	1	0,1515	Valid	0,000	0,05	Valid

Source: Primary data processed 2024

Based on testing the validity of perceptions of quality, Table 4 shows that all statement items for the brand loyalty variable are valid. All statement items show **rcount** greater than **rtable,** which is 0.1515. The results of testing the validity of brand equity are shown in table 5.

Table 5. Brand Equity Validity Test Results

Variables	Grain	rcount	rtabel	Description	Sig (2 tailed)	Sig	Description
	Y.1	0,548	0,1515	Valid	0,000	0,05	Valid
	Y.2	0,550	0,1515	Valid	0,000	0,05	Valid
Brand Equity (Y)	Y.3	0,654	0,1515	Valid	0,000	0,05	Valid
	Y.4	0,725	0,1515	Valid	0,000	0,05	Valid
	Total Y	1	0,1515	Valid	0,000	0,05	Valid

Source: Primary data processed 2024

Table 5 shows that all brand equity variable items are valid, this is indicated by each **rcount** number which is greater than $\mathbf{r_{tabel}}$, which is 0.1515. Based on the validity test of all variables, it shows that all statement items (23 statements) are declared valid.

4.2.2 Reliability Test

Table 6: Reliability Test Results

Variables	Cronbach's Alpha	r-Table	Description
Brand awareness (X1)	0,449	0,1515	Reliable
Perception of Quality (X2)	0,384	01515	Reliable
Brand Association (X3)	0,617	0,1515	Reliable
Brand Loyalty (X4)	0,744	0,1515	Reliable
Brand Equity (Y)	0,464	0,1515	Reliable

Source: Primary data processed 2024

Dewi & Sudaryanto, 2020 (in Rosita et al, 2021) state that the reliability test is a research instrument to determine whether the questionnaire used to collect research data is reliable or trustworthy. The basis for decision making in carrying out reliability is if the Cronbach's alpha value> rtable. Based on the output of "Reliability Statistics" the Cronbach's alpha value of the variables listed is greater than the **rtable** value obtained from N = 166 with a significance of 5%, namely 0.1515. So based on the basis of this decision, it can be concluded that the questionnaire is declared reliable or trustworthy.

4.3 Research results

4.3.1 Hypothesis Test Results

4.3.1.1 Normality Test

Based on the data that has been tested using the normality test, the significance value obtained is 0.200> 0.05, so the data can be said to be normally distributed.

4.3.1.2 Multicollinearity Test

Based on the results of the multicollinearity test that has been carried out in this study, it can be concluded that the research data above does not occur multicollinearity because the tolerance value of the brand awareness variable, perception of quality, brand association and brand loyalty is > 0.10 and the VIF value of the brand awareness variable, perception of quality, brand association and brand loyalty is < 10.

The tolerance value for each independent variable is:
Brand awareness:0.591
Perception of quality: 0,664
Brand association: 0.639
Brand loyalty: 0.640

The VIF value for each independent variable is:
Brand awareness: 1,693
Perception of quality: 1,507
Brand association: 1,444
Brand loyalty: 1,563

4.3.1.3 Heteroscedasticity Test

From the results of the heteroscedasticity test that has been tested in this study, it can be concluded that there has been no heteroscedasticity in this study because the results of the scatter plot show that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis.

Table 7. Model Summary

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544[a]	.296	.279	1.050

a. Predictors: (Constant), LoyalitasMerek, AsosiasiMerek, PersepsiTerhadapKualitas, KesadaranMerek

b. Dependent Variable: BrandEquity

Table 8. Anova

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.529	4	18.882	17.118	.000[b]
	Residual	179.804	163	1.103		
	Total	255.333	167			

a. Dependent Variable: BrandEquity

b. Predictors: (Constant), LoyalitasMerek, AsosiasiMerek, PersepsiTerhadapKualitas, KesadaranMerek

Table 7. shows the R Square value of 0.296. Where this figure means that the variables of brand awareness, perception of quality, brand association, brand loyalty simultaneously affect the brand equity variable by 0.296 or 29.6%. Meanwhile, the remaining 70.4% is influenced by variables outside this regression equation or variables not examined. Table 8. Shows that the calculated F value is 17.118 which means **TCount** < **Ttable** ,where the **Ttable** value is 2.43 and the significance value is below 0.05, namely 0.00. This means that brand awareness, perception of quality, brand association, brand loyalty simultaneously affect the brand equity variable.

Table 9. Hypothesis Testing

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.915	.525		3.650	.000
	KesadaranMerek	.199	.070	.244	2.853	.005
	PersepsiTerhadapKualitas	.142	.096	.120	1.482	.140
	AsosiasiMerek	.140	.055	.202	2.560	.011
	LoyalitasMerek	.077	.051	.124	1.506	.134

a. Dependent Variable: BrandEquity

Based on table 9. shows that brand awareness, perceived quality, brand association, and perceived brand loyalty have **TCount** < **Ttable** with a significance value of p <0.05. Brand awareness has **TCount** < **Ttable** with a value of 2.853> 1.97462 with a significance value of p <0.05, namely 0.005. This shows that H1 is accepted, brand awareness has a positive effect on brand equity. Perception of quality has **TCount** < **Ttable** with a value of 1.482 < 1.97462 with a significance value of p>0.05, namely 0.140. This shows that H2 is not accepted, perception of quality has no effect on brand equity. Brand association has **TCount** < **Ttable** with a value of 2.560> 1.97462 with a significance value of p <0.05, namely 0.011. This shows that H3 is accepted, brand association has a positive effect on brand equity. Brand loyalty has **TCount** < **Ttable** with a value of 1.506 < 1.97462 with a significance value of p>0.05, namely 0.134. This shows that H4 is not accepted, brand loyalty has no effect on brand equity.

Table 10. Multiple Linear Equations

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.915	.525		3.650	.000
	KesadaranMerek	.199	.070	.244	2.853	.005
	PersepsiTerhadapKualitas	.142	.096	.120	1.482	.140
	AsosiasiMerek	.140	.055	.202	2.560	.011
	LoyalitasMerek	.077	.051	.124	1.506	.134

a. Dependent Variable: BrandEquity

$Y=1.915 + 0.199XI + 0.142X2 + 0.140X3 + 0.077X4$

The magnitude of the constant is 1.915, which means that there is a positive influence on the variables of brand awareness, perception of quality, brand association, and brand loyalty. The regression coefficient value for the brand awareness variable of 0.199 is positive, so the brand awareness variable shows a unidirectional relationship with the dependent variable brand equity. The regression coefficient value of 0.199 means that each addition of the variable by one unit will increase the dependent variable by 0.199.

The regression coefficient value for the perceived quality variable of 0.142 is positive, so the perceived quality variable shows a unidirectional relationship with the dependent variable brand equity. The regression coefficient value of 0.142 means that each addition of the variable by one unit will increase the dependent variable by 0.142.

The regression coefficient value for the brand association variable of 0.140 is positive, so the brand association variable shows a unidirectional relationship with the dependent variable brand equity. The regression coefficient value of 0.140 means that each addition of the variable by one unit will increase the dependent variable by 0.140.

The regression coefficient value for the brand loyalty variable of 0.077 is positive, so the brand loyalty variable shows a unidirectional relationship with the dependent variable brand equity. The regression coefficient value of 0.077 means that each addition of the variable by one unit will increase the dependent variable by 0.077.

4.4 Discussion

The results of this study indicate that the Apple product brand awareness variable has a positive and significant effect on the Apple product brand equity variable with a value of $T_{Count} < T_{table}$ with a value of 2.853> 1.97462 with a significance value of p <0.05, namely 0.005. So H1 is accepted, brand awareness has a positive effect on brand equity. So H1 is accepted, brand awareness has a positive effect on brand equity, the results of this study are in accordance with previous research conducted by Ernawati et al., (2016) which shows that brand awareness has a positive effect on brand equity. In addition, this is also in line with research conducted by (Nadhiroh, Nurhajati, & Wahono, 2020) which suggests that brand awareness has a positive and significant effect on *brand equity*. The higher the brand awareness that customers have of a product, it will have a positive impact on increasing *brand equity* for that product.

The results of this study indicate that the perception of the brand quality of Apple products has no significant effect on the brand *equity of* Apple products. This can be seen from the test results of the variable perception of the quality of Apple products on brand equity which has a value of $T_{Count} < T_{table}$ with a value of 1.482 < 1.97462 with a significance value of p>0.05, namely 0.140. This study shows that H2 is not accepted because the perception of the quality of the Apple brand in this study has no effect on the brand equity of Apple brand products. the results of this study are in accordance with research conducted by Darminto et al., (2015) in the study stated that perceptions of brands do not have a positive and significant effect on brand equity.

The results of this study indicate that brand association of Appleproducts has a positive and significant effect on brand equity of Apple products as indicated by the value of $T_{Count} < T_{table}$ value of 2.560> 1.97462 with a significance value of p <0.05, namely 0.011. This shows that H3 is accepted, brand association has a positive effect on brand equity. This is in line with research conducted by (litto et al., 2022) which states that brand association has a positive and significant effect on *brand equity.* The higher the influence of a brand association, it will provide many benefits to the brand.

The results showed that Apple brand loyalty has no positive and significant effect on Apple product brand equity, indicated by the value of $T_{Count} < T_{table}$ value of 1.506 < 1.97462 with a significance value of p>0.05, namely 0.134. This shows that H4 is not accepted, brand loyalty has no effect on brand equity. This research is in line with research conducted by Nadhiroh, R. S., Nurhajati, & Wahono, B. (2019) which states that brand loyalty has no positive and significant effect on brand equity.

The results of this study indicate that brand association of Apple products has a positive and significant effect on brand equity of Apple products as indicated by the value of $T_{Count} < T_{table}$ value of 2.560> 1.97462 with a significance value of p < 0.05, namely 0.011. This shows that H3 is accepted, brand association has a positive effect on brand equity. This is in line with research conducted by (litto et al., 2022) which states that brand association has a positive and significant effect on *brand equity.* The higher the influence of a brand association, it will provide many benefits to the brand.

The results showed that Apple brand loyalty has no positive and significant effect on Apple product brand equity, indicated by the value of $T_{Count} < T_{table}$ with value of 1.506 < 1.97462 with a significance value of p>0.05, namely 0.134. This shows that H4 is not accepted, brand loyalty has no effect on brand equity. This research is in line with research conducted by Nadhiroh, R. S., Nurhajati, & Wahono, B. (2019) which states that brand loyalty has no positive and significant effect on brand equity.

5. Conclusion

Based on the research results, the following conclusions can be drawn:

a. Apple product brand awareness has a positive and significant effect on Apple product brand equity. The higher the brand awareness that consumers have, the higher the brand equity of Apple products.
b. Perceptions of the brand quality of Apple products do not have a significant effect on the brand equity of Apple products. This means that customer perceptions of the quality of Apple products do not directly increase the brand equity of Apple products.
c. Apple product brand association has a positive and significant influence on Apple product brand equity. The stronger the brand association that Apple products have, the higher the brand equity of Apple products.
d. Apple brand loyalty has no positive and significant effect on Apple product brand equity. This means that customer loyalty to Apple products does not directly increase the brand equity of Apple products.

6. Recommendations and Implications

6.1 Recommendation

This research can be repeated with a larger and more diverse sample. This research can be conducted using different research methods, such as qualitative research. This research can be done by examining other factors that can affect brand equity, such as customer satisfaction and brand value.

6.2 Implications

Apple needs to maintain and increase brand awareness of its products to increase brand equity. Apple needs to strengthen its product brand associations with positive things to increase brand equity. Apple needs to re-evaluate its loyalty program to increase its influence on brand equity.

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THE INFLUENCE OF ECO-BRAND, ECO-LABEL, AND ENVIRONMENTAL ADVERTISING ON CONSUMER PURCHASE INTENTION OF AQUA RECYCLE PLASTIC BOTTLE BRAND

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ABSTRACT

In the current era of globalization, the earth is facing a serious problem known as global warming. The continued use of environmentally unfriendly plastic products can lead to various serious environmental problems. Currently, plastic waste from bottled drinking water (AMDK) contributes to the increase in waste piles because the bottles are made of plastic and require a large space in landfills. This study aims to determine the influence of eco-brand, eco-label, and environmental advertising on consumer purchase intentions for the Aqua Recycle Plastic Bottle product. This research uses a quantitative descriptive method with data collection techniques through a survey of 100 respondents who are consumers of the Aqua Recycle Plastic Bottle. The independent variables in this study are eco-brand, eco-label, and environmental advertising, while the dependent variable is consumer purchase intention. The data were analyzed using analytical methods used include, validity test, classical assumption test, reliability test multiple linear regression, t-test, and f-test. The results of this study indicate that eco-brand have not a significant influence on consumer purchase intentions. Eco-label, and environmental advertising have a significant influence on consumer purchase intentions.
Keywords*: Eco-Brand, Eco-Label, Environmental Advertising, Purchase Intention*

1. Introduction

In the current era of globalization, the earth is facing a serious problem known as global warming. Attention to plastic pollution has increased among people concerned about the environment as it becomes one of the major challenges faced by society. The sustainable use of plastic products that are not environmentally friendly can result in a variety of serious environmental problems (Rachmawaty &; Hasbi, 2020). In today's era, many people are increasingly aware of the environment, attention to environmentally friendly business practices is increasing. Currently, there are many people who are aware of environmental conservation. And that awareness is evidenced by concerns about the sustainability of ecosystems, even to concerns about human survival (Purwanto, 2021). With the existence of public awareness about the environment began to emerge a lot *Brands* which began to give rise to its environmentally friendly products, in response to consumer demands for products that are not only quality, but also environmentally responsible. *Brands* Those who adopt ecological strategies such as the use of recycled materials, ecological labels, and environmental promotion, not only gain appreciation from the public, but also can attract consumers' buying interest.

In an industrial era that increasingly prioritizes environmental awareness, the concept of sustainable marketing or known as green marketing has become a major topic in business strategies in many companies. The American Marketing Association (AMA) in Hawkins and Mothersbaugh (2010:94) defines *Green Marketing* is a process of marketing products that are assumed to be environmentally safe. *Green marketing*, also known as green marketing, is closely related to concepts such as *eco brand, eco label, and environmental advertising. Eco brand* refers to the brand or *Brand* that consistently carry environmentally friendly business values and practices, such as the use of recycled materials or renewable energy in their production. *Eco label* defined as a tool that helps consumers choose products that care about the environment and also provides information to customers about the process of making these products (Mujahideen, 2020). *Eco Label* It can also be defined as a label or identifying mark given to a product or service that meets certain environmental standards, providing information to consumers about the environmental aspects of that product. Meanwhile, *Environmental Advertising* is a promotional strategy that emphasizes environmental or sustainability messages in an effort to attract consumers. These three concepts are interrelated in context *Green Marketing*, where the company uses *Eco Brand* to build their image, *Eco Label* to provide guarantees for environmentally friendly products, and *Environmental Advertising* to spread environmental messages to consumers as part of their marketing strategy. Thus, *Green Marketing* Become a holistic approach to promote products and services that are not only profitable for businesses, but also support environmental conservation efforts.

Currently, plastic waste from bottled water bottles (AMDK) contributes to the increase in piles of waste because the bottles are made of plastic and require large space in landfills (Rachmawaty &; Hasbi, 2020). Plastic bottles used in the AMDK industry not only generate large piles of waste, but also have a negative impact on ecosystems and human health due to the length of time it takes for them to decompose. Based on 1893 data, it is known that the contribution of plastic waste from AMDK bottles to the increase in waste piles has become an increasingly urgent issue to be addressed. Seeing concerns about the environmental impact of using AMDK plastic bottles, companies began to move towards more environmentally friendly solutions. One of the steps taken is to introduce drinking water bottles made of recycled plastic. Aqua, as one of the leading brands in the AMDK industry, also responded to this issue by presenting Aqua Recycle Plastic Bottles. This is a bold step by Aqua in adopting a more sustainable approach by using recycled raw materials for its plastic bottles. Thus, Aqua not only reduces the amount of new plastic waste generated, but also helps extend the life cycle of plastics and reduces pressure on the environment. Through the introduction of Aqua Plastic Recycle Bottles, Aqua is committed to leading positive change in the AMDK industry by promoting awareness of environmental issues and encouraging the adoption of eco-friendly practices among consumers and other industry players.

This research aims to gain a deeper understanding of the factors that influence consumer buying interest in environmentally friendly products such as Aqua Bottle Recycle Plastic, by investigating whether Eco-Brand, Eco-Label, and Environmental Advertising influence consumer buying interest in these products, so that it can provide valuable insights for marketing practitioners to design more effective marketing strategies in increasing sales of similar eco-friendly products, as well as significantly contribute to expanding academic knowledge and improving sustainableand responsible marketing practices for marketers and companies.

2. Literature Review and Hypothesis Development

2.1 Literature Review

2.1.1 Eco-Brand

Term *Eco-Brand* derived from the word *"Eco"* which is the science that studies the relationship between plants, animals, and the environment that surrounds them (Syahza, 2021). Word *"Brand"* which is a name, condition, design, symbol or anything that can be a tool to identify a product either goods or services, as well as being a differentiator between one seller and another seller (Kusuma et al., 2020). Moreover *Brand* It can also be defined as a way or approach that shows the credibility of the brand owner, motivates enthusiasts, and fosters loyalty to a brand. Term *Eco-Brand* can be defined as a name, symbol or product design that is not harmful to the environment. Take advantage of features *Eco-brand* can help consumers distinguish green products in several ways from other non-green products (Rahman & Widodo, 2020). In the presence of *Eco-Brand* can increase a positive image of a product or company, so as to increase consumer buying interest in a product.

2.1.2 Eco-Label

Term *Eco-Label* derived from the word *"Eco"* which has the meaning of science that examines the relationship between plants, animals, and the environment that surrounds them (Syahza, 2021) and said *"Label"* which is a label is a simple look at a product or an intricately designed image that is an integral part of the packaging. *Label* Can only list brand or information (Singh, 2018). Term *Eco-Label* can be defined as a tool for consumers in making decisions to choose environmentally friendly products. *Eco-label* It can provide information to consumers about the environmental impact of such products, which helps consumers in identifying products that are more environmentally friendly than other similar products (Rahman & Widodo, 2020). In the presence of *Eco-label* Can assist consumers in identifying, selecting, and finding information related to the impact information of environmentally friendly products so that it will affect consumer buying interest in these products.

2.1.3 Environmental Advertising

Environmental advertising is a form of advertising that encourages consumer behavior to buy products that are not harmful to the environment (Santoso &; Fitriani, 2016). Through media such as television, the internet, and print media, environmental advertisements often promote products and services that are considered more sustainable or environmentally friendly, and convey important messages about environmental protection and the importance of preserving natural resources. In recent years, *Environmental Advertising* It has become increasingly popular in response to increasing public awareness of environmental issues, but it has also raised questions about the honesty and true impact of the product or service being promoted.

2.1.4 Consumer Buying Interest

Consumer buying interest is consumer behavior where consumers have a desire to buy or choose a product (Singh, 2018). Buying interest will arise if a consumer has influenced the quality and quality of a product and information on a product. Factors that influence consumer buying interest consist of psychological, social, economic, and demographic aspects. The psychological aspect includes consumer perceptions, attitudes, and motivations, while the social aspect includes the influence of family, peers, and culture. On the economic side, price, quality, and product promotion affect buying interest, while age, gender, and income also affect consumer preferences. By understanding these factors, research on consumer buying interest can provide valuable insights for companies in devising effective marketing strategies to reach their target market.

2.2 Hypothesis Development

2.2.1 The Influence of Eco-Brand on Buying Interest

Understanding the importance of brands to consumer buying interests is very important for marketers. Based on the results of the study (Rahman & Widodo, 2020) which defines *Eco Brand* as a name, symbol or product design that is not harmful to the environment. Take advantage of features *Eco-Brand* It can help consumers distinguish green products in several ways from other non-green products. According to the results of the study (Mujahidin, 2020) states that consumers will tend to give a positive response to products that have environmentally friendly features which are usually known as *Eco-Brand*. From the results of the study (Eco-label et al., 2023) *Eco-Brand* It is a brand strength that shows environmentally friendly products, gives confidence about the reliability of environmentally friendly products, and that is a strong attraction.

H1: *Eco Brand* has a positive effect on buying interest

2.2.2 The Effect of Eco-Labels on Buying Interest

Eco Label can be an important factor in influencing the purchasing decisions of consumers who are increasingly concerned about the environment. According to research (Mujahidin, 2020) Define Eco Label As a tool for consumers in making decisions to choose environmentally friendly products. From research (Novita & Husna, 2020) Eco Label has the aim of convincing consumers that the product is an environmentally friendly product. Based on research (Purwanto, 2021) said that labeling is a guarantee from the company or manufacturer that the product has gone through an environmentally friendly and safe production process for users, without causing negative impacts on the environment or consumers.

H2: Eco Label has a positive effect on buying interest

2.2.3 The Effect of Environmental Advertising on Buying Interest

Environmental Advertising Have an influence on environmental messages whose messages are conveyed through advertisements that can increase consumer awareness and understanding of environmental issues. Based on research (Putra &; Prasetyawati, 2021) The selection of media that suits the target audience is an important factor in the success of marketing communications. By doing Environmental Advertising Companies can increase buying interest in their products, because this form of advertising has differentiation that can be a weapon in competing with competitors because it is difficult to imitate, besides that Environmental Advertising is part of Corporate Social Responsibility. Thus, the existence of Environmental Advertising will make many people care about environmental issues so that it will increase buying interest in Green Product.

H3: Environmental Advertising has a positive effect on buying interest

The following Figure 1 illustrates the research model:

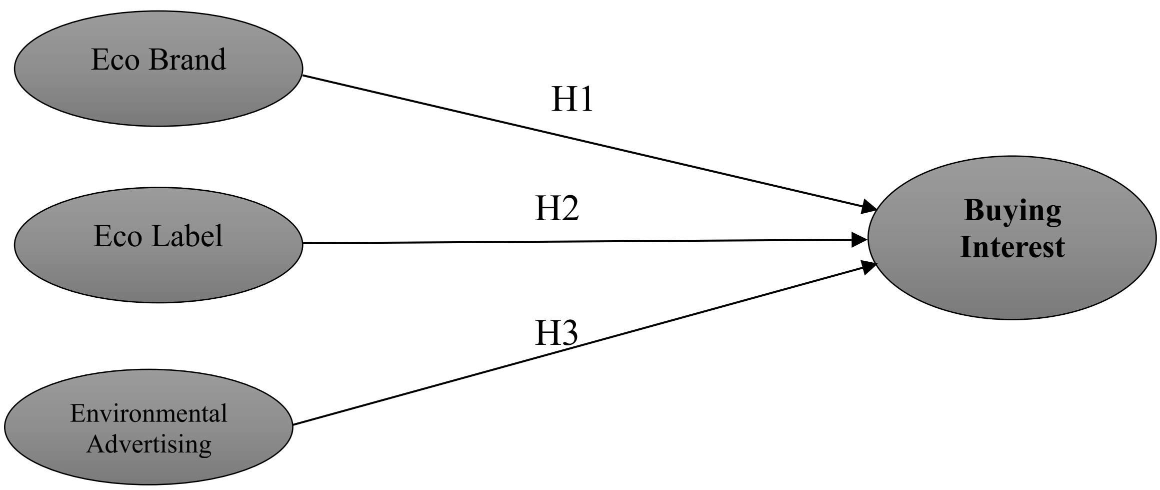


Figure 1. Research Model

3. Research Methods

3.1 Research Design

The research conducted is quantitative. (Rachmawaty & Hasbi, 2020) states that quantitative methods are research approaches based on the philosophy of positivism, which are used to investigate a population or sample systematically and use quantitative numbers or data to analyze observed phenomena. The collection of research data was carried out through a self-administered survey where respondents filled out each questionnaire directly through an online platform The questionnaire begun with a demographic question, followed by an assessment of its importance *eco brand, eco label, and environmental advertising* in the purchase decision of Aqua Plastic Recycle Bottles. Using the Likert scale, respondents will rate the level of agree/disagree. The questionnaire will also include open-ended questions for advice. The data will be analyzed using regression to determine the relationship between these factors and consumer buying interest. The results will provide insights to improve marketing strategies and consumer buying interest.

3.2 Population and Sempel

The population in this study is Aqua consumers, especially Aqua Recycle Bottle Plastic in Indonesia with a research sample of 100 respondents. This is in accordance with the opinion of one of the experts yaiu (Novita & Husna, 2020) conveyed that the feasible sample size in the study was around 30 to 500 respondents. Based on this opinion, the number of respondents to the study has been qualified. The sampling techniques used are: *Quota sampling*, this method takes a predetermined number of samples, which is about 100 respondents of Aqua Bottle Recycle Plastic consumers who aim to explain the number of samples needed.

$$\mathrm{n} = \frac{z^2 \mathrm{P}(1-\mathrm{P})}{d^2}$$

Information:
n = Number of samples
z = Standard value = 1.96
p = Maximum estimate = 50% = 0.5
D = alpha (0.10) or sampling error = 10% and obtained 100 samples.

3.3 Research Data

The source of this research data is primary data. This data collection technique is through consumer surveys by distributing questionnaires to consumers of *Aqua Bottle Recycle Plastic* products. This questionnaire includes questions about how influential three variable X *(Eco-Brand, Eco-Label, Environmental Advertising)* are on variable Y (buying interest) in *Aqua Bottle Recycle Plastic* products. The data that has been obtained from these consumer surveys will provide a broader picture of patterns and trends in consumer preferences. This study identifies and analyzes four main variables, namely *eco-brand, eco-label, environmental advertising*, and buying interest, to explore the relationship between these factors in the context of *Aqua Recycle Plastic Bottle* products. Eco-brand refers to consumers' perception of the *Aqua Recycle Plastic Bottle brand* as environmentally friendly. *Eco-label* refers to the consumer's perception of the ecological label associated with the product. *Environmental advertising* includes the level of consumer exposure to environmental advertisements related to *Aqua Bottle Recycle Plastic* products. While buying interest is the level of interest or desire of consumers to buy *Aqua Recycle Plastic Bottle products*. The collected data will be analyzed using multiple linear regression to determine the relationship between the independent variable *(Eco-Brand, Eco-Label, Environmental Advertising)* and the dependent variable (Buying Interest).

3.4 Data Analysis Techniques

The data analysis technique used in this study is multiple linear regression. It is used to evaluate the relationship between the independent variable *(Eco-Brand, Eco-Label, Environmental Advertising)* and the dependent variable (Buying Interest). In addition, the t-test is used to test the significance of the regression coefficient for each independent variable, while the F test is used to test the overall significance of the model. The results of the analysis will be interpreted to provide deeper insight into the factors that influence consumer buying interest in Aqua Recycle Plastic Bottles. All these statistical analyses are performed using SPSS statistical software.

4. Research Findings and Discussion

4.1 Validity Test

Tabel 1. Validity Test Table

Variabel	Butir	r_{hitung}	r_{tabel}	Keterangan	Sig (2 tailed)	Sig	Keterangan
Eco-Brand	X1.1	0,584	0,196	Valid	0,00	0,05	Valid
	X1.2	06	0,196	Valid	0,00	0,05	Valid
	X1.3	0,741	0,196	Valid	0,00	0,05	Valid
	X1.4	0,648	0,196	Valid	0,00	0,05	Valid
	X1.5	0,726	0,196	Valid	0,00	0,05	Valid
Eco-Label	X2.1	0,706	0,196	Valid	0,00	0,05	Valid
	X2.2	0,789	0,196	Valid	0,00	0,05	Valid
	X2.3	0,754	0,196	Valid	0,00	0,05	Valid
	X2.4	0,815	0,196	Valid	0,00	0,05	Valid
	X2.5	0,517	0,196	Valid	0,00	0,05	Valid
Environmental Advertising	X3.1	0,693	0,196	Valid	0,00	0,05	Valid
	X3.2	0,776	0,196	Valid	0,00	0,05	Valid
	X3.3	0,776	0,196	Valid	0,00	0,05	Valid
	X3.4	0,740	0,196	Valid	0,00	0,05	Valid
	X3.5		0,196	Valid	0,00	0,05	Valid
		93					
Minat Beli	Y.1	0,697	0,196	Valid	0,00	0,05	Valid
	Y.2	0,785	0,196	Valid	0,00	0,05	Valid
	Y.3	0,836	0,196	Valid	0,00	0,05	Valid
	Y.4	0,810	0,196	Valid	0,00	0,05	Valid
	Y.5	0,586	0,196	Valid	0,00	0,05	Valid

Based on the Tabel 1. Validity Test Table, a decision can be made by comparing the calculated r value with the table r value and comparing the significance value (2tailed) with a probability of 0.05. The following is an explanation of the two bases for decision making in the validity test:

1. By comparing r count and r table, the average value in *Eco-brand, Eco-Label, Environmental advertising variables* is greater than r table. Then the data is declared valid
2. Based on the value of significance (2tailed), the results of the variables *Eco-brand, eco-label, Environmental Advertising* have a value smaller than 0.05. Then the data is declared valid.

4.2 Reliability Test

Tabel 2. Reliability Test Table

Variabel	Cronbach's Alpha	r-Tabel	Keterangan
Eco-Brand	0,666	0,600	Reliabe
Eco-Label	0,766	0,600	Reliabel
Environmental Advertising	0,803	0,600	Reliabel
Minat Beli	0,801	0,600	Reliabel

Based on the Tabel 2. Reliability Test Table, Cronbach's Alpha value on Eco-brand, Eco-label, Environmental Advertising variables > from 0.60 then the questionnaire was declared reliable or consistent.

4.3 Classical Assumptions

4.3.1 Normality Test

Tabel 3. Normality Test Table

N		100
Normal Parameters^{a,b}	Mean	.0000000
	Std. Deviation	1.78532207
Most Extreme Differences	Absolute	.086
	Positive	.078
	Negative	-.086
Test Statistic		.086
symp. Sig. (2-tailed)		.063c

Based on the Tabel 3. Normality Test Table, the significance is 0.063 which means greater than 0.05, then the data is normally distributed.

4.3.2 Multicollinearity Test

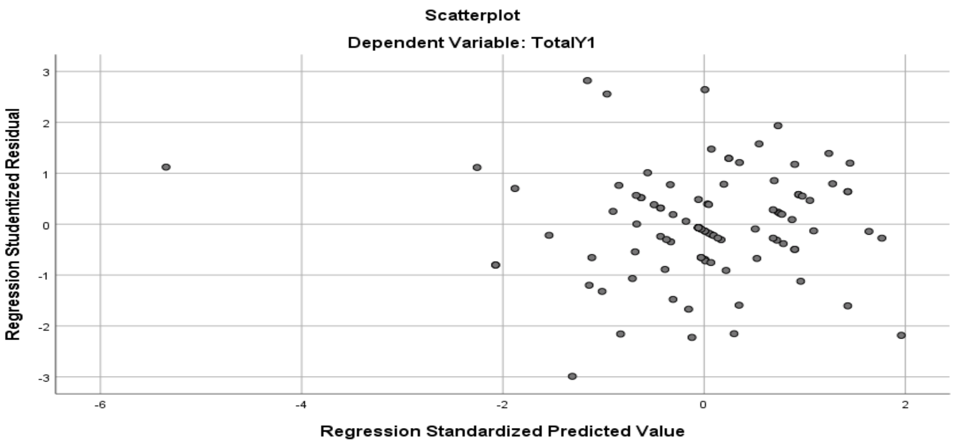
Table 4. Multicollinearity Test Table

Variable	Tolerance	VIF
Eco-Brand (X1)	0.493	2.028
Eco-Lable (X2)	0.335	2.982
Environmental Edvertising (X3)	0.314	3.180

Base on the Table 4. Multicollinearity Test Table, it can be concluded that there is no Multicollinearity in this study because the VIF valueof each independent variable is smaller than 10 and the tolerance value is greater than 0.10.

4.3.3 Heterokedasticity Test

Table 5. Heterokedasticity Test Table



The results of the Table 5. Heterokedasticity Test Table can be seen that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis, therefore it can be concluded that the data of this study does not occur heterokedasticity.

4.4 Multiple Linear Regression Analysis

4.4.1 Coefficient of Determination

Table 6. Coefficient of Determination Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.718	0.516	0.501	1.813

Based on the Table 6. Coefficient of Determination Table, the value of R square is 0.718 or equal to 71.8%. The number means that the variable *Eco-Brand* (X1), Eco-Label (X2), Environmental Advertising (X3) simultaneously (together) affect the variable Buying Interest (Y) by 71.8%. While the rest (100%-71.8% = 28.2%) is influenced by other variables outside this regression equation or variables that are not studied.

4.4.2 F-Test

Table 7. F-Test Table

Model		Sum of Squares	Mean Square		Sig.
	Regression	336.160	112.053	34.090	.000
	Residual	315.550	3.287		
	Total	651.710			

The Significant Value of the ANOVA table is 0.00 which means below 0.05 so it is concluded that all independent variables studied have a simultaneous effect (together) on the dependent variable.

Ftable = (3; 100 – 3)
= (3; 97)

= 2.70

F value calculate 34,090 > F table 2.70, then the independent variables (Eco-Brand, Eco-Label, Environmental Advertising) studied simultaneously affect (together) the dependent variable (Consumer Buying Interest).

4.4.3 T-Test

Table 8. t-Test Table

Model		Unstandardized Conefficients B	Std.Error	Standardized Conefficients Beta	t	Sig.
1	(Constant)	5.263	1.634		3.222	.002
	Eco-Brand	.119	.112	.107	1.060	.292
	Eco-Lable	.347	.114	.373	3.040	.003
	Environmental Advertising	.278	.118	.299	2.363	.020

The Effect of *Eco-brand* (X1) on Buying Interest (Y)

1. The value of t calculate 1,060 < t table 2.00 then Eco-Brand has no effect on Buying Interest
2. GIS value 0.292 > 0.05 then Eco-Brand has no effect on Buying Interest

Eco-Label (X2) against Buying Interest (Y)

1. The value of t calculate 3,040 > t table 2.00 then Eco-Label affects Buying Interest
2. Sig value 0.003 < 0.05 then Eco-Label affects Buying Interest

Environmental Advertisng (X3) to Buying Interest (Y)

1. The value of t is calculated 2.363 > t table 2.00 then Environmental Advertising affects Buying Interest
2. GIS value 0.020 < 0.05 then Environmental Advertising affects Buying Interest

4.5 Linear Regression Analysis Equation

Table 9. Linear Regression Analysis Equation Table

Model	B	Std.Error	Standardized coefficients Beta	t	Sig.
(constant)	5.263	1.634		3.222	.002
Eco-Brand	.119	.112	.107	1.060	.292
Eco-Label	.347	.114	.373	3.040	.003
Enviromental Advertising	.278	.118	.299	2.363	.020

$Y = a + b1X1 + b2X2 + b3X3$

$Y = 5.263 + 0.119X1 + 0.347\ X2 + 0.278\ X3$

5. Discussion

5.1 First Hypothesis

The results of testing the first hypothesis show that eco brands do not have a significant influence on consumer buying interest. Even though previous research indicates the positive potential of eco brands in attracting purchasing interest (Rahman & Widodo, 2020), data from questionnaires filled out by respondents reveal that eco brands themselves are not always a determining factor in purchasing decisions. This shows that although environmentally friendly features are important, there are other factors that play a greater role in influencing consumer purchasing interest, such as product price, the level of consumer trust in the brand/product, as well as consumers' personal preferences and tastes. Therefore, marketers need to consider a more holistic marketing strategy and not only focus on the eco brand or environmentally friendly aspects alone. This strategy must integrate various factors that influence consumer purchasing decisions, such as competitive pricing, building positive brand image and trust, adapting products to target consumer preferences, and ensuring quality, accessibility and effective promotions.

5.2 Second Hypothesis

Based on the test results of the second hypothesis, it shows that there is a positive and significant influence between eco-labels on consumer buying interest. From the answers to the questionnaire filled out by respondents, it was stated that consumers tend to give positive responses to products that have environmentally friendly features which are usually known as Eco-Brands. The results of this second test are in line with the results of previous research tests which also support the existence of a positive and significant relationship between Eco-Label and consumer buying interest, namely research conducted (Putra & Prasetyawati, 2021) which also examined the Eco-Label variable on consumer buying interest which provides results that by having an eco-label on a product, this can influence the increase in consumer buying interest.

5.3 Third Hypothesis

Based on the test results of the third hypothesis, it shows a positive and significant influence of environmental advertising on consumer buying interest. From the answers to the questionnaire filled out by respondents, selecting media that suits the target audience is an important factor in the success of marketing communications. By conducting Environmental Advertising, companies can increase purchasing interest in their products, because this form of advertising has differentiation which can be a weapon in competing with competitors because it is difficult to imitate. In addition, Environmental Advertising is part of Corporate Social Responsibility (CSR). Thus, the existence of Environmental Advertising will make many people care about environmental issues so that it will increase buying interest in Environmentally Friendly Products.So the results of the research conducted show that environmental advertising can increase consumer buying interest. The results of this third test are in line with the results of previous research tests which also support the existence of a positive relationship between environmental advertising and consumer buying interest, namely research conducted by (Rachmawaty & Hasbi, 2020) which also examined environmental advertising on consumer buying interest.

6. Conclusions, Limitations, and Implications

6.1 Conclusion

Based on the results of the analysis on validity, reliability, classical assumption tests, multiple linear regression tests, and partial hypothesis tests (t tests), it can be concluded that:

a. Eco-brand does not affect consumer buying interest in the Aqua Recycle Plastic Bottle brand.
b. Eco-label affects consumer buying interest in the Aqua Recycle Plastic Bottle brand.
c. Environmental Advertising on consumer buying interest in the Aqua Bottle Recycle Plastic brand.

6.2 Limitations

a. The period of time used to complete the research and paper is quite short, about 2 months (March and April).

b. Theory Limitations, the existence of theoretical limitations that have not been able to support research, thus affecting success in answering research questions.
c. Consumer Response Subjectivity: Consumer responses to eco brands, eco labels, and environmental advertising can be subjective and influenced by individual preferences, personal values, and previous experiences.

6.3 Implication

a. Relevance of Marketing Strategy: The findings of this study can provide valuable insights for companies to develop more effective marketing strategies, especially in the context of increasing consumer buying interest in environmentally friendly products.
b. Research Expansion: The implications of this research may be that it may encourage further research involving a wider sample or integrating additional factors that may influence consumer buying interest.
c. Researchers then use other variables that are not studied in this study such as *Eco-brand, Eco-label, Environmental Advertising*, which can affect consumer buying interest.

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ANALYSIS OF THE INFLUENCE OF LOCAL TAXES, CAPITAL EXPENDITURES, GOODS AND SERVICES EXPENDITURES AND DOMESTIC INVESTMENT ON ECONOMIC GROWTH IN SUMATRA

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ABSTRACT

Economic growth is a key indicator in measuring the economic level of a country that is closely related to national development. The purpose of this study is to analyze the effect of local taxes, capital expenditure, expenditure on goods and services and domestic investment on economic growth in Sumatra. This study uses explanatory research and descriptive research methods, using panel data, consisting of 10 provinces in Sumatra from 2019 to 2021, sourced from the Central Statistics Agency (BPS), the Directorate General of Fiscal Balance (DJPK), and One Data Ministry of Trade. This study uses a panel data test, which consists of CEM, FEM and REM model tests. Based on the results of tests conducted by researchers, three of the four independent variables used in this study have a significant effect on economic growth in Sumatra. the variables in question are local taxes, and domestic investment has a positive and significant effect. The capital expenditure variable has a negative and significant effect. Meanwhile, the other independent variable, namely spending on goods and services, has a positive and insignificant effect on economic growth in Sumatra.
***Keywords**: Economic growth, Taxes, expenditure, PMDN.*

1. Introduction

Economic growth is a key indicator to measure the economic level of a country, which is closely related to national development. According to Todaro and Smith, one way to assess the success of national development projects undertaken by the government is to observe economic success. Economic growth also refers to the rate of increase in output that each person produces in the production of goods and services, which is the level of GDP per capita for each person. In addition, economic growth can be referred to as real GDP (Mankiw, 2007). In the country's economy in this year, good is defined as more or less than the average growth of population and per capita income of each individual (Wahyudi & Silpayana, 2022).

Sumatra is an island with significant economic potential due to its abundant natural resources and dense population. According to Indonesia's economic statistics, Sumatra has a significant advantage over Java as year on year, its provinces contribute substantially to the Regional Gross National Domestic Product (GRDP). (Fajri, 2017). According to the Central Bureau of Statistics (BPS), the economic level in Sumatra displayed in Figure 1.1. shows data on economic growth in Sumatra in 2021. The figure shows that the rate of economic development in Sumatra in 2021 is high in the province of North Sumatra amounting to 859,871 billion Rupiah. Meanwhile, the province with the lowest economic growth is Bengkulu province amounting to 79,576 billion Rupiah (BPS, 2023).

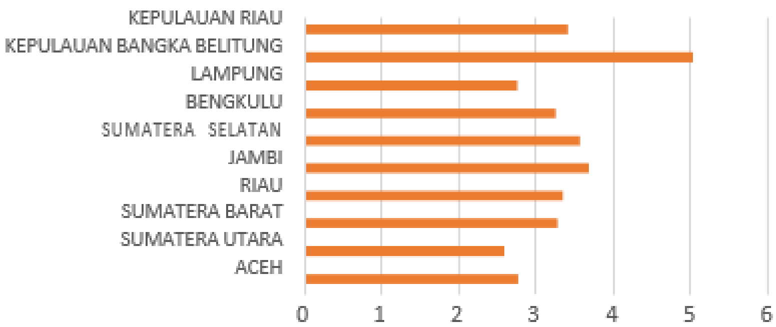

Figure 1.1. Economic Growth in Sumatra in 2021
Source: Data processed by the author, 2024

There are many factors that can influence the increase in economic growth in Indonesia, including in Sumatra, namely the increase in local taxes, capital expenditure, expenditure on goods and services, and domestic investment. The first factor is local taxes. It is possible to use local taxes to enhance the development of the region and increase the level of social cohesion among the population. Taxes are the basis of state authority, both national and local. The size of the tax will determine the capacity of land for land use change, both for construction and for changes in routine land users Yurianto & Akhmad, 2021).

Increasing local revenue from the taxation sector is the goal of tax reform. This revenue will then be used to increase people's prosperity through economic growth and regional development (Saragih, 2018). In research conducted previously, it shows that provincial tax revenue has a significant positive effect on provincial economic growth in Indonesia (Saragih, 2018; Orbaningsih & Sujianto, 2022; Refilio & Widyastuti, 2932; Riski, 2018: Yurianto & Akhmad, 2021). Meanwhile, another study found that tax revenue does not have a significant effect on economic growth in Indonesia (Ramadhania & Gazali, 2022).

In addition to local taxes, regional expenditure indicators can also affect economic growth, one of which is capital expenditure. Government capital expenditure can improve infrastructure and the quality of public services, which in turn can attract investment and encourage economic activity. Capital expenditure, according to the Regulation of the Minister of Home Affairs (Permendagri) Number 13 of 2006, as amended by Permendagri Number 59 of 2007, is defined as expenditure made to purchase, or build tangible fixed assets that have a useful value of more than 12 (twelve) months to be used in government activities. The expenditure structure in the provincial APBD includes capital expenditure policies, which are very important and strategic to encourage regional economic growth (Sulaeman & Silvia, 2019).

Previous research shows that government spending in the form of capital expenditure shows a significant positive relationship with economic growth (Sodik, 2007). It is expected that capital expenditures allocated to provide various public facilities and infrastructure, which can become regional fixed assets and maintain their useful value for more than one year, will serve as capital to encourage various economic activities of the community (Kurniawan et al., 2010). In addition, according to other studies, it shows that government spending on public investment has a significant positive impact on economic growth (Rahayu, 2005).

Next is spending on goods and services. This expenditure can also affect economic growth. Goods and services expenditures, or auctions, are mostly done by governments and private companies. This process is carried out to obtain goods and services for an organization or institution. This process begins with planning needs and ends with completing the entire purchasing process (Astuty, 2022). According to previous research, it explains that expenditure on goods and services has a significant positive effect on economic growth (Astuty, 2022; Pusporini, 2020). Meanwhile, other studies explain that spending on goods and services has no effect on economic growth (Bahari & SBM, 2019).

In addition to local taxes and some components of local expenditure, domestic investment (PMDN) can also affect economic growth in Sumatra. Basically, PMDN can create jobs and increase the production of goods and services. The economy of a region depends on investment to overcome various economic problems, crises and challenges. Sumatra has great potential to attract domestic investment (PMDN). It is supported by abundant natural resources, dense population and growing infrastructure. The Indonesian government has also issued various policies and made promotional efforts to encourage FDI. Public awareness of the importance of investment is also increasing.

The results of previous studies show that PMDN has a small positive effect. This is due to the sluggishness of manufacturing activity in recent years, which makes foreign investors refrain from investing (Buciarda, et al., 2021). Unlike other studies that show that PMDN has a significant positive impact because government investment in public goods is increasing. Other studies show that the ability of FDI is expected to encourage the growth of the private sector and households in the sharing of local resources (Al-Akbar, 2022; Ramadhania & Gazali, 2022; Rumalutur, et al., 2022).

Several studies have been conducted to analyze some of the variables mentioned above, but this study also includes other variables that might make new discoveries about what variables can increase economic growth, especially on the island of Sumatra. Therefore, the purpose of this study is to determine the effect of local taxes, capital expenditure, expenditure on goods and services and domestic investment on economic growth in Sumatra.

2. Literature Review

2.1 Economic Growth

Economic growth is a stage of change in the economic conditions in acountry that is sustainable to lead to better conditions. Economic growth is also part of the stage of increasing production capacity in an economic condition that can be seen from increasing national income *(Yuliantari et al*., 2016). This economic growth can also be said to be the ability of a country to increase the production of goods or services. With this increasing ability, it is also caused by production factors both in terms of quantity and quality (Sukirno, 2006; Alvaro, 2021). Gross Regional Domestic Product (GRDP) is a calculation method used to see economic growth in a region in a certain period (Saputri & Ananda, 2023). In previous research, it was stated that economic growth can show how much economic activity can generate an increase in people's income in a certain period (Basri and Munandar, 2010; Alvaro, 2021)). Economic activity is a stage of using production factors to produce *output*. With the *output,* it will produce a flow of services that the community has for these production factors (Alvaro, 2021).

2.2 Local Tax

Taxes are an important part of state revenue and have a very large contribution in terms of financing the development that will be carried out by the government (Estro, 2020). With the large role of taxes on state revenue in terms of financing, tax revenue can affect the running of the government. Various ways have been taken by local governments to go through several phases of local tax reform. Tax reform aims to increase local revenue from the tax side which will be used for the welfare of the community through increased economic growth and regional development (Habib Saragih, 2018). In good conditions, tax revenues that increase rapidly do not always increase economic growth in a region (Habib Saragih, 2018; Mdanat *et al*., 2018). This condition may be caused by tax revenues that are not properly used to finance regional development plans and other productive activities (Habib Saragih, 2018). According to previous research, there is a positive correlation between economic growth and taxes (Jalata, 2014; Stoilova, 2017; Adkisson and Mohammed, 2014; Adriansyah, 2014; Habib Saragih, 2018). From several researchers who have conducted research, it can be concluded that taxes have a major influence on economic growth. Increased economic growth continuously.

2.3 Capital Expenditure

Capital expenditure is defined as budget expenditure for the acquisition of fixed assets and other assets that provide benefits for more than one period (Waryanto, 2017). The value of the purchase or construction of fixed assets will be budgeted in capital expenditure only at the purchase price of the asset (Yunus & Amirullah, 2019). Basically, capital expenditures have not yet been funded, but all types of revenue sources have been assigned to regions to fund regional expenditures, one of which is capital expenditures (Yunus & Amirullah, 2019). In his research, it was stated that capital expenditure had no significant effect on economic growth (Yunus & Amirullah, 2019). Meanwhile, according to other studies, it was found that capital expenditure has a significant positive effect on economic growth (Waryanto, 2017).

2.4 Good and Services Expenditure

Goods and services expenditure is one of the expenditures used as a budget for the procurement of goods in the government environment which is worth less than one year period (Gosal et al., 2022). When goods and services expenditures meet their needs, employees in the government sector will get maximum public services (Gosal et al., 2022; Pangestu, 2019). This expenditure is used for operational expenditure, non-operational expenditure, public service agency expenditure and goods expenditure aimed at the community (Gosal et al., 2022). In previous studies, it was found that capital expenditure has a positive influence on economic growth (Pangestu, 2019; Yuliantari et al., 2016).

2.5 Domestic Investment (PMDN)

One source of capital that can help increase economic growth from within the country is Domestic Investment (PMDN). Domestic Investment (PMDN) is the use of public wealth. This wealth includes rights and objects owned by the state or national and foreign private companies living in Indonesia (Alvaro, 2021). There are several benefits of PMDN, namely the ability to save foreign exchange, reduce import dependence, encourage industry to become more advanced and can contribute more to employment (Alvaro, 2021). Through FDI, capital stock will increase and productivity will increase. PMDN also has an important role in determining the amount of output and the amount of income (Alvaro, 2021). With investment activities, the economy in an area will develop. Investment can also benefit the community with the transfer of technology that will help the community to develop skills to compete. In previous studies, it was stated that PMDN has no influence on economic growth. (Alvaro, 2021; Asiyan, 2020). This is due to the ineffective growth of PMDN due to the lack of confidence of domestic investors to invest in several sectors in Indonesia. In contrast to other studies which state that PMDN has a significant negative effect on economic growth (Prasetyo, 2011; Yuliantari et al., 2016). In terms of macroeconomics, economic growth can be achieved by increasing the amount of investment realized in a particular region (Yuliantari et al., 2016

2.6 Variable Description

- Economic Growth is the rate of the sum of the added value of goods and services produced by various units of production in the regions of a country within a certain period (usually one year) (BPS, 2022).
- Local tax is a form of mandatory contribution to the region that must be submitted by individuals and entities according to legal regulations, without direct reward, with the aim of supporting public welfare and regional public interests.

- Capital expenditure is a form of cost out of a number of budgets to acquire fixed assets and other assets that provide benefits for more than one period. Capital expenditure includes capital expenditure to receive land, buildings and structures, intangible asset equipment (Ministry of Finance, 2020).
- Goods and Services Expenditure is a form of cost incurred to accommodate the purchase of consumable goods or servicestoproduce marketed or non-marketed goods or services as well as the procurement of goods intended to be delivered or sold to the public and travel expenditure.
- Domestic Investment is an investment activity to conduct business in the territory of the Unitary State of the Republic of Indonesia (NKRI) carried out by domestic investors using domestic capital.

3. Research Methods

This research uses explanatory research and descriptive research methods. Using panel data which is a combination of cross-section and time series. The cross-section data consists of a combination of 10 provinces, namely Aceh, North Sumatra, West Sumatra, Jambi, Riau, South Sumatra, Bengkulu, Lampung, Bangka Belitung Islands and Riau Islands and the time series data consists of 2019-2021. The data used refers to the publications of the Central Statistics Agency (BPS), the Directorate General of Fiscal Balance (DJPK), and One Data of the Ministry of Trade.

Panel data regression is a regression technique that is used as well as the best technique for testing the available data because it has several advantages such as the best estimate of the model so that when there is an increase in the number of observations, it will increase the degree of freedom while minimizing errors if a variable is omitted from the model. For this reason, three types of tests are carried out such as the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) (Salsabila et.al, 2022).

Table 1. Variable Description

Variables	**Symbol**	**Unit**
Dependent	Economic Growth	Percent
Independent	Local Tax	Billion Rupiah
	Capital Expenditure	Billion Rupiah
	Goods and Services Expenditure	Billion Rupiah
	Domestic Investment	Billion Rupiah

Source: processed by the author, 2024

3.1 Data Analysis Method

This study analyzes the effect of government spending, domestic investment and local taxes on economic growth using the model, namely:

$$PEit = \beta 0 + \beta 1PAJAKt + \beta 2BMit + \beta 3BBJit + \beta 4PMDNit + \mu i$$

With a description:

- PE : Economic Growth
- TAXES: Local Taxes
- BM : Capital Expenditure
- BBJ : Goods and Services Expenditure
- PMDN: Domestic Investment

4. Research Findings and Discussion

4.1 Result

Based on the results of the data, it is found that the Fixed Effect Model (FEM) is the best model to see the relationship between variables. This model was selected through two tests, namely the Chow Test and the Hausman Test, so it can be concluded that of the three models CEM, FEM and REM, the appropriate model to explain the panel data regression results of this study is FEM.

Table 2. Data Processing Results

Variables	**FEM**
Local Tax	0.010389
	(0.0025)
Capital Expenditure	-0.012481
	(0.0134)
Goods	0.011211
Expenditure and Services	(0.0928)
Investment	0.002133
Domestic	**(0.0087)**
C	280.1628
	(0.0000)
R-Square	**0.998123**
Adj.R-Square	**0.996598**
F-Statistic	654.4892
Prob (F-Statistic)	0.000000

Source: processed by the author, 2024

Based on the test results conducted by researchers, three of the four independent variables used in this study have a significant influence on economic growth in Sumatra. The variables in question are capital expenditure, domestic investment and local taxes. Meanwhile, the other independent variable, namely Goods and Services Expenditure, has an insignificant positive effect on economic growth.

4.2 Discussion

Taxes have a positive and significant effect on economic growth. When there is an increase in local taxes by 1 billion rupiah, it will also increase economic growth by 0.0025 billion rupiah. Conversely, when there is a decrease in the realization of tax absorption by 1 billion rupiah, it will reduce economic growth by 0.0025 billion rupiah. The realization of local tax revenue is a mainstay to support regional independence. If the regional revenue exceeds the burden or regional expenditure, it will encourage an increase in other sectors in the economy. Moreover, there are many sources of tax revenue so that more and more sectors are able to contribute to regional economic growth (Alpad, 2023). In line with research (Riski, 2018) and (Putra Pratama et al., 2023) that taxes have been able to become a support to increase regional economic growth.

Capital expenditure has a significant negative effect on economic growth, when capital expenditure increases by 1 billion rupiah, it will reduce economic growth by 0.0134 billion rupiah. Conversely, when there is a decrease in capital expenditure by 1 billion, it will increase economic growth by 0.0134 billion rupiah. Whereas capital expenditure is able to add fixed assets or other assets in order to increase economic activity (Ministry of Finance, 2024). It can be understood that an increase in capital expenditure is still unable to encourage accelerated economic improvement so that when the government focuses on its expenditure in the form of capital expenditure, it will reduce the percentage of economic growth. Not only that, the increase in capital expenditure has also not been able to create production demand in each region (Fajri, 2017). However, in contrast to what happened on the island of Sumatra, nationally capital expenditure was able to encourage economic growth (Waryanto, 2016). Thus, the government as the implementer of fiscal policy must be able to create a harmony of programs implemented in order to increase economic growth, especially on the island of Sumatra.In line with this, other activities in the form of investment, which in this case is represented through domestic investment (PMDN), have a significant positive effect on economic growth. When PMDN increases by 1 billion rupiah, it will increase economic growth by 0.0087 billion rupiah. In line with research (Ramadhania & Gazali, 2022) that PMDN has a significant positive effect on economic growth. Thus, achieving the value of investment in the country, especially provinces on the island of Sumatra, will create profit- oriented economic activity which will increase the percentage value of economic growth in the region.

5. Conclusion

This study aims to determine the effect of local taxes, local expenditure represented by capital expenditure and expenditure on goods and services and FDI on economic growth in 10 provinces on the island of Sumatra. Based on the results of the study, it can be concluded that the variables of local taxes and FDI have a significant positive effect on economic growth on the island of Sumatra. While the capital expenditure variable has a significant negative effect on economic growth on the island of Sumatra. The goods and services expenditure variable has an insignificant positive effect on economic growth on the island of Sumatra.

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DETERMINANTS OF LOCAL REVENUE IN BENGKULU PROVINCE

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ABSTRACT

This study aims to determine the effect of local taxes, regional retribution population and poverty levels on local revenue in Bengkulu Province. . The data used in this study is secondary data originating from the Directorate General of Fiscal Balance (DJPK) and the Central Statistics Agency (BPS) from 10 regencies/cities in Bengkulu Province. The analytical method used in this study is multiple linear regression analysis using statistical tests by determining the degree of confidence of 95% ($\alpha = 0.05$) on the t test. The results of this study indicate that partially the local tax variable has a positive and significant effect on local original income, regional levies has a negative and insignificant effect on regional original income population has a positive and significant effect on local original income and poverty level has a negative and not significant effect on regional original income. Then local taxes, regional levies, population and poverty levels simultaneously have a positive and significant effect on regional own-source revenues.
Keywords: *Locally-generated revenue; local tax; regional retribution; total population; poverty level.*

1. Introduction

Regional independence and autonomy is a strategic plan in equalizing while developing regional potential based on local resources. In addition, regional autonomy has also received attention in creating national development in Indonesia (Bappeda, 2019). After gaining authority through decentralization or regional autonomy policies, local governments must focus on the development of their respective regions. Although they still get assistance from the central government through the regional transfer budget reflected in the APBN, local governments are required to become independent regions, especially from local revenues such as taxes and levies (Ministry of Finance, 2022), besides that local governments are also required to be able to allocate the proceeds of regional tax and levy revenues in order to achieve a just, prosperous and equitable society based on Pancasila and the 1945 Constitution of the Republic of Indonesia (Rinaldi, 2013).

Each region has its own authority in regulating and managing regional income. This arrangement and management is a reflection of the performance of the local government to improve and develop its regional economy (Dewi et al., 2018). Bengkulu Province is still increasing its economic growth through various ways. This method is penetrated to obtain regional revenues in order to finance various economic activities in Bengkulu Province. That way, regional independence can be achieved in line with the national development strategic plan.

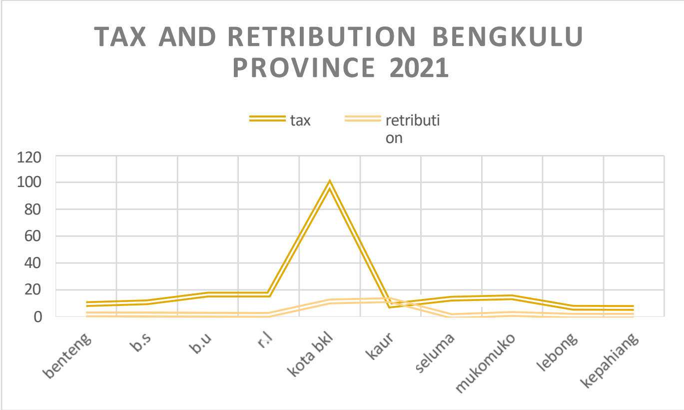

Figure 1

Local taxes and retributions are interesting to study because they are one of the important sources of revenue in financing regional activities and regional development to establish regional autonomy (Ministry of Finance, Law 28 of 2009). The authority of the region to collect taxes and retribution on the region reflects how the independence of the region in organizing its regional autonomy (Kencana, *et al.*, 2022). However, this also makes many regions dependent on local taxes and levies (Kamaroellah, 2017). The components that support PAD above will specifically be the main source of regional revenue. In particular, Bengkulu Province is a province that has a difference in regional revenue. Bengkulu City is able to obtain five times more local revenue than the regencies for taxes and retribution (BPS). This also indicates inequality in income distribution between regencies in Bengkulu Province (Efrianto, *et al.*, 2023).

Studies related to local taxes show that the proportion of local tax contribution to local revenue shows that local taxes contribute significantly to local revenue (Saputri, 2019; Setyawan, 2022; Rizki et al., 2021). Local tax, which is a compulsory contribution, is proven to have a positive and significant effect on PAD (Asteria, 2015; Sipakoly, 2016; Ardiansyah, 2019; Agusta, 2020; Farianti, 2020; Kencana et al., 2022). There is a relationship between local taxes and PAD if the amount of local tax revenue increases, the Regional Original Revenue (PAD) also increases (Kusuma, 2013).

Local taxes and local retribution are components of PAD, awareness of the obligation to pay taxes from taxpayers greatly affects these two things, namely local taxes and local retribution (Saprudin, 2018). The local retribution variable has no effect on PAD, but simultaneously local taxes and local retribution have a significant effect on PAD (Kencana, et al., 2022; Rizki, et al., 2021; Ramadhan, 2019). The increase in local revenue will follow the local retribution and there is no significant effect of local retribution on PAD (Lakoy, 2016; Fadli, 2016). Different with opinion that local retribution positively and significantly affect PAD (Anastasa & Ningsih 2019; Nusa & Panggalo, 2022).

Poverty is a problem faced by all countries in the world, especially developing countries (Novriansyah, 2018). Poverty is also a complex problem that is also influenced by various interrelated factors, such as the level of community income (Verawaty, 2023). Population is one of the important indicators in a country, where the amount of PAD can be influenced by population (Ariyanti, *et al.*, 2018). If the total population increases, there will be an increase in revenue, especially local revenue (Asmuruf, 2015). Partially, population has a positive and significant effect on PAD (Tohir, 2013; Yeny Kurniawati, 2014; Kurniawan, 2018; Gitaningtyas & Kurrohman, 2014; Alfian 2013). This is different from the results of research showing that population is positive and there is no significance to PAD (Woretma, et al., 2022; Muslim, 2019).

Based on the description above, this study aims to analyze the effect of local taxes, local levies, population, and poverty level on local revenue. This research is expected to provide knowledge and can be used as a reference to increase local revenue, especially in Bengkulu Province.

2. Literature Review

Taxes are mandatory but anyone who is taxed is not free to choose whether to pay or not to pay, while local taxes are taxes where the local government has the authority to collect them which are then carried out by the regional revenue office (Dewi&Budhi, 2018). Local tax is a mandatory contribution to the region owed by individuals or entities that are compelling based on the Law, with no direct reward and used for the region for the greatest prosperity of the people (RI Law No. 28 of 2009). Taxes are dues owed to the state that can be imposed by those who are required to pay according to regulations without getting a return achievement, can be directly appointed and the use is to finance several public expenditures connected to the state duties carried out by the government (Anasta & Nengsih, 2019). Local taxes can be defined as contributions required in the regions to individuals or entities without balanced direct rewards, these contributions can be in the form of coercion based on applicable laws and regulations for financing the implementation of local government and regional development, Taxes are also wealth transferred from the people to the state treasury in financing routine expenses and the surplus can be used *public saving* which is the main source to finance public *investment* (Miswar, *et al.,* 2021). Local taxes are collected by the government based on tax regulations set by the region for the benefit of funding the households of the local government concerned (Sukma & Sari, 2020).

Local taxes and local retribution are sources of revenue from local taxes that can be obtained from city / district taxes consisting of hotel taxes, entertainment taxes, street lighting taxes, and other taxes in accordance with existing regulations (Fahmi, *et al.,* 2015). In Law No. 28 of 2009, local retribution is defined as local levies as follows payment for certain services or licenses specifically provided and/or granted by the local government for the benefit of individuals or entities. Regional retribution is a regional levy as payment for the provision of services or the granting of permits that are specifically provided as well as provided by the regional government in order to fulfill the interests of individuals or an entity (Anastasa & Ningsih, 2019). The intended service is an activity carried out by the local government in the form of businesses and services that make goods or facilities or other benefits and can be enjoyed by individuals or business entities so that when someone wants to enjoy the services that have been made available he must pay the retribution that has been determined in accordance with applicable regulations and provisions (Jebarut, 2021). Local retribution has a compelling nature when there are people or business entities expecting reciprocity from government services and will not compel when people or business entities do not feel reciprocity in services from the government (Saipuloh, 2021). Local retribution based on Law 28 of 2009 is divided into 3 types, namely, public service retribution; business service retribution; certain licensing retribution. The collection of this levy itself is a series of activities starting from the collection of data on the object and subject of the levy payable to the collection activity or the levy payable to the party who is obliged to pay the levy payable and supervise the deposit (Jebarut, 2021). More briefly, regional retribution is revenue collected as payment or direct reward for services to the community (Berutu & Anwar, 2019; Nugroho, 2020).

Poverty is a condition when a person's inability to meet basic needs both primary and secondary such as food, clothing, shelter, and health, there are several factors that cause poverty in the form of macro, sector, community, household, and individual characteristics (Jolianis, 2016). Poverty is also defined where human conditions are unable to meet basic needs both in secondary aspects such as financial resources, nutritional adequacy, water quality, housing, health facilities, educational facilities, and social networks, it can also be said that the poor are residents whose average expenditure per capita per month is below the poverty line (Agatha & Uliansyah, 2021). Poverty is a complex problem that is influenced by various interrelated factors, including income levels, education, access to goods and services, location, geography, gender, and environmental conditions (Hambarsari & Inggit, 2016). There is poverty (absolute poverty) arising from the level of income and basic needs (minimum living needs) needed to be able to live properly, and poverty that cannot meet basic needs due to social inequality, still below the state of the surrounding community (relative poverty) (Windra, *et al.,* 2016). Poverty measurement uses the concept of absolute poverty which relates to human ability in order to fulfill basic needs reflected in the poverty line (BPS). Poverty in a country can be seen from the poverty rate. The poverty rate is influenced by the amount of unemployment and then definitely has an impact on inequality in various fields (Paulus, *et al.*, 2019).

On the other hand, the emergence of poverty as a result of an increase in population has created new poor people (Ritonga & Kulantika, 2020). Population itself is a group of people who settle or inhabit an area, while the population consists of people who inhabit an area and have legitimate rights to the area, namely people who have official papers to live in the area (Woreta, *et al.,* 2022). The population is a potential input, if the population increases the income drawn will also increase the theory of Simanjuntak (Ariyanti, *et al.,* 2018). A large population and not balanced with the quality of the population itself is an obstacle to the economic growth of the country concerned (Purba & Manurung, 2023). According to Law no. 24 of 2013, the population is the indigenous Indonesian people and people of other nations who reside in Indonesia. Population can be categorized based on certain variables such as age, gender, religion, livelihood, language, and place of residence (Nurcahyani, 2023).

Regional Original Revenue (PAD) is revenue obtained by the region from within its own area which is collected in accordance with current regulations (Ali & Ningsih, 2021). PAD according to Law No. 23 of 2014 is revenue retribution and obtained by regions based on regional regulations in accordance with statutory regulations. PAD comes from several sources, namely, aspects of local taxes, local retribution, the results of regionally owned companies, and the management of separate regional assets (Dermawan, 2017). PAD is revenue collected by the region based on statutory regulations, which this source of income can be used to develop and optimize all regional potential (Nurcahyani, 2023). Revenue obtained from pure PAD is generated by the region by optimizing potential sources from the management of regional original assets and local community contributions such as local taxes, local retributon, BUMD profits, and other legal PAD (Verginia, 2017; Amalia & Haryanto, 2019; Suot, *et al.*, 2021). PAD is a routine income that comes from the efforts of local governments in utilizing the potential of regional financial resources which shows the ability of a region so that it can support the financing of government administration and regional development (Sihombing, 2022). Regional Original Revenue (PAD) revenue that can be obtained by local governments from sources within their own territory that are levied based on local regulations (Siregar, 2015).

3. Research Methods

This study uses an Explanatory and Descriptive approach. The explanatory approach is a research method that explains the position between the variables studied and the relationship between one variable and another through hypothesis testing that has been formulated (Sugiyono, 2013). Descriptive analysis approach is a statistic used to analyze data by describing or describing the data that has been collected as it is without intending to make general conclusions or generalizations (Sugiyono, 2013). The data used is panel data from 10 districts / cities in Bengkulu Province in 2016-2021. The dependent variable in this study is the variable

PAD of Bengkulu Province. The independent variables in this study are the variables of local taxes, local levies, population and poverty in Bengkulu Province.

Table 7. Operational Definition

No.	Variables	Symbol	Unit	Source
1	Dependent -PAD	Local Revenue	Billion Rupiah	DJPK
2	Independent -Local Taxes -Regional levies -Number of Population -Poverty Level	Local Taxes Local Levies Total Population Poverty Level	Billio Rupiah Billion Rupiah Million Percentage	DJPK DJPK BPS BPS

His study using the Panel Data analysis method, this method aims to analyze the effect of local taxes, local levies, population and poverty levels on local revenue. In the Panel Data Test there are 3 stages, namely the REM, FEM, CEM Model Test and Hypothesis Test. The best model test in this study is REM which is a *Random Effect Model* in this model, differences in individual and time characteristics are accommodated in the errors of the model (Madany, 2022). The models used in this study are:

$$_{it}\mathbf{PAD} = \boldsymbol{\beta_0} + \boldsymbol{\beta_1}\ \mathbf{P_{it}} + \boldsymbol{\beta_2}\ \mathbf{R_{it}} + \boldsymbol{\beta_3}\ \mathbf{JP_{it}} + \boldsymbol{\beta_4}\ \mathbf{TK_{it}} + e_{it}$$

Description :

PAD : Local Original Revenue in billion Rupiah
P : Local Tax in billion Rupiah
R : Local Retribution in billion Rupiah
JP : Total Population in million
TK : Poverty Rate in percentage
e : Eror
it : Panel data, i denotes object and t denotes time

In this study, 2 classic assumption tests were used, namely multicollinearity which aims to test whether the regression found a high correlation between independent variables and heteroscedasticity which is intended to test whether in the regression model there is an inequality of variation from the residuals of one observation to another, because it uses panel data while according to Gujarati (2012) other assumptions are not used. The first hypothesis test is: t test which is used to determine how far an independent variable partially on the variation of the dependent variable; F test is used to determine whether all independent variables included in the model have a joint influence on the dependent variable; R2 test is a coefficient that shows the percentage of influence of all independent variables on the dependent variable.

4. Research Findings and Discussion

This research emphasizes the analysis of local taxes and levies on local revenue in Bengkulu Province. The following is the panel data regression model estimation table

Table 8. Panel data regression model estimation

Test		
	Splitting	Unsplitting
Chow Test	*	*

Hausman	-	-
LM Test	*	*

Notes:

a. Chow Test: Chi-square prob < 5%, H0 is accepted. Then it can be determined that the best model is FEM.

b. Hausman Test: Cross-Section Prob > 5%, H0 is accepted. Then it can be determined that the best model is REM.

c. LM Test : Breusch-Pagan Both < 5%, H0 is rejected. Then it can be determined that the best model is REM.

Based on the panel data regression estimation through the chow test and LM test, the best model chosen is the Random Effect Model (REM).

4.1 Panel Regression Results

Testing the basic classical assumption requirements of regression has been fulfilled. So the research can be continued by testing the significance of the multiple linear regression model which can be seen in the following table:

Table 3. Results

Variabel	Pendapatan Asli Daerah	
	Koefisien	Probability
C	9.751950	0.6357
PAJAK	1.091591	**0.0000****
RETRIBUSI	-0.770454	0.3144
JUMLAH_PENDUDUK	0.000209	**0.0067***
TINGKAT_KEMISKINAN	-0.231462	0.8278
Rsquared	**0.576744**	
Adj.R-S	0.545962	
F-statistic	18.73628	
Prob(F-statistic)	**0.000000**	

Based on the table above, the regression model equation is obtained as follows:

$$\mathbf{PAD = 9.75 + 1.09\ X1 - 0.77\ X2 + 0.0002\ X3 - 0.23\ X4 + \varepsilon}$$

From the above equation, it shows that there is a positive and negative influence of taxes, levies, population and poverty level on the local revenue of Bengkulu Province. The constant value of 9.75 means that without the variables of taxes, retribution, population and poverty level, the variable GRDP growth rate will increase by 975%.

The beta coefficient value of tax is 1.09, if other variables are constant and tax has increased by 1%, local revenue will increase by 1%. Vice versa, if the value of other variables is constant and tax decreases by 1%, then local revenue will decrease by 1%.

The beta coefficient value of Retribution is -0.77, if other variables are constant and Retribution increases by 1% then Local Revenue will decrease by 77%. Vice versa, if the value of other variables is constant and Retribution decreases by 1%, Local Revenue will increase by 77%.

The beta coefficient value of Total Population is 0.0002, if other variables are constant and Total Population increases by 1%, then Local Revenue will increase by 1%. Vice versa, if the value of other variables is constant and the total population decreases by 1%, then the local revenue will decrease by 1%.

The beta coefficient value of the Poverty Level is -0.23, if other variables are constant and the Poverty Level increases by 1%, the Local Revenue will decrease by 23%. Vice versa, if the value of other variables is constant and the Poverty Level decreases by 1%, the Local Revenue will increase by 23%.

Based on table 3, that :

1) The t test results on the tax variable obtained a t value of 4.796071 > t table, namely 2.001717 and a sig value of 0.0000 < 0.05, then H0 is rejected and Ha is accepted, meaning that the tax variable has a significant effect on PAD.
2) The result of t test on retribution variable obtained t value of -1.015334 < t table, namely 2.01717 and sig value 0.3144 > 0.05, then Ha is rejected and H0 is accepted, meaning that the retribution variable has no significant effect on PAD.
3) The t test results on the total population variable obtained a t value of 2.819731 > t table, namely 2.01717 and sig value 0.0067 < 0.05, then H0 is rejected and Ha is accepted. This means that population has a significant effect on PAD.
4) The results of the t test on the poverty level variable obtained a t value of -0.2185561 < t table which is 2.01717 and sig value 0.8278 > 0.05, then Ha is rejected and H0 is accepted, meaning that the poverty level variable has no significant effect on PAD.

4.2 F-statistic Test Results

Based on Table 2, the F-count is 18.73628> f table, namely 1.555239 and the sig value is 0.0000 <0.05, then H0 is rejected and Ha is accepted, meaning that the variables of taxes, levies, population and poverty level simultaneously affect local revenue.

4.3 Test Results of the Coefficient of Determination $(R)^2$

Based on Table 2, the adjusted R squared value is 0.545962 or 54%. The coefficient of determination shows that variables consisting of taxes, levies, population, poverty level are able to explain the variable growth rate in Indonesia by 54% while the remaining 46% (100 - adjusted R square value) is explained by other variables that are not explained in this research model.

4.4 Discussion

4.4.1 The Effect of Taxes on Original Revenue of Bengkulu Province

From the results of research that has been conducted which shows that partially tax has a significant effect with a positive direction on Bengkulu Province Local Revenue. The results of this study are in line with (Anggraini, D., 2010). Where the local tax variable has a t bitung of 9.078 with a significant level of 0.000 below 5% significance. With t count> t table or 9.078> 2.0369. These results mean that, the increase in local tax revenue will result in an increase in local revenue. Or vice versa, the lower the level of local tax revenue, the lower the level of local revenue.

4.4.2 The Effect of Retribution on Original Revenue of Bengkulu Province

From the results of research that has been conducted which shows that the Regional Retribution of Bengkulu Province has no effect on the variable local revenue. regional retribution has no significant effect partially on the local revenue of Bengkulu Province. The results of this study are in line with (Kencana, T., Aladin, A., & Armaini, R. ,2022). The study shows that the t-count value is smaller than the t-table value (-0.259 < -1.992) and the significance value is greater than 0.05 (0.796 > 0.05), so it can be said that the variable Regional Levies of Bengkulu Province has no effect on the variable local revenue. So it can be interpreted as a levy made by the government as a result of the contraprestasi provided by the local government or the payment is based on the achievement or service provided by the local government which is directly enjoyed individually by citizens and its implementation is based on applicable regulations.

4.4.3 The Effect of Population on Original Revenue of Bengkulu Province

From the results of research that has been conducted which shows that partially the total population has a significant effect with a positive direction on the local revenue of Bengkulu Province. The results of this study are in line with (LESTARI, D. P., 2020) the results show that the population has a positive and significant impact on the local revenue of Bengkulu province. Population is an important indicator in a country. Classical economists pioneered by Adam Smith even consider that population is a potential input that can be used as a factor of production to increase the production of a household company. The more the population, the more labor that can be used. As the population continues to grow, there is much to be done to address the growing population.

4.4.4 The Effect of Poverty on Original Revenue of Bengkulu Province

From the results of research that has been conducted which shows that the Poverty Level of Bengkulu Province does not have a significant effect on the variable local revenue. The results of this study are in line with (Priambodo, A., 2022), where the poverty rate has a negative and insignificant effect on local revenue. From the results of the analysis, it also shows that the probability level of the Poverty Level variable is 0.0223 or smaller than the significance of 0.05, which means that the poverty rate has a negative insignificant effect on local revenue, so it can be concluded that the poverty rate can affect the economic situation so that it can reduce local revenue

5. Conclusion

Type Based on the calculation of the REM model, two of the four independent variables studied affect local revenue in Bengkulu Province. Two of these variables have a positive and significant effect on PAD and the total population variable has a significant effect on PAD in Bengkulu Province.

Referring to the results of the research that has been conducted, the researchers provide suggestions and input to the Bengkulu Provincial government in increasing PAD revenue through local taxes. The government is expected to increase supervision and control both technically and administration to increase maximum local revenue in the tax and levy sector. For further similar research, it is hoped that it can conduct research with a wider range of years and objects of research, not just PAD.

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ANALYSIS OF LIQUIDITY RATIO, PROFITABILITY, AND SOLVABILITY TO EVALUATE THE PERFORMANCE OF PHARMACEUTICAL COMPANIES LISTED ON INDONESIA STOCK EXCHANGE (BEI) DURING THE PERIOD 2021-2023

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ABSTRACT

This study aimed to determine the effect of liquidity, solvency, and profitability ratios on company performance as measured by the return of pharmaceutical sector stocks in Indonesia and listed on the Indonesia Stock Exchange for the 2021-2023 period. The sample in this study is pharmaceutical sector companies listed on the Indonesia Stock Exchange in 2021-2023 and listing their financial statements on the Indonesia Stock Exchange in 2021-2023. The companies are Darya-Varia Laboratoria Tbk, Kalbe Farma Tbk, PT Pyridam Farma Tbk, PT Industri Jamu Dan Farmasi Sido Muncul Tbk, PT Soho Global Health Tbk, and Tempo Scan Pacific Tbk. The methods used in this study was quantitative methods, multiple linear regression analysis, and test classical assumptions. The results of this study show that the variable liquidity ratio with the current ratio has a significant value of 0.013 smaller than 0.05, then the solvency ratio variable has a significant value of 0.0116 greater than 0.05, and the profitability ratio variable has a significant value of 0.000 smaller than 0.05. Research shows that the liquidity ratio (current ratio) and profitability ratio (ROA) affect the performance of pharmaceutical companies on the IDX for the 2021-2023 period, while the solvency ratio (DAR) has no effect.
Keywords: *Current ratio, Debt to Asset Ratio, Return on Assets, Company Performance.*

1. Introduction

World economic growth is projected at 3.1% in 2024 and 3.2% in 2025. Inflation fell faster than expected in most regions due to supply problems and the end of restrictive monetary policy. In 2024, global inflation is expected to fall to 5.8% and 4.4% in 2025, with forecasts for 2025 revised down (Fund, 2024). It should be noted that Indonesia still faces structural challenges and external risks such as global uncertainty, inflationary pressures, and geopolitical tensions. Many countries, including Indonesia, are on alert. Increased investment, consumption and exports will be key to Indonesia's strong economic recovery (Waluyo, 2024). The President also encouraged all stakeholders to continue to attract domestic and foreign investors. This investment is a priority to provide value to the country (Waluyo, 2024)

In 2022, Indonesia's pharmaceutical market has generated sales of around $3.6 billion. Statista Health Market Outlook estimates that market revenue will continue to increase by 2028, reaching around $4.54 billion (Nurhayati, 2023). However, Indonesian pharmaceuticals are still highly dependent on imported raw materials which has an impact on the high price of drugs. Drug prices may become cheaper if through regulatory cuts in an effort to remove obstacles to the development of the pharmaceutical industry. Supported by the rapid response of SOEs. SOEs plan to form a *pharmaceutical SOE holding* in 2020 (Hidranto, 2020).

The pharmaceutical industry incorporated in the *SOE holding* , namely PT Kimia Farma Tbk, and PT Indonesia Farma Tbk, PT Bio Farma. In the results of previous research (Mokoginta, 2023) stated that the pharmaceutical industry holding stated 1). PT Indofarma

Tbk's financial performance in 2020 and 2021 is able to create added value, (2) PT Indofarma Tbk's financial performance in 2021 is the most efficient except for the most efficient inventory turnover ratio in 2020, (3) PT Kimia Farma Tbk's financial performance in 2021 and 2022 is able to create added value, (4) PT Kimia Farma Tbk's financial performance in 2021 is the most efficient (Mokoginta, 2023).

In a very tight business competition like today, high company assets alone are not enough to guarantee a company to survive. In this global era, competitive company management is needed to run a company's business. Financial statements are one tangible form of management performance results in managing a company (Fidhayatin & Uswati Dewi, 2012). Financial statement analysis can carried out using financial ratios. AnalysisFinancial ratios allow financial managers and interested parties to evaluate financial condition quickly, due to the presentation Financial ratios will show healthy conditions Whether or not a company is. Ratio analysis connects the elements of the plan and the calculation of profit loss so as to assess effectiveness and efficiency company (Orniati, 2009). Weston in and Kasmir states that the forms of financial ratios are Liquidity Ratio, Leverage Ratio, Activity Ratio, Profitability Ratio, Growth Ratio, and Valuation rasio (Erica, 2016).

The purpose of this study is to determine the value or performance of companies through several types of financial ratios that researchers choose, namely liquidity ratios with Current Rario, solvency ratios with Debt to Assets, and profitability ratios with Return on Assets in pharmaceutical sector companies listed on the IDX in 2021-2023 and also to find out which pharmaceutical companies have the best and worst financial performance in the 2021-2023 period.

2. Literature Review and Hypothesis Development

2.1 Literature Review

2.1.1 Company Performance

According to Fidhayatin & Uswati Dewi (2012) in their research "Analysis of Company Value, Company Performance and Company Growth Opportunities on Stock Return in Manufacturing Companies Listed on the IDX" Company performance is a benchmark for management's success in managing capital, carrying out activities, and achieving profits. This can be seen from the company's financial condition. With good company performance, the welfare of shareholders will increase. Therefore, companies that have good performance, they have the ability to be responsible in paying their debts on time.

2.1.2 Financial Statements

According to Kurniawan & Damayanti (2022), financial statements are the main instrument in presenting company information to stakeholders. The increasing globalization of business and the role of financial information in international markets are driving the need for standardized financial reporting regulations.

2.1.3 Liquidity Ratio

According to Dewi (2017) liquidity ratio analysis in financial statements helps assess the company's ability to pay off its short-term debt that will soon mature. This ratio is very important in financial analysis to assess the financial health of a company so that investors can see how capable the company is of paying its short-term debt. Calculation and analysis of liquidity ratios can give an idea of how well a company is performing.

Based on the type, liquidity ratios have three types, namely current ratio, quick ratio, and cash ratio. In this study we used the current ratio. According to Pratama (2023), the current ratio is one of the popular financial ratios. This ratio is calculated by comparing current assets with current liabilities.

Current Ratio = (Current Assets / Current Debt) × 100%

Figure 10. Current Ratio Formula

2.1.4 Solvency Ratio

The solvency ratio is one of the tools to determine whether or not a company can meet all long-term obligations when the company is liquidated. This study is based on the debt-to-asset ratio, which is a comparison between total assets and total debt, both short-term and long-term (Wulandari &; Darwis, 2020). Systematically it can be formulated:

DAR = (Total Assets / Total Debt) × 100%

Figure 11. Debt to Asset Ratio Formula

2.1.5 Profitability Ratio

The profitability ratio is a ratio that measures how effectively the company utilizes existing investments and economic resources to achieve a profit, so that the company is able to provide profit sharing to investors who have invested in the company. The profitability ratio aims to determine the company's ability to generate profits during a certain period and also to measure the level of management effectiveness in carrying out its company operations. The results of measuring this ratio can be used as material for evaluating management performance so far, whether they have worked effectively or not. This study, using the type of profitability ratio return on assets. Return on assets is a measurement of the company's overall ability to generate profits with the total number of assets available in the company, the higher this ratio means the better the condition of a company (Handayani &; Handayani, 2022). Systematically it can be formulated:

ROA = Profit after Tax / Total Assets

Figure 12. Return on Asset Formula

2.2 Hypothesis Development

Based on the explanation above related to the analysis of liquidity, solvency, and profitability ratios on the performance of pharmaceutical sector companies listed on the Indonesia Stock Exchange for the 2021-2023 period, it can be used as a framework and hypothesis for this study, including:

H_1: There is an influence of the liquidity ratio (Current Ratio) on the performance of pharmaceutical sector companies.

The current ratio is one of the benchmarks of a company's liquidity, namely its ability to meet short-term obligations where the higher the current ratio, the better the company's ability to meet its short-term obligations and so high liquidity means the company has plenty of funds available for various purposes, such as paying dividends, financing operations, and making investments (Amalia, 2018). With this statement, it can be concluded that the liquidity ratio (Current Ratio) can be used to assess the company's performance.

H_2: There is no effect of solvency ratio (Debt to Asset Ratio) on the performance of pharmaceutical sector companies.

Solvency ratio, especially Debt-to-Asset Ratio (DAR) is an important factor for investors and creditors to assess the ability or performance of the company to pay off its debt, DAR helps understand and measure the company's ability to meet its long-term obligations. , so that investors and creditors can make the right investment decisions (Rizki & Yandri, 2019). High DAR can be an indicator of high financial risk of a company. Therefore, it is important for companies to monitor DAR and ensure it is at a safe level (Pratama, 2023). With this statement, it can be concluded that the solvency ratio (debt-to-asset ratio) can be used to assess the presence or absence of influence on company performance.

H3: There is an effect of profitability ratio (Return cn Assets) on the performance of pharmaceutical sector companies.

Profitability is the ability of a company to make a profit, as well as utilize fixed assets used to operate. This ability can be measured through a financial metric commonly known as Return on Assets (ROA), which shows the relationship between profits and fixed assets used (Erlina, 2018). Higher ROA means higher company profits, thus making company profits increase. With this statement, it can be concluded that the profitability ratio (return on assets) can be used to assess the company's performance.

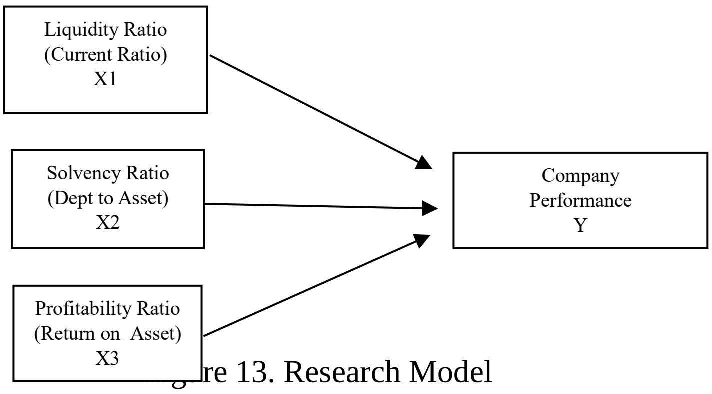


Figure 13. Research Model

3. Research Methods

3.1 Research Design

This study used a quantitative approach. Where quantitative research according to Sarwono is an approach that requires the existence of hypotheses and testing which will then be determine the next stages, such as determining analytical techniques and statistical formulas to be used. Also, this approach is more giving meaning in relation to the interpretation of statistical numbers is not meaning linguistically and culturally (Sugiyono, 2003). In this study, the data used is secondary data in the financial statements of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period. In determining the sample, we determine 2 criteria, namely being listed on the Indonesia Stock Exchange and reporting its financial statements publicly. In its processing, this research uses classical samusion test and Multiple Linear Regression Test

3.2 Population and Research Samples

In research, the population constitutes the entirety of the research subject. Because the selected population has a close relationship with the problem under study. Population also has a meaning as a generalized area consisting of objects or subjects that have certain quantities and characteristics that researchers set to study and then draw conclusions (Prathamy et al., 2022). On the Indonesia Stock Exchange, there are manufacturing industry companies in which there is one of the consumer goods industry sectors that contains the pharmaceutical sub-sector. This pharmaceutical sub-sector is the population of the research to be carried out, the total population listed on the Indonesia Stock Exchange is 13 companies (IDX Data Services Division, 2023).

The sample is a portion of the population whose characteristics will be studied. Research sample means the part of the population that is the subject of research and is a "representative" of the members of that population. The sample is part of the whole and characteristics that a population has (Prathamy et al., 2022). This study used *purposive* sampling method with criteria, namely:

1. Pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX).
2. Pharmaceutical sub-sector companies that publish financial statements in the period 2021 to 2023 are consistently listed on the Indonesia Stock Exchange (IDX).

Table 9. Criterion

No.	Criterion	Total	Total
1.	Pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX).	13	6
2.	Pharmaceutical sub-sector companies that do not publish financial statements in the period 2021 to 2023 consistently listed on the Indonesia Stock Exchange (IDX).	7	6
Total Companies sampled		6	6

Table 10. Sample

NO	STOCK CODE	EMITEN NAME
1	DVLA	Darya-Varia Laboratoria Tbk.
2	KLBF	Kalbe Farma Tbk.
3	PYFA	PT Pyridam Farma Tbk.
4	SIDO	PT Industri Jamu and Pharmacy Sido Muncul Tbk.
5	SOHO	PT Soho Global Health Tbk.
6	TSPC	Tempo Scan Pacific Tbk.

3.3 Research Data

In this study, the data used is secondary data. The secondary data used is related to the variables used in this study, such as Current Ratio (CR), Return on Asset (ROA), Debt to Asset Ratio (DAR) in the financial statements of pharmaceutical sub-sector companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.

3.4 Data Analysis Techniques

According to Yuliara (2016), multiple linear regression is an equation model that explains the relationship of one non-free variable (Y) with two or more independent variables (X_1, X_2, …X_n). The purpose of multiple linear regression tests is to predict the value of the non-free variable (Y) if the values of the independent variable (X_1, X_2, ...X_n) is known. In addition, it is also to be able to find out how the direction of the relationship between non-free variables and independent variables. The form of the regression equation is:

$$Y = a + b1X1 + b2X2 + b3X3$$

Conditions when the regression coefficients, namely b1, b2 and b3 have values:

1. If Value = 0. This means that the variable Y is not influenced by X_1, X_2, and X_3.

2. If the value is negative. This means that there is a relationship in the reverse direction between the non-free variable Y and the variables X_1, X_2, and X_3.
3. If the value is positive, it means that there is a unidirectional relationship between the non-free variable Y and the independent variables X_1, X_2, and X_3.

3.4.1 Coefficient of Determination (r2)

To determine the percentage of influence of variables X_1, X_2, and X_3 on variable Y, a coefficient of determination is used.

1. If r2 is 0, then in the regression equation model formed, the variation of the non-free variable Y cannot be explained in the least by the variation of the independent variables X_1, X_2, and X_3.
2. If r2 is 1, then in the regression equation model formed, the non-free variable Y can be perfectly described by the variation of the independent variables X_1, X_2, and X_3.
3. In this study using multiple linear regression because in this study there is 1 dependent or non-free variable (Y), namely company performance and 3 independent or independent variables (X), namely liquidity ratio (Current Ratio), solvency ratio (DAR), and profitability ratio (ROA) to assess the direction of the relationship between non-free variables and their independent variables. On the other hand, this study will use the coefficient of determination because it has something to do with the formulation of the problem made. To determine the effect of each independent variable (X) on the non-free variable (Y).

3.4.2 Test Hypothesis (T-Test)

The T test can be used to partially test hypotheses in research. To see the results of the T Test, the calculated t value must be greater than the table t value and for significant values it must be below 0.05 (Fidhayatin & Uswati Dewi, 2012).

3.4.3 Classical Assumption Test

1. Normality Test
   The normality test is very important to use in classical assumption research. In this test, If the value is Asymp, sig. (2-*tailed*) above 0.05, then the data is said to be normally distributed (Putra, 2020).
2. Multicollenierity Test
   The multicollenierity test is used to find a correlation or relationship between independent variables or variables X_1, X_2, X_3. In this test, interpretation can be seen from the *tolerance* and VIF values, where if the *tolerance value* is above 0.1 and the VIF value is below 10 (Primary, 2023b).
3. Heterokedasticity Test
   The heterokedasticity test can be used to find variance inequalities between residuals (Putri &; Binastuti, 2023). In this test, interpretation can be seen from scatterplot images.

4. Research Findings and Discussion

4.1 Descriptive Statistical Analysis

4.1.1 Darya-Varia Laboratoria Tbk

Table 11. Financial Report DVLA

Year	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	2,6	0,3	7%	Rp 20.464
2022	3,0	0,3	7%	Rp 16.410
2023	2,9	0,3	7%	Rp 24.064

PT. Darya-Varia Laboratoria Tbk has a liquidity ratio value of >1, meaning that the company's current assets are twice as much as current debt. If the company pays off all current liabilities, it still has sufficient cash or inventory for other short-term needs**.**

PT. Darya-Varia Laboratoria Tbk has a solvency ratio value of 0.3 from 2021-2023, meaning that the company's assets are the result of the cost of equity, not debt. A good ROA value is at least 5%. PT. Darya-Varia Laboratoria Tbk has a profitability ratio value of 7% from 2021-2023, meaning that the company can generate good profits from asset investment. Every Rp 1 invested by the company in assets managed to generate a net profit of 7%. The stock return in 2022 that the company distributed to investors decreased and rose again in 2023 even higher than in 2021.

With that, the company's performance can be said to be good because the company can pay off all current liabilities, and still has sufficient cash or inventory for short-term needs, the company's assets are the result of the cost of equity instead of debt, so the company is able to distribute profits to investors.

4.1.2 Kalbe Farma Tbk

Table 12. Financial Report KLBF

	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	3,6	0,2	12%	Rp 589.279
2022	3,8	0,2	13%	Rp 636.735
2023	4,9	0,1	10%	Rp 404.122

PT. Kalbe Farma Tbk has a liquidity ratio value of >1 from 2021-2023, meaning assets The company's current debt is twice as much as current debt. If the company pay off all current liabilities, he still has sufficient cash or inventory for other short-term needs**.** Kalbe Farma Tbk has a solvency ratio value of 0.2 in 2021 and 2022, and 0.1 In 2023, it means that the company's assets are the result of the cost of equity, not debt. A good ROA value is at least 5%. PT. Kalbe

Farma Tbk has a profitability ratio of 12% in 2021, 13% in 2022, and 10% in 2023, meaning that the company can generate good profits from asset investment. Every IDR 1 invested by the company in assets managed to generate a net profit of 12% in 2021, 13% in 2022, and 10% in 2023.

The stock return in 2022 that the company distributed to investors decreased and rose again in 2023 even higher than in 2021. With that, the company's performance can be said to be good because the company can pay off all current liabilities, and still has sufficient cash or inventory for short-term needs, the company's assets are the result of the cost of equity not debt, but the company in distributing profits to investors decreases in 2023.

4.1.3 PT Pyridam Farma Tbk

Table 13. Financial Report PYFA

Year	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	1,3	0,8	1%	Rp 5.763
2022	1,8	0,7	18%	Rp 267.391
2023	1,9	0,8	-6%	Rp - 113.903

PT Pyridam Farma Tbk has a liquidity ratio value of >1 from 2021 -2023, meaning that the company's current assets are more than current debt. If the company pays off all current liabilities, it still has sufficient cash or inventory for other short-term needs**.** PT Pyridam Farma Tbk has a solvency ratio value of 0.8 in 2021, 0.7 in 2022, and 0.7 in 2023, meaning that the company's assets are the result of the cost of equity, not debt.

A good ROA value is at least 5%. PT Pyridam Farma Tbk has a profitability ratio of 1% in 2021, 18% in 2022, and -6% in 2023, meaning that the company in 2022 and 2023 can generate good profits from asset investment. The stock returns in 2022 that the company distributed to investors rose and fell again in 2023 even to minus.

With that, the company’s performance can be said to be not good because even though the company can pay off all current liabilities, and still has sufficient cash or inventory for short-term needs, the company’s assets are the result of the cost of equity not debt, but the company in 2023 is unable to distribute the Company’s profits to investors.

4.1.4 PT Industri Jamu and Pharmacy Sido Muncul Tbk

Table 14. Financial Report SIDO

Year	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	4,1	0,1	31%	Rp 1.561.854
2022	4,1	0,1	27%	RP 1.451.585
2023	4,5	0,1	24%	Rp 1.893.214

PT Industri Jamu Dan Farmasi Sido Muncul Tbk has a liquidity ratio value of >1 since 2021 -2023, meaning that the company's current assets are more than current debt. If the company pays off all current liabilities, it still has sufficient cash or inventory for other short-term needs**.**

PT Industri Jamu Dan Farmasi Sido Muncul Tbk has a solvency ratio value of 0.1 from 2021-2023, meaning that the company's assets are the result of the cost of equity, not debt. A good ROA value is at least 5%. PT Industri Jamu Dan Farmasi Sido Muncul Tbk has a profitability ratio value of >5% from 2021-2023, meaning that the company can generate good profits from asset investment. Stock returns from 2022 have decreased, but in 2023 they will rise to exceed 2021, meaning that the Company can distribute profits to investors.

With that, the company's performance can be said to be good because the company can pay off all current liabilities and still have sufficient cash or inventory for short-term needs, the company's assets are the result of the cost of equity instead of debt, so that the company is able to distribute the Company's profits to investors.

4.1.5 PT Soho Global Health Tbk

Table 15. Financial Report SOHO

Year	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	2,0	0,5	14%	Rp 14.195
2022	2,0	0,5	8%	Rp 3.689
2023	1,9	0,5	8%	Rp 13.704

PT Soho Global Health Tbk has a liquidity ratio value of > 1, meaning that the company's current assets are twice as much as current debt. If the company pays off all current liabilities, it still has sufficient cash or inventory for other short-term needs**.**

PT Soho Global Health Tbk has a solvency ratio value of 0.5 from 2021-2023, meaning that the company's assets are the result of the cost of equity not debt. A good ROA value is at least 5%. PT Soho Global Health Tbk has a profitability ratio of 14% in 2021 and 8% in 2022 and 2023, meaning that the company can generate good profits from asset investment. Every IDR 1 invested by the company in assets managed to generate a net profit of 14% in 2021 and 8% in 2022 and 2023. The stock return in 2022 that the company distributed to investors declined and rose again in 2023.

With that, the company's performance can be said to be good because the company can pay off all current liabilities, and still has sufficient cash or inventory for short-term needs, the company's assets are the result of the cost of equity instead of debt, so the company is able to distribute profits to investors.

4.1.6 Tempo Scan Pacific Tbk

Table 16.Financial Report TSPC

Year	Current Ratio (X1)	DAR (X2)	ROA (X3)	Stock Return (Y)
2021	3,3	0,3	9%	Rp 195.467

2022	2,5	0,3	9%	Rp155.785
2023	2,7	0,3	11%	Rp 361.417

Tempo Scan Pacific Tbk has a liquidity ratio value of >1, meaning that the company's current assets are twice as much as current debt. If the company pays off all current liabilities, it still has sufficient cash or inventory for other short-term needs**.**

Tempo Scan Pacific Tbk has a solvency ratio value of 0.3 from 2021-2023, meaning that the company's assets are the result of the cost of equity, not debt. A good ROA value is at least 5%. Tempo Scan Pacific Tbk has a profitability ratio of 9% in 2021 and 2022 and 11% in 2023, meaning that the company can generate good profits from asset investment. Every IDR 1 invested by the company in assets managed to generate a net profit of 9% in 2021 and 2022 and 11% in 2023. Stock returns tend to increase from 2021 to 2023, meaning that the company can share profits with investors well.

With that, the company's performance can be said to be good because the company can pay off all current liabilities, and still has sufficient cash or inventory for short-term needs, the company's assets are the result of the cost of equity instead of debt, so the company is able to distribute profits to investors.

4.1.7 Descriptive Statistical

Table 17. Descriptive Statistical

	N	Minimum	Maximum	Mean	Std. Deviation
Liquidity	18	1.3	4.9	2.939	1.0450
Liquidity	18	.1	.8	.356	.2307
Profitability	18	-.1	.3	.117	.0889
Valid N (listwise)	18				

Based on the results of descriptive analysis, it shows that the liquidity ratio (Current Ratio) has a minimum value of 1.3, a maximum value of 4.9, a mean value of 2.939, and a standard deviation value of 1.0450. With a mean value that is greater than the standard deviation value, this has a positive impact because of the even distribution of data and also the efficient use of current assets by the company.

Then the result of the solvency ratio (DAR), has a minimum value of 0.1, a maximum value of 0.8, a mean value of 0.356, and a standard deviation value of 0.2307. With a mean value greater than the standard deviation value, this has a positive impact, such as an even distribution of data and good or stable company finances.

Then the result of the profitability ratio (ROA), has a minimum value of -0.1, a maximum value of 0.3, a mean value of 0.117, and a standard deviation value of 0.0889. With a mean value greater than the standard deviation value, this has a positive impact, such as an even distribution of data and the efficiency of the company's profit and operations.

4.2 Classic Assumption Test

4.2.1 Normality Test

Table 18. Normality Test

N		***18***
Normal Parameters[a,b]	***Mean***	***.0000000***
	Std. Deviation	***236740.28238680***
Most Extreme Differences	***Absolute***	***.136***
	Positive	***.118***
	Negative	***-.136***
Test Statistic		***.136***
Asymp Sig. (2-tailed)		***.200[c,d]***

In the picture of the *Kolmogorov-Smirnov Test One-Sample Test* above, it shows that the normality test shows the value of Asymp, sig. (2-*tailed*) of 0.200. From this result, this data can be said to be normal because the value of Asymp, sig. (2-*tailed*) of 0.200, this is greater than 0.05 or 5%. Therefore, we can conclude that the data from the three variables have a normally distributed spread.

4.2.2 Multicolinierity Test

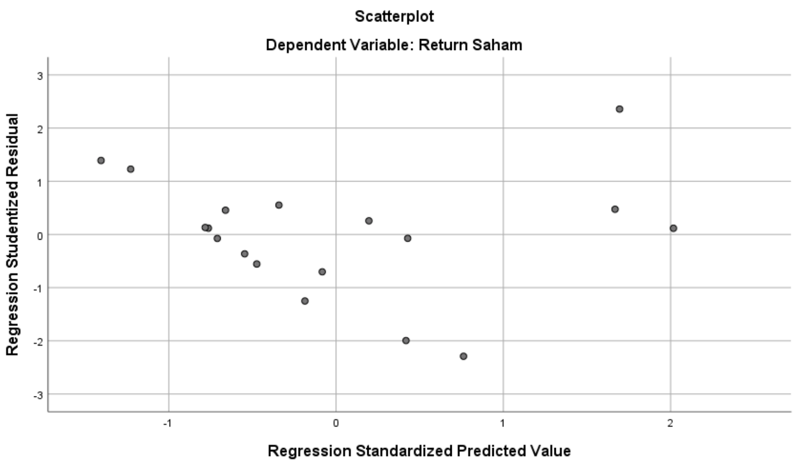
Table 19. Multicolinierity Test

Variable	Tolerance	VIF
Liquidity	.184	5.430
Solvency	.171	5.839
Profitability	.604	1.657

Based on the *coefficients table,* it is known that the VIF value for *Current Ratio* 5.430>10, DAR 5.839>10, ROA 1.657>10 and *Tolerance* value for *Current Ratio* 0.184>0.1, DAR 0.171>0.1, ROA 0.604>0.1. Thus, it means that there is no multicollinearity or there is no strong relationship between these variables.

4.2.3 Heterokedastisity Test

Figure 14. Heterokedastisity Test



Based on the scatterplot graph, the points spread between the numbers -1 and 1. The data points do not collect just above or below me but spread out. The spread of dots does not form a widening pattern then narrows then widens again. Thus, variable data does not indicate heterokedasticity.

4.3 Multiple Linear Regression Test

4.3.1 Determination Coefficient

Table 20.Determination Coefficient

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.920	.846	.813	260875.085

The R square value is 0.846 or equal to 84.6%. This number means that the variables *Current Ratio* (X1), DAR (X2), and ROA (X3) simultaneously (together) affect the variable stock return (Y) by 84.6%. While the rest (100%-84.6% = 15.4%) are influenced by other variables outside this regression equation or variables that are not studied.

4.3.2 Hypothesis Test (T Test)

Table 21. Hypothesis Test (T Test)

Model		Unstandardized Conefficients B	Std.Error	Standardized Conefficients Beta	t	Sig.
1	(Constant)	-1724467.920	644827.824		-2.674	.018
	Current Ratio	401681.999	141092.700	.695	2.847	.013
	DAR	1110300.838	662828.239	.424	1.675	.116
	ROA	4850835.451	915867.380	.714	5.296	.000

The effect of the Liquidity Ratio (Current Ratio) or X1 on Company Performance (Y)

1. The value of t is calculated 2.847 > t table 2.1447, so it can be said that the Liquidity Ratio (Current Ratio) or X1 affects the Company's Performance (Y)
2. The sig value of 0.013 < 0.05, it can be said that the Liquidity Ratio (Current Ratio) or X1 affects the Company's Performance (Y)

The effect of Solvency Ratio (DAR) or X2 on Company Performance (Y)

1. The value of t is calculated 1.675 < t table 2.1447, then the Solvency Ratio (DAR) or X2 has no effect on the Company's Performance (Y)
2. Sig values of 0.116 > 0.05, then the Solvency Ratio (DAR) or X2 has no effect on the Company's Performance (Y)

Effect of Profitability Ratio (ROA) or X3 on Company Performance (Y)

1. The value of t is calculated 5.296 > t table 2.1447, then the Profitability Ratio (ROA) or X3 affects the Company's Performance (Y)
2. The sig value of 0.000 < 0.05, then the Profitability Ratio (ROA) or X3 affects the Company's Performance (Y)

Y = a+b1X1+b2X2+b3X3

Y = -1,724,467,920 + 401,681,999 + 1,110,300,838 + 4,850,835,451

= 4,638,350,368

This result, if the value is positive, means that there is a unidirectional relationship between the non-free variable Y and the independent variables X1, X2, and X3.

4.4 Analysis and Discussion

4.4.1 The Effect of Liquidity Ratio on Company Performance

From the results of the T test analysis, it can be seen that the liquidity ratio (Current Ratio) gets a significant value of 0.013 smaller than 0.05, meaning that H0 is accepted and H1 is rejected. So it can be concluded that the liquidity ratio partially has a significant influence on the company's performance because the significant value for the liquidity ratio is greater. The higher the ability of a company to pay off short-term debts, the lower the profit that will be received by a company as a result of repaying these short-term debts so that this will certainly affect the company's performance conditions later.

The results of this study are in accordance with previous research conducted (Sembiring, 2019), where in his research the liquidity ratio with the current ratio has an influence on company performance.

4.4.2 The Effect of Solvency Ratio on Company Performance

From the results of the analysis and discussion above, it can be seen that the solvency ratio variable gets a significant value of 0.116 > 0.05. Then it can be concluded that the solvency ratio partially does not have a significant effect on the Company's performance. The Company in fulfilling long-term obligations does not affect the Company's performance. The higher the solvency value, it will not directly affect the company's obligations in meeting its long-term debt repayment which will ultimately have an impact on the company's performance.

4.4.3 The Effect of Profitability Ratio on Company Performance

From the results of the T test analysis above, it can be seen that the profitability ratio gets a significant value of 0.000 < 0.05. Then it can be concluded that the profitability ratio partially has a significant influence on financial performance. Because the higher the Return on Assets owned by the company, it shows the better the company's performance because with a high Return on Assets the company is able to generate and manage more profits from the assets that the company has so that this is also good for attracting investors (Iman & Saleh, 2023)

4.4.4 The Company's performance is assessed based on Current ratio, DAR, ROA.

Table 22. Financial Report

Company	Current Ratio (X1)	DAR (X2)	ROA (X3)
DVLA	2,8	0,3	7%
KLBF	3,4	0,2	12%
PYFA	1,7	0,0	4%
SIDO	4,2	0,1	27%
SOHO	2,0	0,5	10%
TSPC	2,8	0,3	10%
Average Industry	1,50 - 3.00	0,5	14,72%

Financial performance appraisal is analyzed by a comparative method between the resulting financial performance with applicable performance standards derived from industry averages. Based on the table above, the company that has the best current ratio value is PT. Sido Muncul Tbk's Herbal and Pharmaceutical Industry with a ratio value of 4.2 and which has the worst *current* ratio value of PT Pyridam Farma Tbk with a ratio value of 1.7. The company that has the best ROA value is PT Pyridam Farma Tbk with a ratio value of 0.0 and the company that has the worst DAR value is PT Soho Global Health Tbk with a ratio value of 0.5. The company that has the best ROA value is PT. Herbal and Pharmaceutical Industry Sido Muncul Tbk with a ratio of 27% The company that has the worst ROA value is PT Pyridam Farma Tbk with a ratio value of 4%.

5. Conclusions

Based on the results of analysis on descriptive statistical tests, classical assumption tests, multiple linear regression tests, and hypothesis tests. Then it can be concluded the following:

1. The Liquidity Ratio (Current Ratio*)* has a significant effect on the performance of pharmaceutical companies (stock returns) listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
2. The Solvency Ratio (DAR) does not have a significant effect on the performance of pharmaceutical companies (stock returns) listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period.
3. The Profitability Ratio (ROA) has a significant effect on the performance of pharmaceutical companies listed on the Indonesia Stock Exchange (IDX) for the 2021-2023 period limitations and implications.
4. The best financial statements are PT. Sido Muncul Tbk Herbal and Pharmaceutical Industry and the worst financial report PT Pyridam Farma Tbk.

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STRATEGIC PLANNING IN TOURISM DEVELOPMENT IN SIMALUNGUN REGENCY, LAKE TOBA

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ABSTRACT

Tourism development is pivotal for local and national economic growth, prompting continuous governmental efforts to foster it as a reliable income source. One such effort is the establishment of National Tourism Strategic Areas, including Lake Toba as one of the ten priority areas in Indonesia. This study examines the role of strategic planning in developing tourism in Simalungun Regency, Lake Toba. The objective is to analyze the significance of strategic planning and offer recommendations for tourism enhancement in the region. Utilizing qualitative descriptive analysis and SWOT analysis, the research identifies the region's potential, strengths, weaknesses, and threats. Findings emphasize the necessity of synergy among institutions, stakeholders, and business actors to boost tourism promotion, environmental education, transportation infrastructure, and digital technology utilization. The study concludes that with a well-implemented strategic plan, Simalungun Regency can emerge as a sustainable and competitive tourism destination, providing actionable insights for future development efforts.

***Keywords**: Strategic Planning, SWOT, Tourism*

1. Introduction

Tourism is one of the fastest-growing economic sectors globally and serves as a major contributor to both local and national economies (Lopes et al.,2021). Tourism contributes to up to 6 percent of global exports (Fletcher et al.,2017). Current tourism development in Indonesia also positions itself as a promising economic sector in the industrial world due to its annual growth. The significant impact of tourism on a country's economy, including Indonesia, motivates the government to promote tourism development in every tourist destination in the country, one of which is through the designation of "10 Priority Government Areas" or the establishment of National Tourism Strategic Areas (KSPN). KSPN is a national strategy focused on strengthening policies, activities, and programs at each tourist destination to observe changes after development (Stephanus et al.,2020).

Strategic management in the tourism industry relates to the adaptation and implementation of fundamental business strategy principles designed specifically to meet the unique needs and demands of the tourism sector. The strategic management approach in the tourism industry requires comprehensive analysis and application of various business strategies aimed at optimizing performance and achieving favorable outcomes in the continuously evolving sector (Moutinho & Vargas-Sanchez, 2018). According to Mjaku & c, (2020), the definition of strategic management involves a diverse and intricate process encompassing the formulation and implementation of strategies to achieve the goals set by the organization. This complex process involves a comprehensive analysis of both internal and external environments, where factors such as strengths, weaknesses, opportunities, and threats to the organization are carefully examined and evaluated. The strategies formulated through a series of steps include preparation, implementation, evaluation, and monitoring. To achieve successful strategic management, it is crucial to identify key factors contributing to successful strategies for all types of companies or institutions, whether government entities or private enterprises (Farid, 2022). The ultimate goal of strategic management is to create a sustainable competitive advantage for the organization and ensure long-term success (Sridadi, 2014).

The importance of strategic planning in tourism development has been examined from several crucial aspects. Ruhanen (2012) highlighted the difficulty of integrating stakeholder groups and decision-making in the context of tourism goal planning, emphasizing the importance of strategic vision concepts for sustainable development. Lai et al., (2006) emphasize the importance of integrating master planning and tourism background analysis to ensure the alignment of implementation programs with master plans. Shpak et al., (2022) underscored the need for an in-depth examination and evaluation of the investment component's influence on the progress of the tourism industry. Meanwhile, Suparman et al., (2023) highlighted the importance of air transportation accessibility, and Subawa et al., (2021)emphasized the role of tourist area promotion, particularly through Virtual Reality Module (VRM) technology, in increasing tourist numbers. Overall, stakeholder collaboration, planning integration, investment, transportation accessibility, and VRM-based promotion are crucial elements that support sustainable tourism development.

Lake Toba, also known as the Kawasan Danau Toba (KDT), is a place formed due to the eruption of the supervolcano Mount Toba. Simalungun Regency is part of the Key Tourism Areas (KTA) (Dincer et al, 2019). This regency is among the most visited and traversed areas within Lake Toba because of its strategic location along the shores of Lake Toba and its position along the primary arterial road, serving as a gateway to other tourism areas around Lake Toba. The villages of Parapat and Tigaraja exert significant influence on Simalungun Regency as they host nearly all tourism support facilities and have better accessibility than other villages. Since the 1990s, Parapat and Tigaraja have experienced rapid growth dominated by accommodations, hotels, and restaurants, resulting in most residents engaging in trade and service industries, particularly accommodation and transportation services.

The inclusion of Kawasan Danau Toba (KDT) in the National Tourism Strategic Area (KSPN) presents significant opportunities for tourism growth. However, despite being part of the KSPN, Simalungun Regency faces its own challenges in terms of infrastructure and tourist visitation.

Table 23. Data on the number of tourists in Simalungun Regency for the years 2015-2021

Year	Domestic Tourists	International Tourists	Total
2015	133.700	160.744	294.444
2016	142.485	172.405	314.890
2017	290.811	456.430	746.458
2018	425.260	14.536	439.796
2019	542.003	17.383	559.386
2020	371.159	119	371.278
2021	179.407	30	179.437

Source: Simalungun Regency Statistics Agency, 2022

Based on the data provided in the table, it is evident that there are significant differences in the number of tourist visits each year in Simalungun Regency. Particularly for international tourists, there has been a clear and significant decline since 2018. This disparity can be attributed to various factors, one of which is promotion efforts. It is known that Simalungun Regency faces significant limitations in its promotional efforts, resulting in a lack of awareness among potential visitors. So far, the efforts made by the Simalungun Regency Tourism Office to promote tourism include the creation of a website, Simaluntourism.com, which contains information about festivals, tourist attractions, hotels, restaurants, and the latest news about tourism in Simalungun Regency.

In addition to the less-than-optimal promotion, accessibility to tourist locations is also not easy. The distance between Sisingamangaraja International Airport and Lake Toba is 71.3 kilometers, taking approximately 2 hours by car. On the other hand, the distance from Kualanamu Medan Airport (KNO) to Lake Toba is 98.8 kilometers, with a travel time of about 3 hours and 20 minutes by car using the toll road. However, if traveling via regular roads without using the toll road, the journey can take up to 4 hours and 27 minutes.

This intriguing phenomenon has prompted researchers to pose questions related to the development of tourism in Simalungun Regency, including how stakeholders in Simalungun's tourism sector utilize strategic planning processes to develop existing tourism. Answers to these questions are crucial in understanding how Simalungun Regency can enhance its tourism sector and compete effectively. This research is also built upon earlier studies. For instance, in a prior investigation conducted in Bukit Simarjarunjung, Simalungun Regency, Purba & Rangkuti, (2023) asserted that the area holds substantial potential for tourism development. Despite concerted efforts, however, it has failed to draw sufficient numbers of local, national, and international tourists. Some important findings revealed in their research include:

a. Organizational Strategy: The Simalungun Regency Tourism and Culture Office has implemented an organizational strategy that establishes competency assessment standards for employees.
b. Program Strategy: Due to poor planning, program strategies have not been fully implemented in the Bukit Simarjarunjung area, especially in terms of marketing and promotion activities.
c. Resource Support Strategy: Challenges, including the Covid-19 pandemic, have hindered the full utilization of resource support strategies.
d. Innovative Approach: The Disparbud website serves as an innovative approach to enhancing the region's competitiveness in the tourism industry. These findings emphasize the importance of strategic planning and the need to address existing gaps to promote tourism development in Simalungun Regency.

The research only illustrates how Disbudpar implements tourism development strategies in Bukit Simarjarunjung. Therefore, this study aims to serve as a further investigation to identify the issues faced by tourism in Simalungun Regency through SWOT analysis (Strengths, Weaknesses, Opportunities, and Threats), where the results will provide appropriate strategies to address these issues. Thus, this research will contribute to the previous research. A directed and measured strategic planning process can provide a strong foundation for tourism development and help identify the potential challenges faced by the tourist destination. Therefore, this research is expected to make a significant contribution to tourism development efforts in the Simalungun Regency.

2. Literature Review

2.1 Tourism Development

Tourism is one of the fastest-growing economic sectors globally and a major contributor to both local and national economies (Lopes et al., 2021). Tourism development involves a series of efforts aimed at achieving the integrated utilization of resources in tourism and the integration of various aspects outside tourism that are directly or indirectly related to tourism development (Fletcher et al., 2017). Tourism development is a national strategy employed by the government to boost the national economy, where tourism relies on aspects such as natural potential, culture, history, and the way of life of local communities. Tourism development is carried out through the development of tourism elements, namely the demand (supply) aspect of tourism. There are four components in the demand aspect of tourism: attractions, accessibility, amenities, and ancillary services (Cooper, 2020).

a. Atrraction

Tourism attractions are crucial factors in tourism, serving as the primary reason and holding significant value for tourists (Fletcher et al., 2018). Attractions can be grouped into several categories, including cultural attractions such as religious sites and museums; traditional attractions such as festivals and cultural events; and events such as sports activities and folk celebrations (Fletcher et al., 2017). Tourism attractions possess allure as they can be witnessed and explored by tourists, offering unique experiences that are different from other attractions (Ridwan, 2019). Uniqueness, authenticity, originality, and diversity are essential aspects of tourism products (Manggala Putra et al., 2015).

b. Accesibilities

Tourist travel is closely related to ease of access to tourist locations (Soekadijo, 2000). Transferability, or ease of movement, is one of the offerings that must be provided by tourism organizers. Therefore, in tourism development, attention should be paid to the readiness and availability of transportation modes to support the tourist movement from one place to another (Ridwan, 2019).

c. Fasilitas (*Amenity*)

The complementarity between tourist motives and attractions results in tourist journeys with diverse needs such as food, rest areas, and accommodation, known as tourist needs. The comfort and safety of tourists depends on tourism facilities and infrastructure, such as roads, clean water, and dining places. Facilities such as restaurants, hotels, shopping areas, and tour services also enhance the tourist experience (Soekadijo, 2000).

d. Anciliary

Additional services needed today are information and the promotion of tourist destination attractions. Publication, promotion, and sales activities in marketing are realizations of tourism (Soekadijo, 2000).

2.2 Tourism Development Model

Tourism development is a series of efforts aimed at achieving the integration of resource utilization in tourism, as well as the integration of various aspects outside of tourism that are related either directly or indirectly to tourism development (Cooper, 2016). Tourism development is one of the strategies employed by the government to boost the national economy, where tourism relies on elements such as natural potential, culture, history, and the way of life of local communities. According to Cooper, (2016), tourism development can also be attributed to the impact of the industrial revolution on technology, such as transportation technology.

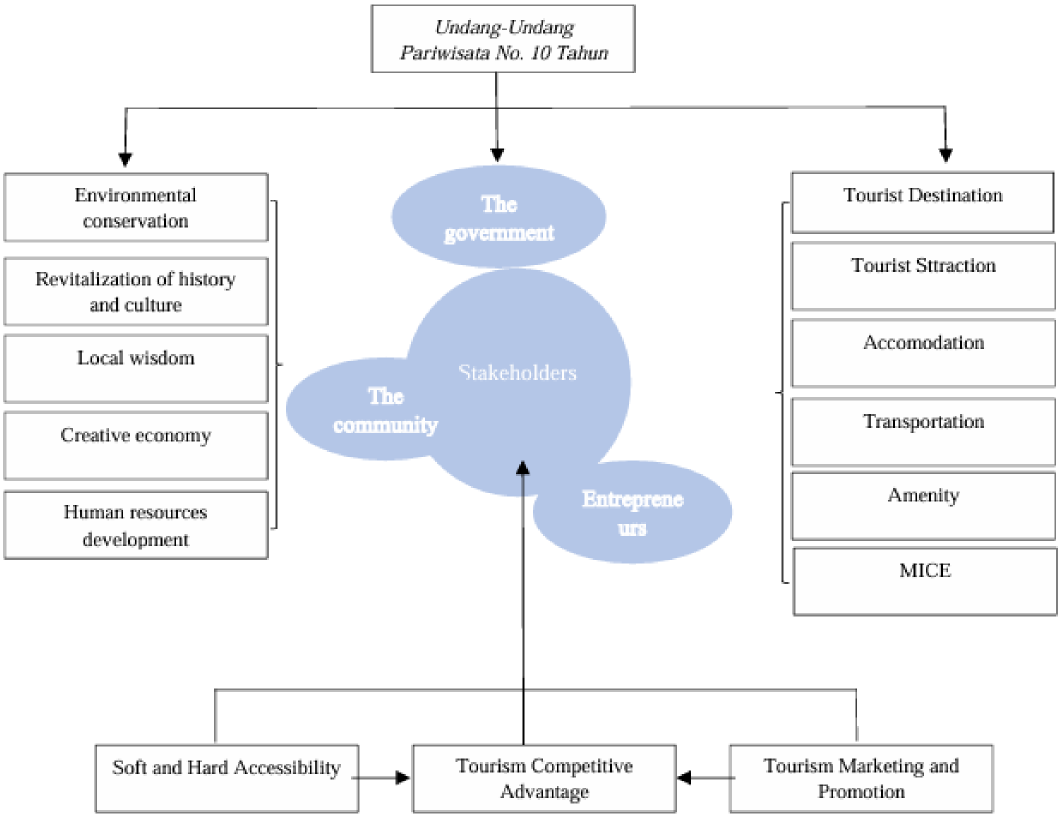

Figure 15. Tourism Development Model

2.3 Strategic Planning

Strategic planning is a series of steps taken by organizations to ensure strategic direction and appropriate resource utilization. The strategic planning process includes steps such as strategic analysis, development, implementation, and monitoring, where managers use various criteria to select strategies that align with the company's goals and situational analysis results. Strategic planning is also defined as a systematic approach to formulate, implement, and monitor organizational strategies and formally document organizational expectations (Hopkins, 1997). There are three main components of strategic planning, as outlined by Hopkins.

1. Formulation

   The primary objective of strategy formulation is to develop a plan that aligns with the company's strategic goals, thereby creating a competitive advantage and achieving sustainable profitability over time (Grant, 1991).

   a. Mission Development

      Mission is a key element in strategic management that serves as guidance in setting company strategies. Unlike vision, which determines future direction, the mission is not time-bound and aims to answer essential questions about the existence of an organization.

   b. Identification of Primary Goals and Objectives

      Goals represent the implementation of the organization's mission, meaning setting specific achievements within a specific timeframe, while objectives are a more specific elaboration of goals. A goal can be achieved if the objectives are met, and it is important to set SMART (specific, measurable, achievable, relevant, and time-bound) goals to provide a clear focus for the organization and facilitate performance evaluation.

c. Internal and External Environmental Assessment
Internal environmental analysis evaluates the strengths and weaknesses of an organization, including resources, capabilities, and organizational structure, to provide a comprehensive understanding and valuable input in strategy development (Hopkins, 1997). Meanwhile, external environmental analysis considers external opportunities and threats, such as market trends and competition, helping the organization formulate strategies that leverage strengths and opportunities while addressing weaknesses and mitigating threats (Hopkins, 1997).

d. Selection of Alternative Strategies
Selecting alternative strategies in strategic planning is a crucial process in which an organization evaluates and chooses effective actions to achieve desired goals. This process considers the internal and external factors that influence an organization's capabilities, enabling the identification, assessment, and selection of appropriate strategic alternatives (Hopkins, 1997).

2. Implementation
Implementation in strategic planning involves executing selected strategies, including resource allocation, designing the organizational structure, and orchestrating activities towards goal achievement. This process also entails monitoring the progress of strategies and taking corrective actions if necessary to ensure alignment with the plan. This stage is crucial, as it determines an organization's ability to effectively execute strategies and achieve its goals.

3. Control
Control in strategic planning is the process of monitoring the implementation of strategies and taking corrective actions if necessary. This involves setting performance standards, measuring actual performance, and taking corrective action if there are significant deviations. Control is essential to ensure that the organization remains on the chosen strategic path and adapts to any obstacles that may arise in achieving its goals.

3. Methods

3.1 Research Design and Sampling Method

Qualitative research, according to Creswell, (2017), examines complex processes by comprehensively understanding phenomena, and is used to address questions about human behavior and their responses to problem-solving strategies. Qualitative data consist of verbal information collected through questionnaires, surveys, interviews, or observations, comprising primary data (obtained directly by researchers through interviews) and secondary data (obtained from other sources, such as media and documentation). The main differences between the two are their sources and collection methods.

3.2 Data Collection and Analysis

Data are divided into two types: primary and secondary data, where primary data are obtained through methods such as interviews and direct observations in the field, while secondary data are obtained through studies and reviews of Lake Toba tourism documents. Purposive sampling means that members are specifically chosen and considered experts in the field under study, such as someone knowledgeable about Lake Toba's tourism.

Table 24. Criteria for Respondents in Research

Interviewees/Respondents	Criteria
Government Institutions	• Hold a Specific Position in Simalungun Regency • Have Knowledge of the Tourism Conditions in Simalungun Regency

	• Play a Role in Planning and Developing Tourism in Simalungun Regency • Have Knowledge of the Potential and Issues of Tourism in Simalungun Regency

Source: Authors, 2024

Table 25. Informants

No	Code	Informants Based on Criteria	Sample Size
1	N1	Department of Culture, Tourism, and Creative Economy of Simalungun Regency	1
2	N2	Simalungun Regency Tourism and Creative Economy Agency (Bapperida)	1
3	N3	Department of Industry and Trade of Simalungun Regency	1
4	N4	Department of Environment of Simalungun Regency	1
5	N5	Department of Public Works of Simalungun Regency	1
6	N6	Bank Indonesia	1
7	N7	Community-Based Tourism Development Group (POKDARWIS) of Simalungun Regency	1
8	N8	Village-Owned Enterprises (BUMDES) of Simalungun Regency	1
9	N9	Business Actors	1
10	N10	Tour Guides	1
Total			10

Source: Authors, 2024

The method used for technical data analysis involved qualitative descriptive and SWOT analyses. Qualitative descriptive analysis compares phenomena in a comparative study and classifies them based on specific standards or norms. The goal is to provide a deep and contextual understanding of data using words rather than numbers. The process involves data collection from various sources, selection of relevant data, thorough examination, and drawing of conclusions. This method analyzes, describes, and summarizes various conditions or situations found in the data, such as the interview results or observations. Freddy (1997) explains that SWOT analysis is a systematic process for identifying various factors for formulating company strategies. This approach aims to maximize strengths and opportunities, while minimizing weaknesses and threats.

4. Results and Discussion

4.1 Characteristics of Simalungun Regency

Simalungun Regency is part of the *Kawasan Danau Toba* (KDT) and holds a position as a PKL (Center of Activity and Services) and KSK (Strategic District Area) with a focus on economy, social, cultural, and environmental aspects according to the Spatial Planning of Simalungun Regency. This regency is included in national and provincial strategic areas with an emphasis on economic growth and environmental protection. The national strategic area includes Lake Toba and its surrounding areas, while the provincial strategic areas include the Highland Agropolitan, Tebing Tinggi – Siantar, and Simalungun – Batubara – Asahan along with the Sei Mangke Special Economic Zone.

4.2 Tourism Development

Following the establishment of the National Tourism Strategic Area (KSPN), Lake Toba tourism was identified based on the 4A concept: Attractions, Amenities, Accessibility, and Ancillary Services. The development of tourism in the Girsang Sipangan Bolon Subdistrict is uneven because of the prioritization of certain areas for development. Based on the analysis conducted, centers and sub-centers for tourism development were identified to facilitate tourism development efforts.

Figure 16. Tourism in Simalungun Regency

4.3 Internal and External Environment Analysis

The direct assessment of internal factors in tourism in Simalungun Regency employs an internal environmental analysis method aimed at evaluating the strengths and weaknesses of tourism development strategies. Nathanael & Susanti, (2022) explains that the focus is on identifying existing strengths and weaknesses within the context of an organization. Table 3 presents the strengths and weaknesses of tourism in Simalungun Regency. The data in the table were obtained through a series of in-depth interviews with stakeholders in the region. Each aspect comprises four points that cover key factors: strengths and weaknesses. After identifying the internal factors in tourism in the Simalungun Regency, the next step is to calculate the weights and scores to analyze these factors more deeply.

Table 1 Strengths and Weaknesses of Tourism in Simalungun Regency

	Strengths	**Weaknesses**
Internal Factors of Tourism in Simalungun Regency	1. Abundance of tourism potential	1. Low awareness of tourism among the community
	2. Strong value/attractive attributes	2. Limited accessibility in reaching tourist destinations
	3. Well-equipped with adequate amenities	3. Tourism promotion that has not reached the expected level of effectiveness
	4. Extensive networks	4. Lack of synergy among institutions, stakeholders, and businesses

Source: Authors, 2024

Meanwhile, research on the external environment is conducted to evaluate opportunities and threats related to strategic plans in the development of the tourism sector in Simalungun Regency using a direct observation approach. Nathanael & Susanti, (2022) explained that the purpose of external environmental analysis is to identify opportunities and threats in the operational environment of an organization. Table 4 presents the opportunities and threats of tourism in Simalungun Regency, with each point obtained based on in-depth interviews with stakeholders in Simalungun Regency. Each aspect contained four main points that represented opportunities and threats. Thus, after identifying the external factors in tourism in the Simalungun Regency.

Table 2 Opportunities and Threats of Tourism in Simalungun Regency

	Opportunities	**Threats**
External Factors of Tourism in Simalungun Regency	1. Changing trends and tourist preferences	1. Natural phenomena or environmental conditions with the potential to alter the attractiveness of the tourism sector
	2. Increased connectivity in transportation	2. Competition arising from other tourist destinations

Opportunities	Threats
3. Advancements in information and communication technology 4. Government support for the Development of Lake Toba Tourism (Through the implementation of Policies or Regulations related to Lake Toba KSPN).	3. Economic crises impacting tourist visitation interest 4. Dynamics of change in regulations and policies related to the tourism sector.

Source: Authors, 2024

4.4 IFE (Internal Factors Evaluation) and EFE (Eksternal Factors Evaluation) Matrix

Putri et al. (2014) explained that the IFE matrix is used to assess the weight and rating of internal and external factors in agrotourism. This involves analyzing the internal and external factors of a company using weighting and rating methods.

Based on the data in Table 5, it can be concluded that the total score for internal factors was 2.58. This score is divided between strengths and weaknesses, with a strength value of 1.96 and a weakness value of 0.62. These results indicate that strengths have a higher value than weaknesses, suggesting that tourism in Simalungun Regency has the ability to leverage its strengths to address existing weaknesses.

Table 3 Matrix IFE (Internal Factors Evaluation)

Internal Factors	Weight	Ranking	Weighted Score
Strengths:			
1. Abundance of tourism potential	0,13	4	0,53
2. Strong value/attractive attributes	0,13	3,9	0,51
3. Well-equipped with adequate amenities	0,13	3,8	0,50
4. Extensive networks	0,13	3,2	0,42
Subtotal	**0,53**		**1,96**
Weaknesses:			
1. Low awareness of tourism among the community	0,13	1	0,13
2. Limited accessibility in reaching tourist destinations	0,12	1,2	0,14
3. Tourism promotion that has not reached the expected level of effectiveness	0,11	1,2	0,13
4. Lack of synergy among institutions, stakeholders, and businesses	0,11	1,9	0,21
Subtotal	**0,47**		**0,62**
Total	**1,00**		**2,58**

Source: Authors, 2024

Table 4 Matrix EFE (Eksternal Factors Evaluation)

External Factors	Weight	Ranking	Weighted Score
Opportunities:			
1. Changing trends and tourist preferences	0,14	4	0,56
2. Increased connectivity in transportation	0,14	4	0,56
3. Advancements in information and communication technology	0,12	4	0,47
4. Government support for the Development of Lake Toba Tourism (Through the implementation of Policies or Regulations related to Lake Toba KSPN).	0,12	3,5	0,41
Subtotal	**0,51**		**2,00**
Threats:			
1. Natural phenomena or environmental conditions with the potential to alter the attractiveness of the tourism sector	0,13	1,4	0,18
2. Competition arising from other tourist destinations	0,13	2,3	0,30
3. Economic crises impacting tourist visitation interest	0,10	1,3	0,14

External Factors	Weight	Ranking	Weighted Score
4. Dynamics of change in regulations and policies related to the tourism sector.	0,12	2,6	0,31
Subtotal	0,49		**0,93**
Total	**1,00**		**2,93**

Source: Authors, 2024

Based on the data in Table 6, the total score for external factors is 2.93, divided between the score for opportunities of 2.00, and the score for threats of 0.93. This indicates that the opportunity factor has a higher value than the threat factor, suggesting that the tourism sector in the Simalungun Regency has the ability to leverage existing opportunities to address threats. According to the same table, the primary opportunities for tourism development in the Simalungun Regency are changes in tourism trends and increased transportation connectivity, with scores of 0.56 each. The increase in transportation connectivity, particularly in North Sumatra, is believed to have a positive impact on the tourism sector in the Simalungun Regency, considering its inclusion in the National Tourism Strategic Area (KSPN) and its status as a primary gateway to the Lake Toba Tourism Area.

However, there are also major threats in the tourism sector of the Simalungun Regency, such as competition arising from other tourism destinations, dynamics of changes in regulations and policies related to the tourism sector, and the potential economic crisis that could reduce tourist interest. Additional information from the Ministry of Transportation and the National Development Planning Agency (Bappenas) indicates that Indonesia's economic conditions in the next five years will face significant challenges, both in terms of climate and the growth of community productivity, as stated in the National Medium-Term Development Plan (RPJMN) 2025-2029

4.5 Determining the Position of Tourism in Simalungun District in the SWOT Quadrant

To determine the position of Simalungun District Tourism in the SWOT quadrant, we utilized the score results of the assessment for each factor, both internally (strengths and weaknesses) and externally (opportunities and threats), that have been identified. Strengths and weaknesses variables were placed on the X-axis, whereas opportunities and threats variables were placed on the Y-axis. Based on an analysis of the IFE and EFE matrices, the position of Simalungun District Tourism in the SWOT quadrant can be obtained as follows:

Table 5 Determination of the Position of Tourism in Simalungun Regency

Factors	Score	Coordinates (Strengths-Weaknesses) (Opportunities-Threats)
Internal		
1. Strength	1,96	Coordinates X= 1,34
2. Weaknesses	0,62	
Eksternal		
3. Opportunities	2,00	Coordinates Y= 1,07
4. Threats	0,93	

Source: Authors, 2024

The coordinates are then mapped in the SWOT analysis diagram in the following Figure 1:

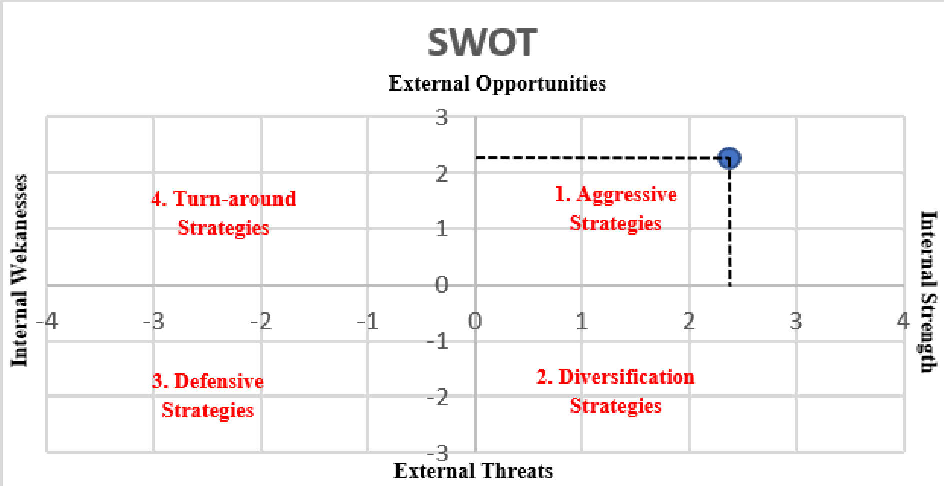

Figure 17 Positioning of Tourism Development in Simalungun Regency

Based on the diagram, the results indicate that Tourism in Simalungun Regency is in quadrant I, which indicates a strong and potentially advantageous condition. This finding is consistent with Rangkuti's (2016) view that quadrant I reflects the most favorable condition, where opportunities and strengths are optimal. The recommended strategy is an aggressive strategy, which means maximizing strengths to exploit as many opportunities as possible to maintain the existence of Tourism in Simalungun Regency. According to Hambali and Andarini (2021), the recommended strategies are market potential and product development.

The SO (Strength-Opportunity) strategy becomes the main focus in this position, allowing for the implementation of market penetration and product development strategies. This is reinforced by the views of Sari et al. (2020), who stated that the market penetration strategy aims to expand market share through more intensive marketing efforts, while the product development strategy aims to increase revenue by improving or developing new products. Market penetration efforts can be made by expanding the market share of domestic and international tourists. Additionally, tourism managers in the Simalungun Regency need to enhance online product promotion using social media to reach a wider audience.

4.6 SWOT Matrix Analysis (Strenght, Weakness, Opportunity, Threat)

The SWOT matrix is a strategic analysis tool used to evaluate internal factors (strengths and weaknesses) as well as external factors (opportunities and threats) that influence an entity or project, in this case, the development of Lake Toba tourism. In this context, the SWOT matrix is used to identify crucial factors that can affect the success of tourism development.

Table 6 The Results of the SWOT Matrix

IFE **EFE**	**Strenght (S)** List of Internal Strength Factors	**Weakneess (W)** List of Internal Weaknesses Factors
Opportunities (O) List of Eksternal Opportunities Factors	**Strategy SO** 1. Utilizing tourism potentials by adapting to trends and tourist preferences through periodic market research. 2. Enhancing the attractiveness value by leveraging information and communication technology, particularly through digital platforms	**Strategy WO** 1. Anticipating threats of natural phenomena with mitigation and adaptation through emergency plans and early warnings, to ensure the resilience of Lake Toba tourism destinations against natural disasters. 2. Increasing differentiation and adding value to tourist attractions by continually innovating, so tourism destinations offer

IFE / EFE	Strenght (S) List of Internal Strength Factors	Weakneess (W) List of Internal Weaknesses Factors
	and social media, to improve accessibility and promote Lake Toba tourism destinations. 3. Strengthening amenities by enhancing the quality and quantity of facilities to increase tourist attraction and satisfaction at tourism destinations. 4. Utilizing networks for strategic partnerships with local governments, local businesses, and communities for sustainable tourism development.	unique experiences that differentiate them from other destinations. 3. Addressing economic crises by diversifying income sources and target markets, and adjusting marketing strategies to attract tourists from various market segments. 4. Leveraging extensive networks to adapt to the dynamics of changes in tourism regulations and policies through active participation in dialogue with governments and stakeholders and developing strategic partnerships to influence policies that support the growth of the sector.
Threats (T) List of Eksternal Weaknesses Factors	**Strategy ST** 1. Increasing public awareness through engaging and educational promotional campaigns, leveraging changes in tourism trends and preferences to support tourism in the Lake Toba vicinity. 2. Addressing accessibility limitations by enhancing transportation connectivity, through collaboration with relevant parties to improve transportation infrastructure and facilitate tourist access to tourism destinations. 3. Enhancing the effectiveness of tourism promotion through the utilization of information and communication technology, using digital platforms and social media to expand audience reach and increase destination brand awareness. 4. Strengthening synergy among institutions, stakeholders, and businesses to enhance tourism promotion, through regular meetings, project collaborations, and joint programs to effectively achieve promotional goals.	**Strategy WT** 1. Conducting educational campaigns for the community about the importance of environmental conservation and sustainable tourism, to reduce the negative impacts of potential natural threats in the Lake Toba vicinity. 2. Optimizing the development of alternative transportation infrastructure and offering unique value propositions to enhance tourist destination accessibility and attract more visitors. 3. Maximizing promotion strategies through digital platforms and social media, as well as developing special promotion packages to attract tourist interest during economic hardships. 4. Strengthening synergy among institutions, stakeholders, and businesses to address changes in tourism regulations and policies, by collaborating to influence policies that support tourism growth and environmental sustainability.

Source: Authors, 2024

With the implementation of these strategies, it is hoped that the development of Lake Toba tourism can proceed more effectively and have a positive impact on the local community as well as regional economic growth. A comprehensive SWOT analysis and the implementation of appropriate strategies will be the key to success in optimizing the potential of Lake Toba tourism and making it a superior and sustainable tourist destination.

5. Discussion

The findings of this research shed light on the strategic planning processes employed by tourism stakeholders in Simalungun Regency and the steps taken to enhance the existing tourism sector. The importance of a directed and measurable strategic planning process in tourism development cannot be overstated. By adopting a structured strategic planning approach, Simalungun Regency can lay a strong foundation for identifying the potential and challenges of its tourism destinations, enabling it to compete effectively in the tourism industry.

The SWOT analysis executed in this research unveiled pivotal internal strengths and weaknesses of tourism development in Simalungun Regency. These internal elements play a pivotal role in molding the future direction of tourism in the region. By harnessing strengths like cultural allure, natural splendor, and community involvement, stakeholders can leverage existing assets to amplify the tourism sector. Tackling weaknesses such as infrastructure constraints and limited brand recognition will be imperative in surmounting obstacles and fostering sustainable advancement.

Additionally, the strategic suggestions put forth in this research endeavor to steer tourism development endeavors in Simalungun Regency. Augmenting cooperation among institutions, stakeholders, and enterprises is essential for effective tourism promotion and sustainable expansion. Utilizing digital platforms and social media can broaden audience outreach and augment destination brand recognition, while fortifying synergy among key entities can address fluctuations in tourism regulations and policies, ensuring compliance with industry norms and environmental sustainability.

6. Conclusion

It can be concluded that tourism development in Simalungun District, Lake Toba, is a strategic step toward boosting the local economy and strengthening the region's position as an attractive tourism destination. The strategic planning process plays a key role in guiding tourism development efforts by focusing on identifying the potential, strengths, weaknesses, and threads.

The importance of synergy among institutions, stakeholders, and businesses in enhancing tourism promotion, environmental education campaigns, optimizing transportation infrastructure, and utilizing digital technology for promotion are the main highlights of this study. These steps are expected to enhance the attractiveness of tourism destinations, improve accessibility, and prioritize environmental sustainability.

With the analysis of internal and external environments and the implementation of measured strategic plans, Simalungun District has the potential to develop into a sustainable and competitive tourism destination. Support from various parties, continuous performance monitoring, and adaptation to environmental changes are the key to the success of tourism development in the region. In conclusion, efforts to develop tourism in Simalungun District require close collaboration among various stakeholders, the implementation of targeted strategies, and commitment to environmental sustainability. With the right steps and strong support, Simalungun District has the potential to become a superior and competitive tourism destination at both the regional and global levels.

7. Recomendation

Based on the findings and conclusions of this study, the following recommendations are proposed to enhance tourism development in Simalungun Regency and maximize the potential of Lake Toba as a sustainable and competitive tourism destination:

a. Strengthening synergy: Enhances collaboration among institutions, stakeholders, and businesses to boost tourism promotion efforts. This can involve joint marketing campaigns, cooperative initiatives, and shared resources to maximize the promotional impact.
b. Environmental Education Campaigns: Launch comprehensive educational campaigns aimed at raising awareness about environmental conservation among tourists, local communities, and stakeholders. This includes workshops, seminars, and informational materials, highlighting the importance of preserving natural resources and biodiversity.

c. Optimization of transportation infrastructure: Improving alternative transportation infrastructure to enhance accessibility to tourism sites. This could involve upgrading roads, developing public transportation systems, and implementing innovative transportation solutions to facilitate tourist mobility within the region.
d. Digital platform utilization: Digital platforms and online marketing strategies are utilized to promote tourism effectively. These include leveraging social media channels, developing user-friendly websites, and implementing targeted digital marketing campaigns to reach a wider audience and attract more visitors.
e. Collaboration for Policy Influence: Collaborate with relevant stakeholders to advocate for policies that support tourism growth and environmental sustainability. This may involve engaging with local authorities, policymakers, and community leaders to influence regulations, zoning ordinances, and land-use policies that prioritize tourism development, while safeguarding natural resources and ecosystems.

By implementing these strategic recommendations, Simalungun District can enhance its tourism sector, attract more visitors, and contribute to sustainable economic growth, while preserving its natural and cultural heritage.

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ANALYSIS OF STRUCTURE, CONDUCT, PERFORMANCE OF AGRO-INDUSTRY IN THE DAERAH ISTIMEWA YOGYAKARTA (DIY) IN 2016 USING THE INPUT OUTPUT APPROACH

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ABSTRACT

Agro-industry in DIY contributes to the economy in terms of the contribution of its product exports, where of the 16 commodities exported, 11 of them are dominated by agricultural processing product. This research aims to find out (1) what the structure-conduct-performance (SCP) of agro-industry in DIY in 2016, (2) which agro-industry sector was leading in DIY in 2016, and (3) compare the suitability between DIY government policies and the results of the analysis. This research uses an input-output method where forward and backward linkages are used to measure structure, output and income multipliers to measure conduct, and the degree of export dependence and export multipliers on output to measure performance. The research results show that DIY's leading agro-industry sector is the food and beverage supply sector because it has high forward and backward linkages, high output and income multipliers, as well as high degrees of export dependence and export multipliers on output. This is in line with the publication from the Bappeda DIY regarding the Final Report on Preparing Analysis of the Impact of Infrastructure on DIY's Economic Development in 2016 which stated that the food and beverage supply sector was included in the leading sectors in DIY in 2016.
***Keywords**: structure-conduct-performance, agro-industry, input-output.*

1. Introduction

Daerah Istimewa Yogyakarta (DIY) is one of the provinces in Indonesia that has potential in agriculture. The importance of this agricultural sector makes the government strive to protect DIY agricultural land through regional laws contained in Daerah Istimewa Yogyakarta Regulation Number 6 of 2021 concerning Amendments to the Regional Regulation of the Daerah Istimewa Yogyakarta Province Number 10 of 2011 concerning the Protection of Sustainable Food Agricultural Land. However, in reality the contribution of the agricultural sector is declining and has always been exceeded by the processing sector since 2012-2015. Even BPS statistics show that in 2012-2019 the processing sector contributed the most to the DIY GDP, which was around 13,22% every year. As for the agricultural sector in the distribution of DIY GDP contributed around 10,38% from 2012-2019.

According to data from the Badan Pusat Statistik, the average area of agricultural land has always decreased by 0,32% since 2014-2016. Likewise, the amount of production on average decreased by 0,81% from 2012-2016. The decline in the contribution of the agricultural sector is caused by many things, one of which is from a social perspective, people feel that their lives are more prosperous when they leave the profession to become farmers and choose to sell their rice fields and change professions to become entrepreneurs (Wiraraja, Windia, 2016). However, there are still many people who work as farmers. In 2015, the distribution of DIY residents working in the agriculture, forestry, hunting, and fisheries sectors was 436,529 which is more than the population working in the processing industry sector which was 276,386 in 2015. It can be concluded that the DIY economy is still based on the agrarian sector because most of the population still depends on the agricultural sector. But on the other hand, the processing industry contributes more to DIY GDP than the agricultural sector, indicating a shift in the economic structure in DIY. Therefore, in order for a structural transformation from agriculture to a resilient industry is to link the agricultural sector with other sectors that are superior and create economic growth and have links with the agricultural sector, namely the processing sector (Jhingan, 2016).

The concept is called agro-industry, which means the agricultural product processing industry. Agroindustry is a series of interrelated activities, including production, processing, storage, marketing, and distribution of agricultural products. In simple terms, agro-industry is a concept that combines the manufacturing industry with the agricultural sector. Tarigan, 2007 in (Tresnawati, 2010) states that agro-industry activities have the opportunity to create jobs, increase income distribution, and have significant potential to encourage the development of the agricultural sector. Agro-industry needs to be developed because its role can contribute significantly to national development (Austin, 1992). Agorindustri has an impact on creating added value, increasing competitiveness, and increasing income (Udayana, 2011).

In 2015-2016 there were 16 export commodities originating from DIY where 11 of these commodities were included in the agro-industrial sector. Exports of agricultural products in 2015-2016 are enough to prove that agro-industry in DIY needs to be developed in order to be able to drive the economy of a region. Therefore, agro-industry needs further analysis so that the government can implement the right policies according to the priority scale. This study uses input-output analysis whose data comes from the input output table issued by BPS. Through the analysis of input output, it can be determined which sectors have advantages and which require priority in the development process. The research data taken refers to the DIY Provincial Input-Output table issued by BPS in 2016. In 2016, the Input Output Table was prepared simultaneously for each of thirty-four provinces in Indonesia. The year 2016 was chosen because in that year the 2016 Economic Census was held, which is an important basic data in the implementation of the preparation of input output tables for thirty-four provinces.

This study aims to analyze the structure, conduct, and performance of agro-industry in DIY in 2016 which is one of the studies in the field of industrial economics. Manson's thinking as cited in (Kuncoro, 2007), which relates to the SCP (Structure-Conduct-Performance) paradigm states that the structural characteristics of an industry will have an impact on conduct in that industry, which in turn will affect its performance. The relationship between the three variables, namely structure, conduct, and performance are linear, where the structure of the industry influences conduct, and the conduct then affects the performance of the industry. The results of the analysis of the structure, conduct, and performance of DIY agro-industry in 2016 will show the leading agro-industrial sectors which can be used as a reference by the government in determining the priority scale of development in the Daerah Istimewa Yogyakarta. The results of the analysis of the leading agro-industry sector in DIY in 2016 will be identified in accordance with government policies that have been realized in 2016. The suitability of research results and the application of government policies shows that input-output analysis is needed to assist the government in determining the priority scale of development of a region.

2. Literature Review

2.1 Literature Review

The Structure-Conduct-Performance (SCP) concept was first introduced by Mason in 1939, which stated that the structure of an industry will influence conduct in the industry which will ultimately determine the performance of that industry. (Lipczynski et al., 2005) defined the SCP concept as an analytical technique to determine the relationship between components, namely market structure in the industry, conduct of company, and company performance in the industry. Market structure tends to influence the conduct of companies in the industry so that it will have an impact on company performance in the industry (Kuncoro, 2007). The structure, conduct and performance of agro-industry can be analyzed using an input-output approach. (Kuncoro, 1996) stated that forward and backward linkages can be used to determine the structure of an industry. Forward linkages are defined as the use of output from one sector which is used as input from other sectors, while backward linkages are defined as the linkages of a sector to other sectors that contribute input to that sector. The conduct of an industry can be analyzed through output multiplier and income multiplier. The output multiplier is an analysis to determine changes in final demand due to changes in production in the economy, while the income multiplier is used to determine the impact of changes in final demand on household income. Industrial performance is analyzed using the degree of export dependence and the export multiplier on output. The degree of export dependence is used to assess what sectors contribute to meeting export needs, while the export multiplier on output is used to assess the extent to which export activities influence the economy as a whole.

(Kuncoro, 1996) defines agro-industry by classifying into several economic sectors where in the table Input Output at Basic Prices for DIY Producers in 2016 there are 18 sectors included in the scope of agro-industry: food crop farming (01), seasonal horticultural crop farming, annual horticulture, and others (02), perennial plantations (03), farms (04), agricultural and hunting services (05), forestry and logging (06), fisheries (07), food and beverage industry (13), tobacco processing industry (14), textile and apparel industry (15), leather industry, leather goods and footwear (16), wood industry, goods made of wood and cork and woven goods made of bamboo, rattan and the like (17), paper industry, paper goods, printing and reproduction (18), chemical industry, pharmaceutical and traditional medicine (19), rubber industry, rubber and plastic goods (20), goods metal industry, computers, electronic goods, optics and electrical equipment (23), furniture industry (26), supply of food and beverage (41).

2.2 Empirical Review

The structure, conduct, and performance of agribusiness in Indonesia were analyzed in 2005 where the structure was measured using forward and backward linkages, conduct was analyzed through the output multiplier and income multiplier, and performance was analyzed based on the value of the export multiplier on output and the export multiplier on income. This research explains that in terms of Indonesia's agribusiness structure in 1990 - 2000, the sectors that had high forward and backward linkages were the agricultural product processing industry and agricultural input providers. In terms of Indonesian agribusiness conduct in 1990 - 2000, the sectors that had high output multipliers and income multipliers were the agricultural product processing sector and a few primary agricultural sectors. In terms of Indonesia's agribusiness performance in 1990 - 2000, the sectors that had export multipliers for output and high income were dominated by the agricultural product processing sector (Rondhi, 2005).

Research related to structure, conduct, and performance was also carried out in 2019 where the research subject was the manufacturing industry. The focus of the research is to look at changes in terms of structure, conduct, and performance of the manufacturing industry in Indonesia from 2005-2016. This research uses forward and backward linkages to measure structure, income and output multipliers to measure conduct, and the degree of export dependence and export multipliers on output to measure performance. Meanwhile, to see changes in the structure, conduct, and performance of the manufacturing industry in 2005-2016, it was analyzed using non-parametric testing, namely the Wilcoxon Signed Runk Test. The research results stated that there were no changes in structure, conduct, or performance between 2005 and 2010, whereas in 2010-2016 there were changes. When viewed as a whole period, from 2005-2016 there were changes in terms of structure, conduct, and performance of the manufacturing industry in Indonesia (Kayoselba, 2023).

3. Research Methods

This research is a type of quantitative research with secondary data sources in the form of Input-Output (IO) Tables on Basic Prices of Producer ofthe Daerah Istimewa Yogyakarta Province in 2016, which consists of 52 sectors. The analytical method in research is input-output analysis where the agro-industrial structure is analyzed using forward and backward linkages, behavior is calculated based on the income multiplier and output multiplier, and performance is analyzed based on the degree of export dependence and export multiplier on output (Kuncoro, 1996). Data processing was carried out using Microsoft Excel software.

3.1 Input-Output Analysis

Input-Output analysis begins by calculating the input coefficient matrix, identity matrix, identity matrix minus the input coefficient matrix which then inverses the results of subtracting the two matrices (identity matrix - input coefficient matrix). The result of the inverse matrix is called the Leontief Inverse matrix (Firmansyah, 2006).

a. Calculating the Input Coefficient Matrix or Technology Coefficient (Matrix A)

$$a_{ij} = \frac{Xij}{X_j}$$

Xij : usage sector “i” by sector “j”
Xj : output of sector j
a_{ij} : input coefficient

b. Calculating the Leontief Inverse Matrix (Matrix $(I - A)^{-1}$)
   1) In calculating the Leontief Inverse matrix, it is necessary to first calculate the matrix (I-A). For matrix A or matrix technology has been obtained as a first step. The next step is form an identity matrix or Matrix I. Matrix I is matrix longitude figure that contains the main diagonal value 1 and elements valued at 0.
   2) Calculating I-A by subtracting identity matrix (Matrix I) against the input coefficients matrix (Matrix A).
   3) The next step is to calculate matrix I-A where researcher already has matrix A and matrix I obtained from steps 1 and b.1.
   4) The Leontief inverse matrix would be obtained by inversing the matrix $I - A^{-1}$

c. The acquisition of the Leontief Inverse matrix will later become a component for calculating forward and backward linkage, output multipliers, income multipliers, export dependence degrees and export multipliers on output.

3.2 Analysis Structure, Conduct, Performance of Agro-industry

3.2.1 Agro-industry Structure Analysis

The structure of agro-industry is defined as the state of sectors that are structurally arranged under the scope of the agro-industrial sector. The structure of agro-industry analyzed by using forward linkage and backward linkage indicators. Forward linkage to see the level of linkage between outputs from one sector to be used as input to other sectors. Backward linkage is the ability of a sector to use another sector or the sector itself as its input (Kuncoro, 1996).

a. Forward Linkages
   The forward linkage model is described in the following equation:

$$F(d)_i = \sum_{j=1}^{n} a_{ij} \text{.......(1)}$$

Information:
F(d)i : forward link index
a_{ij} : Leontief coefficient

b. Backward Linkages
The bakward linkage model is described in the following equation:

$$L_{bj} = \frac{\sum_{i=1} x_{ij}}{x_j} = \sum_{i=1}^{n} \overline{a_{ij}} \text{.......(2)}$$

Information:
L_{bj} : backward link index
X_j : value of the j product
X_{ij} : value of sector i's service input to produce in sector j
$\overline{a_{ij}}$: inverse of the Leontief coefficient matrix

c. Forward and Backward Linkages Mapping
Mapping by grouping forward and backward linkage values serves to find out the leading sectors that are able to be a driver for other sectors (Widodo, 2006). The mapping is presented in the form of a matrix by grouping the linkage values into 4 categories. The classification of 4 mapping categories is as follows;
1) Sectors that have high forward and backward linkages
2) Sectors that have high forward and low backward linkages
3) Sectors that have low forward and high backward linkages
4) Sectors that have low forward and backward linkages
As for the linkage mapping, it is presented as shown below;

Table 26. Mapping Backward and Forward Linkages

<table>
<tr><th rowspan="4">Backward Linkage</th><th rowspan="2"></th><th colspan="2">Forward Linkages</th></tr>
<tr><th>Low</th><th>High</th></tr>
<tr><td>High</td><td>Backward linkage is high, forward linkage is low, tends to be high risk, markets are limited</td><td>Forward and backward linkage is high, conglomerates tend to occur</td></tr>
<tr><td>Low</td><td>Forward and backward linkages are low, neither markets for output nor input providers</td><td>Forward linkages are high, backward linkages are low, tend to be prospective and markets are guaranteed</td></tr>
</table>

Source: (Widodo, 2006)

3.2.2 Agro-industry Conduct Analysis

Agro-industrial conduct is defined as industrial action due to final demand. (Kuncoro, 1996) stated that to determine agro-industrial behavior using the effect of output multipliers and income multipliers. An output multiplier is an analytical tool for calculating the change in final demand against the change in total output. Meanwhile, income multiplier is defined as an analytical technique to calculate the change in final demand against the change in income received by households as a labor supply.

a. Output Multiplier
The output multiplier equation model is as follows:

$$O_j = \sum_{i=1}^{n} \beta_{ij} \text{.......(3)}$$

Information:
O_j : output multiplier value
β_{ij} : the number of columns in the Leontief inverse matrix

b. Income Multiplier
The output multiplier equation model is as follows:

$$H_j = \sum_{i=1}^{n} O_j\, K_u \text{.......(4)}$$

Information:
H_j : income multiplier value
O_j : output multiplier
K_u : wage coefficient

3.2.3 Agro-industry Performance Analysis

Agro-industry performance is the achievement achieved by sectors in the agro-industry in economic activities. (Kuncoro, 1996) stated that to determine the performance of agro-industry, use the degree of export dependence and the export multiplier on output. The degree of export dependence is an analytical technique to see the proportion of production of a sector used as a exports fulfillment. Export multiplier on output is an analytical technique to see the rate of change due to exports in a sector to total output in the economy.

a. Degrees of Export Dependence
The model of degrees of export dependence equation is described in the equation as follows:

$$dk_i = \frac{\sum_i b_{ij} E_j}{X_i} \text{.......(5)}$$

Information:
dk_i : degree of export dependence of sector i
E_j : export sector j
x_i : total output of sector i
b_{ij} : inverse elements of the Leontief matrix

b. Export Multiplier on Output
The model of export multiplier on output equation is described in the equation as follows:

$$Poi = \frac{\sum_j b_{ij} E_j}{\sum E_j} \text{.......(6)}$$

Information:
Poi : export multiplier on output index
b_{ij} : inverse elements of the Leontief matrix
E_j : export sector j

4. Research Finding and Discussion

4.1 Research Finding and Discussion

4.1.1 Forward Linkages

The agro-industrial sectors in DIY in 2016 with high forward linkage figures were the food and beverage industry (13) with a value of 1,962, supply of food and beverage (41) with a value of 1,500, and the textile and apparel industry (15) with a value of 1,232. These sectors are said to be high because their value exceeds the average of 1,225.

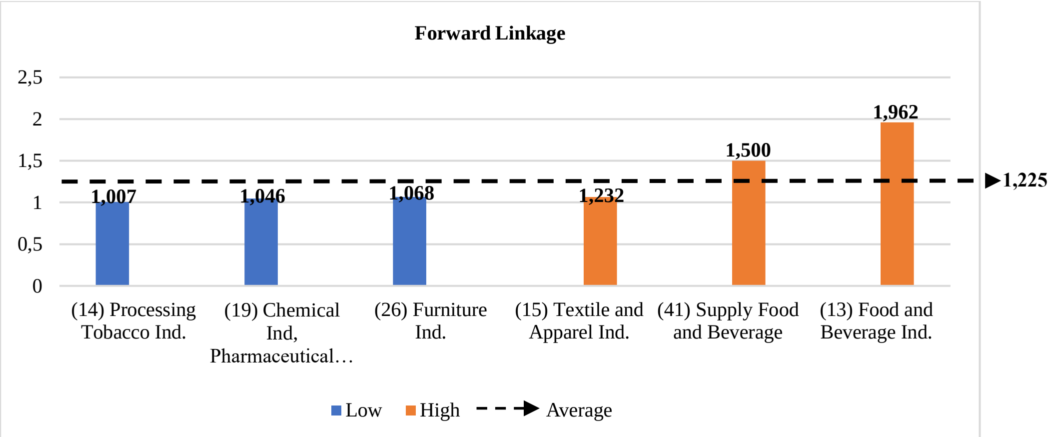

Figure 18. Forward Linkages of DIY Agro-industry in 2016

4.1.2 Backward Linkages

The agro-industrial sector in DIY in 2016 with high backward linkage figures was the food and beverage industry (13) with a value of 1,665, the leather, the supply of food and beverage (41) with a value of 1,530, and the textile and apparel industry (15) with a value of 1,495. These sectors are said to be high because their value exceeds the average of 1,265.

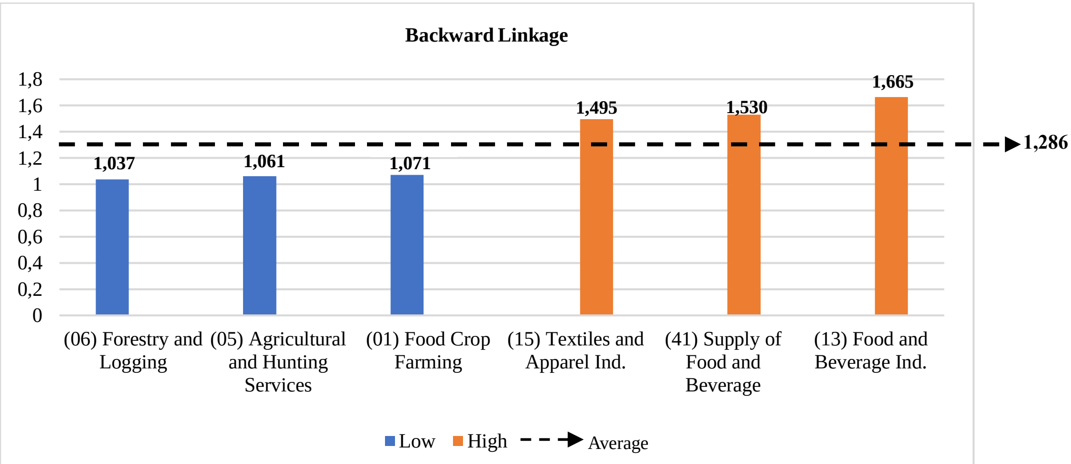

Figure 19. Backward Linkages of DIY Agro-industry in 2016

4.1.3 Forward and Backward Linkages Mapping

From the results of the analysis of forward and backward linkages in the DIY agro-industry in 2016, mapping can be carried out through a forward and backward linkage matrices according to the classification proposed by (Widodo, 2006). The following mapping classification is divided into four parts, consisting of:

(1) has high forward and backward linkage;
(2) has high forward linkage but low backward linkage;
(3) has high backward linkage, but low forward linkage;
(4) has low forward and backward linkage.

Sectors that are included in the high category if the linkage values exceed the average of the entire agro-industry sector. On the other hand, the low category consists of sectors with lower linkage values than the average of the entire agro-industry sector.

Table 27. Mapping of Forward Linkages and Backward Linkages of DIY Agroindustry in 2016

		Forward Linkage	
		High	**Low**
Backward Linkage	**High**	(Conglomeration) (13) Food and Beverage Industry (15) Textiles and Apparel Industry (41) Supply of Food and Beverage	(Limited market) (04) Farms (16) Leather, Leather Goods and Footwear Industry (17) Wood, Goods Made of Wood and Cork and Woven Goods Made of Bamboo, Rattan and the like (18) Paper and Goods from Paper, Printing and Reproduction of Recorded Media Industry (19) Chemical, Pharmaceutical and Traditional Medicine Industry (20) Rubber, Rubber Goods and Plastic Industry (26) Furniture Industry
	Low	(Prospective market) (01) Food Crop Farming (06) Forestry and Logging	(Not a market for output or it's the input providers) (02) Seasonal Horticultural Crop Farming, Annual Horticulture, and Others (03) Perennial Plantations (05) Agricultural and Hunting Services (07) Fisheries (14) Processing Tobacco Industry (23) Goods from Metals, Computers, Electronics, Optics, and Electrical Equipment Industry

4.2 Conduct of Agro-Industry Daerah Istimewa Yogyakarta in 2016

4.2.1 Output Multiplier

The agro-industrial sector in DIY in 2016 with high output multiplier figure was the food and beverage industry (13) with value of 1,665, supply of food and beverage (41) with value of 1,530, and the textile and apparel industry (15) with value of 1,495. These sectors are said to be high because their value exceeds the average of 1,286.

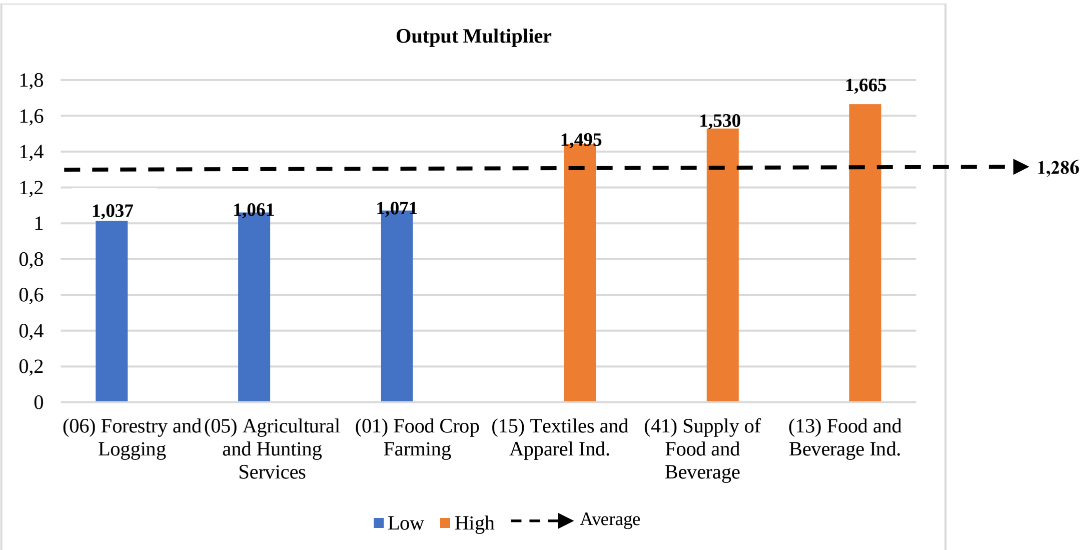

Figure 20. Output Multiplier DIY Agro-industry in 2016

4.2.2 Income Multiplier

Agro-industrial sector in DIY in 2016 with high value of income multiplier is farm sector (04) with value 0,546, agricultural and hunting services (05) with value 0,516, and supply of food and beverage (41) with value 0,413. These sectors are said to be high because their value exceeds the average of 0,289.

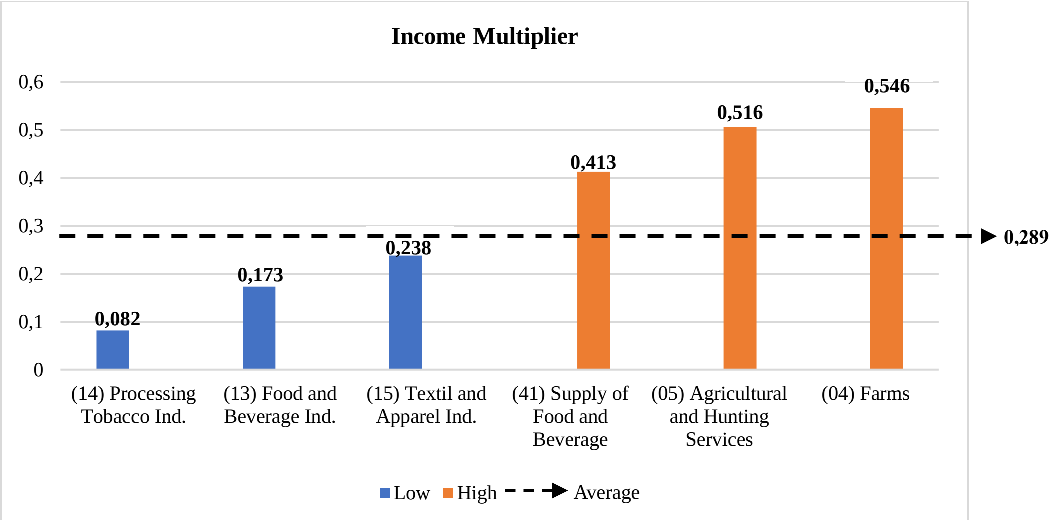

Figure 21. Income Multiplier DIY Agro-industry in 2016

4.3. Performance of Agro-Industry Daerah Istimewa Yogyakarta in 2016

4.3.1 Degree of Export Dependence

The agro-industrial sector in DIY in 2016 with a high degree of export dependence is the textile and apparel industry (15) with a value of 0,848, chemical industry, pharmaceutical and traditional medicine (19) with a value of 0,790, and supply of food and beverage (41) with a value of 0,567. These sectors are said to be high because their value exceeds the average of 0,463.

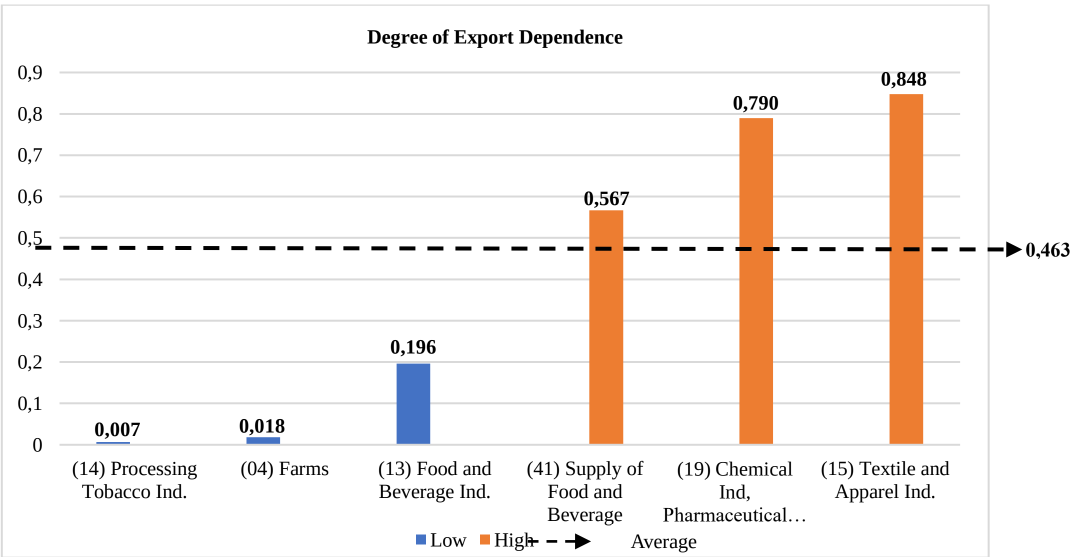

Figure 22. Degree of Export Dependence DIY Agro-industry in 2016

4.3.2 Multiplier Export On Output

The agro-industrial sectors in DIY in 2016 with high output multipliers were supply food and beverage sector (41) with a value of 0,171, the textile and apparel industry (15) with a value of 0,079, and the food and beverage industry (13) with a value of 0,063. These sectors are said to be high because their value exceeds the average of 0,028.

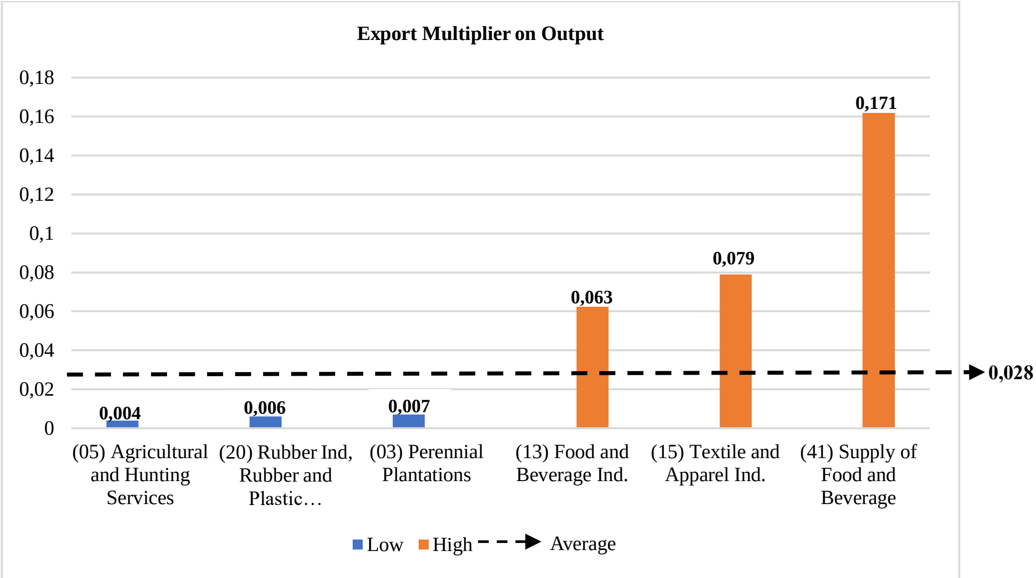

Figure 23. Multiplier Export On Output DIY Agro-industry in 2016

4.4. Leading Sector of Agro-Industry Daerah Istimewa Yogyakarta in 2016

The leading sector is a sector that has high forward and backward linkage values, high output and income multipliers, as well as a high degree of export dependence and export multipliers on output. Based on the input output analysis of the agro-industry sector in DIY in 2016, it was found that the leading sector was the supply of food and beverage sector with sector code in the input output table 41. This sector's value was consistently above average starting from the analysis of links, multipliers and exports. Meanwhile, two other sectors, namely the food and beverage industry (13) and the textile and apparel industry (15), are sectors that have opportunities to be developed because these two sectors have high values of both forward and backward linkages. However, both sectors have low income multipliers so they are not included in the leading sectors. The low income multiplier value is caused by the food and beverage industry as well as the textile and apparel industry including industries with a labor-intensive character, which means relying more on high utilization of human resources rather than the use of technology and machines in the production process. The more the number of workers in a sector, the lower the wages received because wages are considered a burden or cost for the company (Raharjo et al., 2022).

Based on table 4.1, the supply of food and beverage sector (41) is classified as a conglomeration industry. Conglomeration is an attempt by large companies to merge into one group with great power so that they are able to beat competitors, have control in regulating transaction prices between companies, especially to avoid taxes, can hold lots subsidies, and have "bargaining power " (Priasmoro et al., 1994). Similar research explained that companies with low market power have a low ability to raise prices. On the other hand, companies with large market power are able to influence prices (Datta et al., 2013). So in line with this phenomenon, the food and beverage industry sector (13) and the textile and apparel industry (15) are included in the conglomeration market, which can be interpreted that both industries are dominated by companies with large market share so that companies in these industries tend to be able to control prices, especially in this phenomenon of lowering prices or in matter this called income received by labor. This then has an impact on the low income multiplier of the two industries.

5. Conclusion

The structure of the DIY agro-industry in 2016 which had a high number of forward linkages and backward linkages were the food and beverage industry (13), the textile and apparel industry (15), and the supply of food and beverage (41). DIY agro-industry conduct in 2016 which had high output multiplier and income multiplier figures were farm sector (04), the leather industry, leather goods and footwear (16), and the supply of food and beverage sector (41). The performance of DIY agro-industry in 2016 which has a high degree of export dependence and export multiplier on output were the textile and apparel industry (15) and the supply of food and beverage sector (41). The leading agro-industrial sector in DIY in 2016 is the supply of food and beverage with the sector code in the input output table (41), because it has a high number of forward and backward linkages, high output and income multipliers, as well as a degree of dependence on exports and export multipliers on high output. This is in accordance with the Final Report on the Preparation of Analysis of the Impact of Infrastructure Development on DIY's Economic Development in 2016 issued by the Bappeda DIY in 2016, which states that the supply of food and beverage sector is a key sector or leading sector of DIY in 2016.

Based on this fact, it is advisable for the government to prioritize development both physically in the form of infrastructure facilities and policies that support the supply of food and beverage sector. The government also needs to encourage potential sectors such as the food and beverage industry and the textile and apparel industry by focusing on wage policy aspects in both industries so that their existence can increase the multiplier impact in the income sector. On the other hand, agro-industrial sectors with low linkage, multiplier and export values still need to be encouraged so that these sectors can still survive in meeting the needs in the region so that it is hoped that the DIY region will not need to import products produced by sectors that have a small contribution.

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THE EFFECT OF HUMAN DEVELOPMENT INDEX, ECONOMIC GROWTH, ON POVERTY IN BENGKULU PROVINCE IN 2020-2022

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ABSTRACT

Poverty levels remain a major concern in many developing countries, with the Human Development Index (HDI) and economic growth being important factors considered in poverty alleviation efforts. Although increasing the Human Development Index and economic growth are often considered as solutions to reduce poverty, the relationship between these factors and poverty rates needs to be studied further to better understand their impact. This study aims to analyze the effect of the Human Development Index and economic growth on the poverty rate in Bengkulu province in 2020-2022, as well as to provide a deeper understanding of these dynamics. The method used in this research is multiple linear regression analysis. The results of the analysis show that the human development index variable has a significant positive effect on poverty and economic growth has a significant negative effect on poverty. The local government could consider policies that provide public facilities to the community such as education and health, and distribute them evenly across the province. Increase investment in agricultural infrastructure such as transport networks, distribution centres, and irrigation to improve market accessibility in every region of Bengkulu province.
***Keywords**: Poverty, Economic Growth, Panel Data, Human Development Index.*

1. Introduction

Indonesia, as a developing country, often faces many economic problems including increasing poverty rates (Herlambang, 2023). Poverty is a socio-economic condition of a person or group of people who do not have basic rights to live and develop a dignified life (Fadila & Marwan, 2020). Poverty is an unresolved problem that involves many aspects of life (Khoirudin & Nasir, 2022). Efforts to resolve the problem of poverty must be carried out in a comprehensive and integrated manner covering various aspects of people's lives because this problem is complex and has many causes (Sari et al., 2021).

One indicator of poverty is the number of poor people, which shows how many people live below the poverty line during a certain period. The government must reduce the number of poor people, at least it must decrease every year, because the number of poor people will increase along with population growth (Karauan et al., 2023). The Human Development Index is one source that influences the number of poor people (Bawowo et al., 2022). The human development index (HDI) is a measure of human development achievements based on quality of life (Silaban et al., 2020). indicators of the HDI, namely the health index showing life expectancy; The education index shows the average years of schooling and literacy rate; and the purchasing power index shows adjusted real expenditure per capita or purchasing power (Maulana et al., 2021). A decrease in the Human Development Index (HDI) will result in low work productivity of the population. Low productivity results in a decrease in income generation, which in turn causes an increase in the number of poor people (Nurlita et al., 2017).

On the other hand, a higher HDI shows that the quality of human life is also better (Ristika et al., 2021). Apart from that, one of the factors that determines the prosperity of society and the success of a region's development is economic growth (Awruni & Kartika, 2019). Gross Regional Domestic Product (GRDP) is the added value summed up from the results of all business units in a region (Muslim & Saputra, 2023). If economic growth has a large potential source of income for a region, the level of welfare of the population in a region will also increase so that the number of poor people will decrease (Rahayu, 2018). High economic growth does not guarantee that everyone in the area will live in prosperity. Economic growth is only a general picture of society's welfare (Alhudori, 2017).

Bengkulu Province is one of the provinces on the island of Sumatra with a population of 2,010,670 people in 2020. It is noted that Bengkulu Province is ranked second after Aceh with the number of poor people out of ten provinces on the island of Sumatra (BPS Bengkulu Province, 2024). The poverty level in Bengkulu Province continues to fluctuate from 2020-2022.

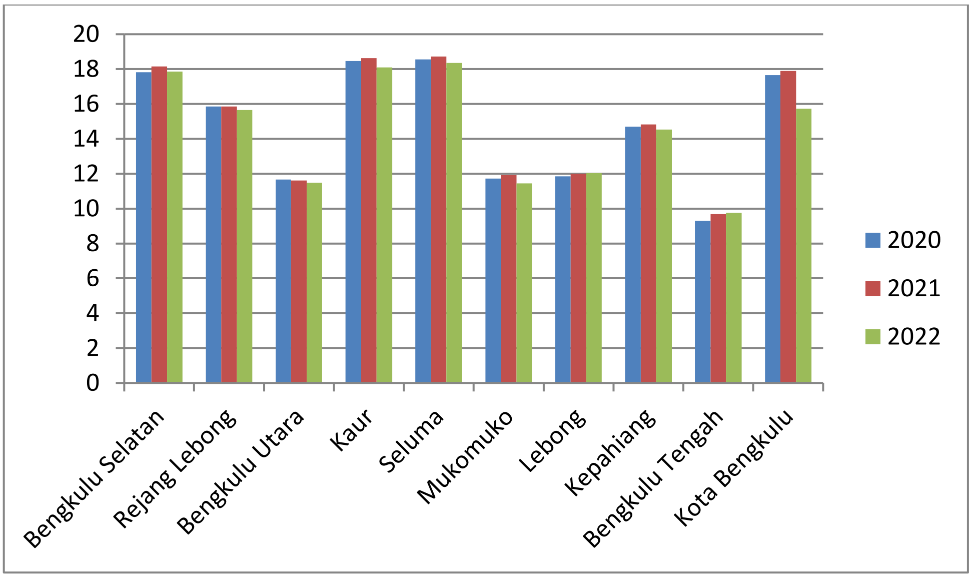

Figure 1. Number of Poor People in Bengkulu Province in 2020-2022
Source:(Bengkulu Province Central Statistics Agency dilah 2024)

Figure 1 shows that the number of poor people in Bengkulu province has changed. In 2020-2021, South Bengkulu Regency experienced a fairly high increase, namely from 17.82% to 18.16%, but in 2022 it fell to 17.86%, while North Bengkulu Regency experienced a decrease every year from 11.67%. in 2020 it will be 11.61% in 2021 and 11.48% in 2022. Kaur district experienced fluctuations from 18.47% in 2020 to 18.62% in 2021, but in 2022 it decreased to 18.10%. Followed by Seluma Regency, Muko-Muko, Bengkulu City and Kepahiang which also experience fluctuations up and down every year. Lebong Regency experienced an increase in poverty every year from 2020 by 11.85% to 12.00% in 2021 and 12.03% in 2022. Apart from that, Central Bengkulu also experienced an increase every year from 2020 of 9.30% in 2021 to 9.68% and in 2022 it will be 9.76%. For North Bengkulu district, in 2020-2021 there was no change in the number of poor people, namely 15.85%, but in 2022 it will decrease to 15.65%.

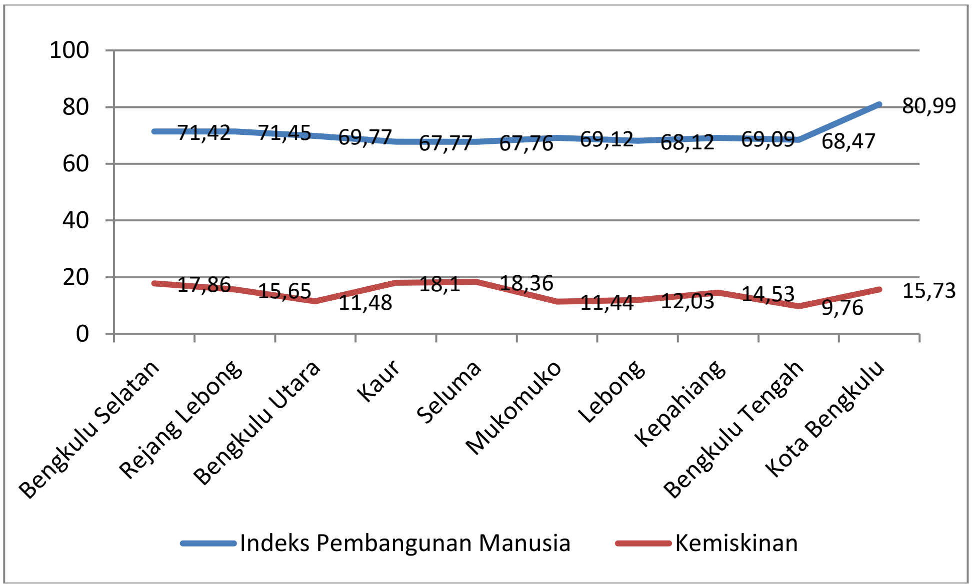

Figure 2. Human Development and Poverty Index for Bengkulu Province in 2022
Source:(BPS Bengkulu Province,processed 2024)

From the picture above, it can be seen that there are variations in the Human Development Index (HDI) and poverty levels in Bengkulu areas in 2022. Bengkulu city has the highest HDI at 80.99% with a poverty rate of 15.73%. while Seluma district has the lowest HDI at 67.76%, with the highest poverty rate at 18.36%. Central Bengkulu district with an HDI of 68.47% has the lowest poverty rate of 9.76%. Next, South Bengkulu district with an HDI of 71.42% has a poverty rate of 17.86%. followed by Rejang Lebong with an HDI value of 71.45% and a poverty rate of 15.65%. Kaur district with a low HDI value after the previous year of 67.77% had a poverty rate of 18.1%. Muko-Muko district with an HDI of 69.12% has a fairly low poverty rate of 11.44%. Lebong Regency has a HDI of 68.12% with a poverty rate of 12.05%. Kepahiang district has a HDI of 69.09% with a poverty rate of 14.53%. North Bengkulu with an HDI of 69.77% has a poverty rate of 11.48%.

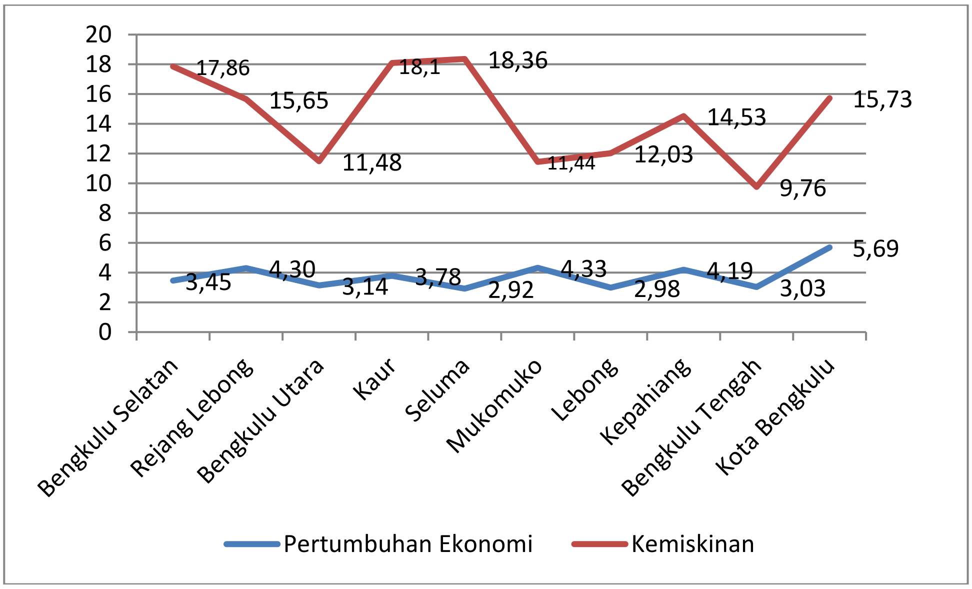

Figure 3. Economic Growth and Poverty of Bengkulu Province in 2022
Source:(BPS Bengkulu Province,processed 2024)

From data on economic growth and poverty levels in the Bengkulu region in 2022, fluctuations can be seen. Bengkulu city has the highest economic growth of 5.69% with a poverty rate of 15.73%. while Seluma district had the lowest economic growth at 2.92%, with the highest poverty rate at 18.36%. Central Bengkulu district with economic growth of 3.03% has the lowest poverty rate of 9.76%. Furthermore, South Bengkulu Regency with economic growth of 3.45% has a poverty rate of 17.86%. followed by Rejang Lebong with an economic growth value of 4.30% and a poverty rate of 15.65%. Kaur district with an economic growth value of 3.78% has a poverty rate of 18.1%. Muko-Muko district with economic growth of 4.33% has a fairly low poverty rate of 11.44%. Lebong Regency had low economic growth after the previous year, namely 2.98% with a poverty rate of 12.05%. Kepahiang district had economic growth of 4.19% with a poverty rate of 14.53%. North Bengkulu with economic growth of 3.14% has a poverty rate of 11.48%.

Based on previous studies conducted by (Bawowo et al., 2022). shows that the HDI variable has a negative and significant influence on the poverty level. Studies (Padambo et al., 2021) shows that the Human Development Index does not affect poverty. In line with the study conducted by (Andhykha et al., 2018). shows that the Human Development Index has no effect on poverty. study from (Kotambunan et al., 2016) shows that the human development index has no effect on poverty, namely because the HDI is only an indicator of welfare so that if the HDI increases it does not determine whether poverty will decrease. study conducted by (Kiray et al., 2023) shows that gross regional domestic product has an impact on poverty levels while the human development index has a significant negative impact on poverty levels. study from (Suryani et al., 2023) shows that the Human Development Index has an influence on poverty levels because a higher HDI value indicates a high quality of life and GRDP has an effect on poverty levels. Studies (Dharmmayukti et al., 2021) shows that the Human Development Index has a positive and significant influence on poverty. Studies (Syahputri & Fisabilillah, 2022) shows that GRDP has no effect on poverty. namely because there is unequal distribution of income and also those who enjoy economic growth are only the middle and upper classes.

Based on the background description above, it shows the importance of research in the Bengkulu Province region regarding the influence of the Human Development Index (HDI) and Gross Regional Domestic Product (GRDP) on poverty in 2020-2022.

2. Literature Review

2.1 Poverty

Poverty is when a person or household faces economic problems that prevent them from achieving the standard of material well-being common in a particular area (Permana & Pasaribu, 2023). according to (Azriyansyah, 2022) Poverty can be defined as a lack of resources that can be used to improve one's welfare. This situation of deprivation includes lack of capital, lack of knowledge and skills, low productivity, low income, low exchange value for the products of the poor, and lack of opportunities to participate in development. According to (Roseline et al., 2022) Based on the circle of poverty theory introduced by Nurks, there are three main factors that cause poverty: first, backwardness and underdevelopment of human resources (HR), which is indicated by the low human development index, second, market imperfections, and third, lack of capital and low productivity. Low productivity causes the low income they receive as shown by the GDP rate.

One of the figures in marginal alien theory is Oscar Lewis (1966). This theory says that in every region there must be people who have a low level of living or are poor. The concept of a culture of poverty is very well known. According to Lewis, a culture that doesn't care about the progress of the times and wants to live as it pleases without any feeling of wanting to live a much better life, is resigned to circumstances, lack of education and knowledge, lack of ambition to build the future, and crime and violence are the causes of every society throughout the world becomes poor. Arthur Lewis argued that a vertical flow from rich people to poor people would occur naturally after the level of economic growth. The benefits of economic growth will be felt by the rich first, and then the poor will start to benefit when the rich start spending the results of economic growth. In other words, poverty will only be reduced on a very small scale if poor people receive only a small amount of all the benefits brought about by economic growth.

2.2 Human Development Index

The human development index is a measure that assesses the impact of regional development performance on the population's quality of life, living standards and education (Y. Sari et al., 2020). The human development index is a combination of several indices. the health index shows life expectancy; the education index shows the average years of schooling and literacy rate; and the purchasing power index shows adjusted real expenditure per capita or purchasing power. These three indicators are considered to show the level of welfare and success of human development in an area (Maulana et al., 2021). One of the factors that determines the level of poverty is the quality of human resources. which can be measured using indicators such as the quality of life index or human development index. A low HDI is associated with a decrease in labor productivity in a population. there is a correlation between low productivity and low income, therefore, those with limited financial resources may experience a higher prevalence of poverty.

Endogenous growth theory emphasizes that savings and human capital are essential for economic growth and development. Robert E. Lucas and Paul Romer support the endogenous growth theory, which explains that human capital determines the level of output. In the long run, an increase in labor will result in increasing returns to scale in aggregate production (Mankiw, 2007). Endogenous growth theory also emphasizes the role of externalities in determining the rate of return on capital investment. There is an assumption that public and private investment in human resources increases productivity so as to compensate for decreasing returns to scale. According to Todaro (2003), endogenous growth theory attempts to explain various growth patterns and increasing returns to scale.

Based on previous studies conducted by (Nurlita et al., 2017) shows that the Human Development Index has a significant negative relationship between the number of poor people in the city of Samarinda from 2003 to 2015. In other words, every change in the human development index will have an impact on the number of poor people, an increase in the human development index will result in a decrease in the poverty level. This means that poverty can be influenced by the level of education and health as indicators included in human development. If the government makes improvements in the health sector, it can improve the overall health of society, and school-age children can receive good lessons at school. if employees have sufficient skills and knowledge, their productivity and income will increase. this results in economic improvement, which in turn reduces poverty. the same results were also shown by the study (Azriyansyah, 2022; Dieda et al., 2023; Efendi, 2023; Nisa, 2022) it was found that the human development index (HDI) showed a fairly large impact and negative correlation on the prevalence of poverty. study from (Ramdhani, 2022) The results of the Human Development Index test show a positive influence on the poverty level in DKI Jakarta Province. A short-term strategy to overcome poverty is to give priority resources to people at the bottom. One way to achieve this is by creating jobs.

2.3 Gross Regional Domestic Product

Gross regional domestic product is the total amount of added value of goods and services, or the final value of goods and services produced by all business units in a certain region (Satria, 2022). Per capita GDP in an area reflects the average ability of people's income to meet people's needs, especially basic needs. One indication of prosperity that comes from the aspect of income distribution in the regions is fulfilling the basic needs of the community (Noble & Putri, 2022). studies have shown that GRDP has a negative and significant impact on poverty levels in certain regions. for example, research (Fatmasari, 2022) using the multiple linear regression method, time series data shows that economic growth has a negative and significant impact on poverty in East Kalimantan province. in other words, economic growth can reduce poverty in East Kalimantan province, although this reduction is not significant. The results of this research cannot be accepted by the neo-liberal paradigm, which considers poverty as the result of free market mechanisms. according to this approach, market forces are the main key to solving the problem of poverty because the expansion of market forces and economic growth will eliminate poverty, so that economic growth plays a role in reducing poverty by increasing market forces in creating jobs and providing income for the community which is caused by the fact that growth output in certain sectors, especially mining and quarrying, as well as agriculture, forestry and fisheries, is largely controlled by mining and agricultural companies, as a result, income distribution is unequal across all levels of society.

Another study from (Syahputri, 2022) with multiple linear regression, time series data type, the research results show that GRDP has a significant and negative impact on poverty in East Java province. The results of this research follow classical theory, which says that economic growth depends on natural resources, labor, productivity and technology. Thus, progress and improvement in this matter will be able to encourage an increase in GRDP, with a tendency to increase GRDP in East Java. However, as a result of the Covid-19 pandemic, GRDP fell in 2020 because economic conditions were unstable and experienced a recession, which had an impact on all economic sectors responsible for driving the economy. Entering 2021, however, GRDP will again increase rapidly as economic activity recovers and develops, including investment, consumption and exports. Ultimately, efforts to gradually increase GRDP will be able to increase productivity through increasing purchasing power and consumption, which in turn will have an impact on production activities. Apart from that, the growth of economic activities will be able to create jobs, which in turn will have an impact on community welfare because the income generated from these economic activities will improve community welfare.

Study (Suripto & Subayil, 2020) shows that economic activities carried out can increase people's income and welfare. GRDP is observed through the use of resources that can create jobs, resulting in increased production, which in turn can increase people's income and increase employment. As a result of this economic activity, poverty will decrease. The results of this research follow classical theory, which says that economic growth depends on natural resources, labor, productivity and technology. Therefore, it will be able to encourage an increase in GRDP if there is progress and improvement in this matter. Study from(Hasibuan, 2023)Economic growth between 2014-2019 was not effective in reducing poverty in Indonesia, indicating that economic growth does not affect poverty. Poor people have not been affected by economic growth. Economic growth will not reduce poverty if it is not followed by poor people in areas such as agriculture. Economic growth from 2014-2019 was supported by consumption more than investment or capital, so economic growth did not absorb poverty directly. Study from (Faadihilah, 2023) The results of the analysis show that economic growth in Bekasi Regency in 2006–2020 did not have a negative impact on poverty. This is because economic growth has not succeeded in reducing poverty levels. This means that this increase has not spread to all income groups, including those who are poor.

The thinking framework discusses the logical flow of variables in research. This research framework consists of three variables: Human Development Index (X1) Gross Regional

Domestic Product (X2) and Poverty Rate is variable Y. The research framework is described as

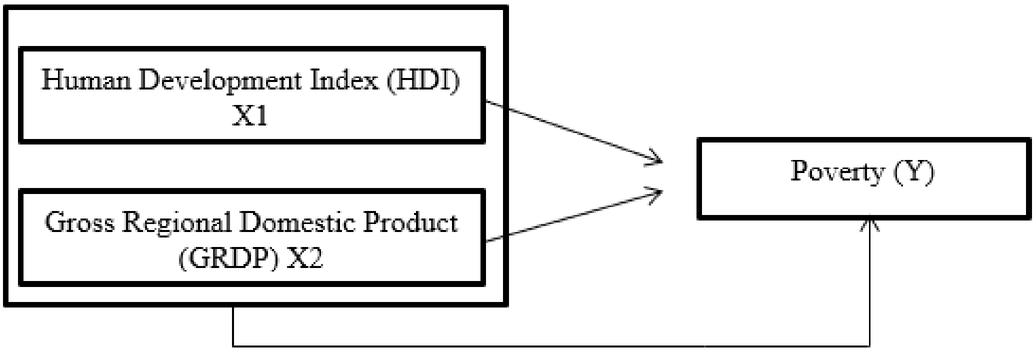

Figure 4. Framework of thinking
Source: Theoretical Study (processed by the author)

Based on the framework above, the following hypothesis is formulated:

1. It is suspected that the Human Development Index has an influence on poverty in Bengkulu Province in 2020-2022.
2. It is suspected that Gross Regional Domestic Product influences poverty in Bengkulu Province in 2020-2022.
3. It is suspected that the Human Development Index and Gross Regional Domestic Product have an influence on the poverty rate in Bengkulu Province in 2020-2022.

3. Research Methods

The data used in this research is secondary data originating from the Central Statistics Agency. The type of data used is panel data, namely combined data from time series and cross sections. Secondary data taken from BPS is human development index data, gross regional domestic product, and the number of poor people per district and city in Bengkulu Province from 2020-2022. This research uses quantitative analysis, which means it uses statistical calculations. Using the multiple linear regression analysis method, it is used to evaluate the relationship between the dependent variable and the independent variable.

Multiple linear regression models with panel data have three different approaches. The first, the Common Effect Model (CEM) only combines time series and cross-section data, and does not pay attention to time or individual dimensions, so it is assumed that the behavior of the data is the same in various time periods. The second approach, Fixed Effect Model (FEM) only combines time series and cross-section data. Third, the Random Effect Model (REM) model will estimate panel data where disturbance variables can be interconnected both between individuals and over time.

Several tests can be carried out to select the most suitable model for managing panel data. One of them is the Chow Test, which determines which Fixed Effect or Random Effect is most suitable for estimating panel data. Apart from that, the Hausman Test, which is a statistical test that determines the best technique for choosing Fixed Effect or Random Effect. Then, hypothesis testing is carried out with the t test to determine whether the independent variable has a partial effect on the dependent variable, and the F test is used to determine the total effect of the independent variables on the dependent variable together, and the coefficient of determination R2 value to determine how much influence the independent variable has. on the dependent variable.

$$JpmIt = \alpha + \beta 1(HDI)It + \beta 2(GRDP)It + e$$

The regression model can be written as follows:
JP = Number of Poor Population
It = time series data from 2020-2021 and cross section of 10 districts, cities, Bengkulu province
α = Constant
HDI= Human Development Index
GRDP= Gross Regional Domestic Product
e = standard error (nuisance variable)
Operational Definition and Measurement of the variables used in this research, namely

Table 1. Operational Definition and Variable Measurement

No	Variable name	Variable description	Unit
1.	Poverty	Number of poor people per district/city in Bengkulu province in 2020-2022	Thousands of Souls
2.	Human Development Index	Human Development Index per district/city in Bengkulu province for 2020-2022	Percentage
3.	Gross Regional Domestic Product	GRDP per district/city in Bengkulu province 2020-2022	GRDP at Constant Prices

Source: (BPS Bengkulu Province, processed 2024)

The classical assumption tests used are the multicollinearity test and the heteroscedasticity test

a. The multicollinearity test is the occurrence of a linear relationship between independent variables in a multiple linear regression model (Hilmi et al., 2024). The purpose of multicollinearity is to determine whether or not there is a large or perfect influence between the independent variables in the regression model. If the correlation coefficient value between variables exceeds 0.8, it indicates that there is multicollinearity in the regression model, while a value of less than 0.8 indicates that multicollinearity does not affect the regression model.
b. Heteroscedasticity test, the independent variable factors do not have the same variance value. In contrast, the assumption fulfilled in classical linear regression is that the homoscedasticity variance value is the same (constant). The Glejser test is a method to ensure heteroscedasticity. The probability values of the regression coefficients of the explanatory variables must be checked before performing the Glejser test. We reject the null hypothesis which indicates that there is no heteroscedasticity if the probability value is less than 0.05, and if the probability value is more than 0.05, then we accept the null hypothesis.

4. Results And Discussion

This research describes the research results based on statistical descriptions and logistic regression test results. This description can be seen in table 2 below

Table 2. Statistical Description of Research Data

Variable	Obs	Mean	Std. Dev	Min	Max
Poverty	30	30,195	15,450	10,790	69,120
Human Development Index	30	69.91833	3.871340	66.89000	80.99000
GRDP	30	4820329	3988226	2126720	16733936

Source: Eviews data processed by the author, 2024

Based on Table 2, it can be seen that the lowest poverty is 10,790 thousand people with the highest poverty being 69,120 thousand people with an average of 30,195 thousand people. The GRDP variable has a minimum value of 2126720 billion rupiah and a maximum value of 16733936 billion rupiah with an average of 4820329 billion rupiah and a standard deviation of 3988226 billion rupiah. The human development index variable has a minimum value of 66.89% and a maximum value of 80.99% with an average of 69.91% and a standard deviation of 3.87%.

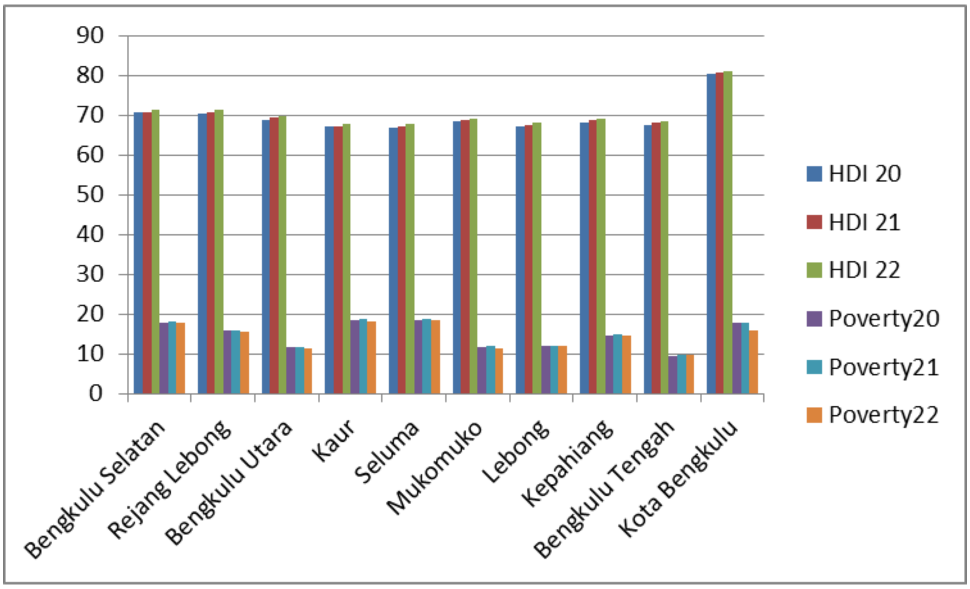

Figure 5. Relationship between HDI and Poverty in 2020-2022
Source: (BPS Bengkulu Province, processed 2024)

From the picture above, it shows that HDI has a relationship with poverty in Bengkulu province. where when the HDI increases each year it is followed by a fluctuating increase in poverty. Where several districts in Bengkulu province continue to experience an increase in HDI every year and also an increase in poverty, such as in Lebong district, when HDI continues to increase, poverty will also increase. Like Muko-Muko district and Bengkulu city, when HDI experiences an increase every year followed by poverty which falls every year. Likewise with several other districts which continue to fluctuate up and down between HDI and poverty in 2020-2022

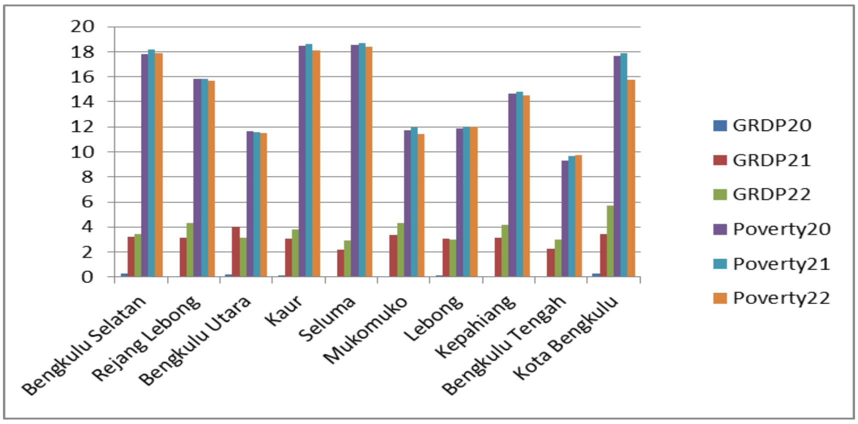

Figure 6. Relationship between GRDP and Poverty in 2020-2022.
Source: (BPS Bengkulu Province, processed 2024)

Based on the picture above, there is a relationship between GRDP and poverty in Bengkulu province. Where when there is economic growth, the level of poverty also decreases and some also increase. such as in Central Bengkulu district where when GRDP increases, poverty will also increase every year. In Rejang Lebong district, when GRDP experiences an increase, the poverty level will decrease every year. Several other districts, such as Kaur, Seluma and Muko-Muko, continue to experience fluctuations between GRDP and poverty levels in Bengkulu province in 2020-2022.

Table 3. Classic Assumption Test

1.	**Multicollinearity Test**	
	Human Development Index	GRDP
Human Development Index	1,000000	0.772716
GRDP	0.772716	1,000000
2.	**Heteroscedasticity Test**	
	Coefficient	Prob
Human Development Index	-175.92	0.479
GRDP	0.0002	0.485

Source: Eviews data processed by the author, 2024

Based on the table above, the classical assumption test has a correlation value between X1 (Human Development Index) and X2 (GRDP) of 0.77 < 0.8, so there is no multicollinearity problem.

Based on table 3, the results of the heteroscedasticity test using the Glejser test, it can be seen that there is no heteroscedasticity problem. This is because the probability value of each independent variable is greater than 0.05, so there is no heteroscedasticity problem

Table 4. Correlation and Regression Results

Variable	**Poverty**		
	Fixed Effects	**Random Effects**	**Common Effects**
Human Development Index	2,142,402***	1642820**	-1445.717
	(0.0042)	(0.0158)	(0.3658)
GRDP	-0.007236***	-0.001242	0.004759**
	(0.0000)	0.1425	(0.0043)
T-statistical test			
Human Development Index	3,278	2,574	-0.919
GRDP	-6,468	-1,510	3,119
F-Statistic Test	597.45	1,101	46,395
R Test	0.99	0.69	0.75

Source: Eviews data processed by the author, 2024

From the regression results using fixed effect, random effect and common effect models through the Chow test and Hausman test, the best regression results were obtained, namely using the fixed effect model.

Based on the table above, the results of the t-statistical test on Variable X1 (Human Development Index) obtained a calculated t value of 3.278 > t table2.048 and a significant value of 0.0042 <0.05, then H0 is rejected and Ha is accepted, meaning that the HDI variable has an effect on poverty. sThe results of the t-statistical test on Variable X2 (GRDP) obtained a calculated t value of 6.468 > t table2.048 and a significant value of 0.000 < 0.05, then H0 is rejected and Ha is accepted, meaning that the GRDP variable has an effect on poverty.

Based on the table, the F-statistical test is obtained with a calculated F value of 597.45 > F table 4.195972 and a significant value of 0.0000 < 0.05, so H0 is rejected and Ha is accepted, meaning that the variables HDI and GRDP have an effect on poverty in Bengkulu province.

The adjusted R Square value is 0.99 or 99%. The coefficient of determination value shows that the independent variables consisting of HDI and GRDP are able to explain the poverty variable in Bengkulu province.

From the regression results above, the following multiple linear regression equation is obtained:

$$\text{Poverty} = - 8471 + 2142\ (\text{HDI}) - 0.007\ (\text{GRDP}) + e$$

Based on this equation, it can be explained that when the constant is negative -8471, this shows that if the HDI and GRDP change, then poverty will remain at -8471. The HDI regression coefficient is positive at 2142, this shows that when the HDI increases, poverty will also increase by 2142 assuming the other independent variables are constant. The GRDP regression coefficient is negative at -0.007, this shows that if economic growth increases it will reduce the amount of poverty by 0.007.

The human development index variable has a positive and significant influence on poverty in Bengkulu province in 2020-2022. Where the significant value of the HDI variable is 0.0042 <0.050. This is in accordance with the hypothesis proposed at the beginning of the research. The Human Development Index has a positive and significant influence on poverty levels, where every 1% increase will increase poverty by 2142.

The influence of GRDP on poverty levels shows that the significance value is 0.0000 with a regression coefficient of -0.0072. A significance value of 0.000<0.050 indicates that H0 is accepted and H1 is rejected. By considering this description, it can be concluded that GRDP has a negative and significant impact on poverty levels. This means that increasing GDP will reduce poverty.

According to (Zulyanto, 2016) In Bengkulu province, most of the expansion areas and several districts are undeveloped areas and have little infrastructure and public facilities, as well as poor socio-economic and health facilities. As a result, the expansion area will achieve a low HDI value. On the other hand, expansion regions are still largely dependent on the central government for funding. At the same time, their local potential has not been fully controlled due to limited infrastructure and other resources so that there is inequality that occurs in Bengkulu province, namely equality that occurs only in the city of Bengkulu, giving rise to development inequality, but even though urban areas have infrastructure, education and adequate health insurance, inequality can still occur because development programs are not running well. The results of this research are also in line with the study (Meriyanti, 2015) regarding the influence of the human development index on poverty in Buleleng sub-district where the human development index has a positive and significant influence on poverty. One of the reasons there is a positive and significant relationship between HDI and poverty is because HDI development in Indonesia has not provided benefits for the entire community, this causes inequality which has a disproportionate or uneven impact on certain regions or areas.

In 2020-2022, several districts of Bengkulu province experienced an increase in GRDP every year, such as Rejang Lebong and Kepahiang districts, which dominate the agricultural sector, which were actually able to increase income and reduce poverty, and the city of Bengkulu, which dominated the goods and services sector, was able to support the poverty rate. So the dominance of the GRDP sector in several districts has the effect of reducing poverty levels. This research is in line with the study (Manangkalangi et al., 2020) regarding the influence of GRDP and inflation on poverty in Central Sulawesi province which states that several sectors that dominate in each region will have an influence in reducing poverty and if

GRDP increases then poverty will decrease. This research is also in accordance with the study (Oktaviana et al., 2021) shows that GRDP partially has a negative and significant effect on poverty in Madiun district. Poverty in Madiun Regency is increased by agricultural economic growth, especially the agricultural sector. In 2020, Madiun district had rice production of 453.54 thousand tons of GKG (milled dry grain), ranking 7th highest in East Java. This district is also the center of the food crop farming industry in East Java. By implementing a program to improve pre- and post-harvest management in Madiun district, the regional government of Madiun district can see agricultural management as a way to increase economic growth.

5. Conclusions And Recommendations

Partially, the Human Development Index has a positive and significant impact on poverty in Bengkulu province in 2020-2022. Gross Regional Domestic Product has a negative and significant impact on poverty in Bengkulu province in 2020-2022. Simultaneously HDI and GRDP influence poverty in Bengkulu province in 2020-2022. Based on the results and conclusions of the analysis above, there are recommendations that can be proposed, namely by providing public facilities to the community such as education and health, every aspect of economic activity can run more smoothly and be provided evenly to all regions in Bengkulu province, which in turn can increase economic growth, improve community welfare, and reduce poverty levels. investment in agricultural infrastructure such as irrigation, transportation networks, and distribution centers to increase market accessibility and enable farmers to deliver crops more efficiently to each agricultural sector in several districts. Encouraging further processing of agricultural products through the food and beverage processing industry, increasing the added value of agricultural products, and wider market access for these products.

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THE INFLUENCE OF INFLUENCER MARKETING, ONLINE CUSTOMER REVIEWS, AND LIVE STREAMING MARKETING ON SKINCARE PURCHASING DECISIONS AT TIKTOK SHOP FOR SANATA DHARMA UNIVERSITY STUDENTS.

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ABSTRACT

This study aims to determine the effect of influencer marketing, online customer reviews, and live streaming marketing on purchasing decisions for skincare products at TikTok Shop (Case Study of Students Sanata Dharma University). This research uses a quantitative approach. The sampling technique used is non-probability sampling with the purposive sampling method. Sampling with a total of 100 respondents. The data collection technique was carried out by distributing questionnaires. Data analysis techniques using data analysis techniques Normality Test, Multicollinearity Test, Heteroscedasticity Test, Multiple Linear Regression Test, Simultaneous Test (F Test), Partial Test (T Test). The result of this study indicates that influencer marketing has an effect on purchasing decisions for skincare products. Online customer review affects the decision to purchase Skincare Products. Live Streaming Marketing has an effect on purchasing decisions for Skincare Products on TikTok Shop. With this research, marketers of skincare products can find out how potential it is to use influencers to market product, online customer review about product that have been purchased, and use the live streaming feature on TikTok to market products, of course this can help marketers to improve their skincare product marketing strategy.
Keywords*: Influencer Marketing, Online Customer Review, Live Streaming Marketing, Purchase Decision, TikTok Shop.*

1. Introduction

The current digital era has given birth to various new platforms, one of which is TikTok, which not only functions as social media, but has penetrated into the realm of E- commerce through the TikTok Shop feature. TikTok Shop is an e-commerce platform that utilizes the power of influencers and live streaming features in promoting products, and reaching customers more broadly. The platform allows users to shop for products that have been promoted by their favorite influencers or content creators. In 2023, active TikTok Shop users have penetrated more than 99 million users (DataBoks, 2023), this has caused sales on the TikTok Shop feature to experience rapid growth with a transaction value of Rp. 1.3 Trillion per month in 2023 for the Fast, moving, consumer good or FMCG category (Binus, 2023). The largest transaction growth was in the skincare category, amounting to Rp. 722 billion. This phenomenon occurs due to increased consumer awareness of skin health and beauty, especially among teenagers. The main research problem is to investigate how influencer marketing, customer reviews, and live streaming influence the purchase decision of skincare products at

TikTok Shop, with a particular focus on sanata dharma university students as TikTok Shop users.

From previous research conducted (Agustin, 2022) obtained the results that influencer marketing has a significant influence on purchasing decisions for skincare products at the TikTok shop. Then research on customer reviews conducted by (Suwondo & Noor Andriana, n.d.) that online customer reviews have a positive and significant influence on purchasing decisions for skincare products on TikTok. And finally research on live streaming conducted by (Maulidya Nurivananda et al., 2023) found that live streaming has a positive influence and a significant impact on purchasing skincare products on TikTok. Based on the results of previous research described above, this study was made to determine whether there is an influence of influencer marketing, customer reviews, and live streaming on skincare purchasing decisions on Tiktok where this research will be conducted on active students in the city of Yogyakarta. Previous research ignores specific contexts, such as active university students in Yogyakarta, by focusing more on broader demographics. In addition they tend to separate factors such as influencer marketing customer reviews and live streaming without considering their potential combined effects. For example, one study only limited demographics to the city of Samarinda and focused on the evaluation of a single skincare product, reducing a holistic understanding of the actual market dynamics.

Purchasing decisions made by consumers can be influenced by several factors such as the influence of creative content from influencers, reviews given by consumers who have made purchases, and also marketing strategies carried out such as discounts and usually sellers give discounts when live streaming on TikTok. Many marketing ideas and strategies are carried out by influencers, such as they always create creative content on TikTok so that many people are tempted to buy the products they offer, one of which is skincare products. After consumers are poisoned with skincare products offered by influencers, some of them will immediately make the decision to buy the product but some still want to find further information about the product by looking at reviews from consumers who have already bought the product. And not all consumers will also immediately buy skincare products after they find out about the skincare and find out reviews from previous customers because many consumers will buy products when at certain times that will provide discounts such as for example during live streaming by the seller, and indeed when live streaming the seller gives a price that is much cheaper than the existing catalog and this will make the product more affordable.

Consumers immediately make the decision to buy the product. So influencer marketing, customer reviews, and live streaming will influence purchasing decisions for skincare products on TikTok, because skincare is a product that many people need, especially women.

This research aims at some specific audiences such as, for TikTok The result of this study can help TikTok in understanding the factors that influence purchasing decisions for skincare product among Santa Dharma University students. This information can also be used by TikTok to improve marketing strategies and to improve service features such as live streaming an affiliaties to be more effective and efficient, TikTok can also use the results of this study to increase consumer loyalty and increase its market share. For Student the results of this study will help students understand the concept of purchasing decisions and the factors that influence them. This information helps students make more rational purchasing decisions. Students can use the findings from this study to improve marketing insights and skills. For Marketers the results of this study will help marketers understand the factors that influence student skincare purchasing decisions. This information can e used by marketers to develop more effective marketing strategies for technology products. Marketers can use the results of this study to increase awareness of the importance of the role of influencer marketing, online customer review, and live streaming.

This study aims to examine in depth the influence of influencer marketing, online customers review, and live streaming on skincare purchasing decision on TikTok on students of Sanata Dharma University. Testing the hypothesis of this study using regression analysis, Discussion of the research, its practical implications, and further research suggestions are explained later.

The rapid development of social media has changed consumer behavior and thinking patterns in making purchasing decisions. One of them is TikTok. TikTok is a popular social media that has presented the TikTok Shop feature which allows users to shop online. In this context, digital marketing strategies such as Influencer marketing, Online customer reviews, and Live streaming marketing are important factors that can influence consumer purchasing decisions.

Based on the Elaboration Likelihood Model or ELM theory (Petty & cacioppo 1984), Influencer Marketing can influence consumer purchasing decisions through the central route (involving deep cognitive processes) and peripheral route (involving simpler cognition, where consumers are more easily influenced by external factors such as the attractiveness of influencers). Influencers who are credible and have closeness with their followers (Najwah & Chasanah, 2022) can build trust and encourage consumer purchasing decisions.

In processing purchasing decisions, consumers prefer products and make purchasing decisions based on information and product recommendations from other users (Online Customers Review), this is supported by Social Cognitive Theory (Bandura, 1997) which states that, providing information and product recommendations, the consumer is more likely to make purchasing decisions based on information and product recommendations from other users can help consumers make purchasing decisions. Consumers tend to buy products and imitate the behavior of others who are considered trusted, including positive reviews from other users (Nurvitasari & Dwijayanti, 2021).

The existence of online interactions between sellers and buyers in real-time, can create a more interactive, personalized and interesting shopping experience (Mokodompit et al., 2022). Of course, this can build and increase consumer confidence in the product, so that consumers can make purchasing decisions easily.

2. Literatur Review And Hypothesis Development

2.1 Literatur Review

2.1.1 Influencer Marketing

Influencer Marketing is a person who has a very important influence in influencing consumer purchasing decisions by providing information about the products offered (Kotler & Keller, 2016: 326). Influencer *Marketing* is a *digitalmarketing* strategy that utilizes the power of an *influencer* to promote products and services to a specific target *audience* and can influence others to make purchasing decisions. The role of *Influencers* can be as *endorsers*, and *brand ambassadors* who can be found in various social media (Agustin & Amron, 2022). The *Influencer Marketing* indicators that influence consumer purchasing decisions are *Influencer*content, insight, and clarity of product information delivery.

2.1.2 Online Customer Review

Online Customer Review (OCR) is one of the *word of mouth* communication trategies in *online* sales *(*Ramadan et al., 2021). *Customer* reviews can provideimportant information to potential buyers about the benefits of the product. OCR can help potential buyers in assessing product quality and in making purchasing decisions (Kanitra, 2018). The *Online Customer Review* indicators that influence consumer purchasing decisions, namely, ease of access to information, trust, and honesty of consumer *online* reviews.

2.1.3 Live Streaming Marketing

Live Streaming Marketing is a broadcast conducted *online* or in *real-time* that enables business to business (B to B) and business to consumer (B to C) communication (Zhang, 2019). *Live Streaming Marketing* is a digital marketing strategy that utilizes the live broadcast feature of social media to promote products, brand services, and communicate with audiences in *real-time* to build more interactive relationships with audiences (Maulidya Nurivananda et al., 2023b). The indicators of *Live Streaming Marketing* that influence consumer purchasing decisions are, interest in *Live Streaming*, the *host's* ability to introduce products, the speed of communication between buyers and sellers, and the discounts offered.

2.1.4 Purchase Decision

Purchasing decisions are a problem recognition process carried out by consumers by searching for information about products that are considered to solve their problems, and consumers evaluate them first which then leads to purchasing decisions (Mardiana et al., 2021). According to (Kotler & Armstrong, 2016), purchasing decisions are a decision-making process carried out by consumers involving five stages; problem recognition, information search, alternative evaluation,purchase decisions, and post-purchase behavior. Purchasing decisions are made by consumers before buying a product or service. The indicators of purchasing decisions that influence consumer purchasing decisions are, recommendations from people, easeof finding and buying products, and *vouchers* offered.

According to (Razak, 2016) determining purchasing decisions for a product isinfluenced by several factors:

i. Internal Factors

Factors that come from consumers themselves, which are included in internal factors are:

a. Motivation, arising from a need that must be met
b. Perception, the process experienced by consumers to process information into a picture. These images include price perceptions, perceptions of product advertising, and perceptions of product quality.
c. Learning, a form of consumer behavior based on knowledge of aproduct or service that has been used.
d. Personality, Consumers will buy a product according to their personality or lifestyle.

ii. External Factors

External factors that come from outside the consumer, which are included in the internal factors are:

a. Culture, Culture can have a different influence on buying situations, influenced by the values or symbols that are believed.
b. Decisions about the time of purchase, Consumers have different buying patterns regarding the time of purchase.
c. Decisions on Payment Methods, Consumers are free to choose the payment method that best suits their needs when making a purchase. There are several payment methods, namely, cash, bank transfers, debit/credit cards, *e-wallets*, and *paylater*.

2.2 Hypothesis Development

2.2.1 Influence of *Influencer Marketing on Purchasing Decisions*

The existence of content from influencers makes the products they promote spread more widely to the public or consumers, and the information provided by influencers really helps consumers to find out more about these products and makes consumers interested and will make purchasing decisions on these products. In previous research conducted (Dhea, 2024) found that *influencer marketing has a*significant influence on purchasing decisions for *skincare*

products at TikTok *shops*, and these findings are the same as research conducted by Agustin and Amaron (2022).This research can be interpreted that the more influencers who promote products, the consumer purchasing decisions for these products will also increase.
H1: *Influencer Marketing has a* positive and significant effect on *Skincare* PurchasingDecisions on TikTok

2.2.2 The Effect of Online Customer Reviews on Purchasing Decisions

Online Customer Review greatly influences other consumers in making purchasing decisions, because consumers who first buy a product will give an honest review of the product. So honest reviews from consumers who first become a big consideration for other consumers to make purchases, so if the Online Customer Review gives a positive review of a product, there is a big hope for other consumers to make a purchase decision on the product.

Previous research conducted by (Lisa, 2024) that online customer reviews have a positive and significant influence on purchasing decisions for skincare products on TikTok. From this study, it can be interpreted that the reviews given by consumers of products make purchasing decisions increase.
H2: Online Customer Review has a positive and significant effect on Skincare Purchasing Decisions on TikTok.

2.2.3 The Effect of Live Streaming Marketing on Purchasing Decisions

Live Streaming is a marketing strategy that is developing and is widely used by sellers at TikTok Shop, many consumers make purchases when live streaming takes place, this is because through live streaming sellers and consumers can easily and quickly communicate, if consumers want to ask questions about products they can quickly get answers from the seller or live streaming admin, and the main reason why consumers prefer to make purchases when live is because of the price discounts provided by the seller or admin and vouchers that can only be used for orders via live streaming. This is what makes live streaming really influence consumers to make purchasing decisions.

Research that has been conducted by (Shahnaz, 2023) found that live streaming has a positive influence and a significant impact on purchasing skincare products on TikTok. So from previous research it can be interpreted that direct interaction between sellers and buyers provides an interesting shopping experience and plus the discount given during live streaming makes purchasing decisions increase.
H3: live streaming marketing has a positive and significant effect on Purchasing Decisions Skincare on TikTok

Frame of Thought

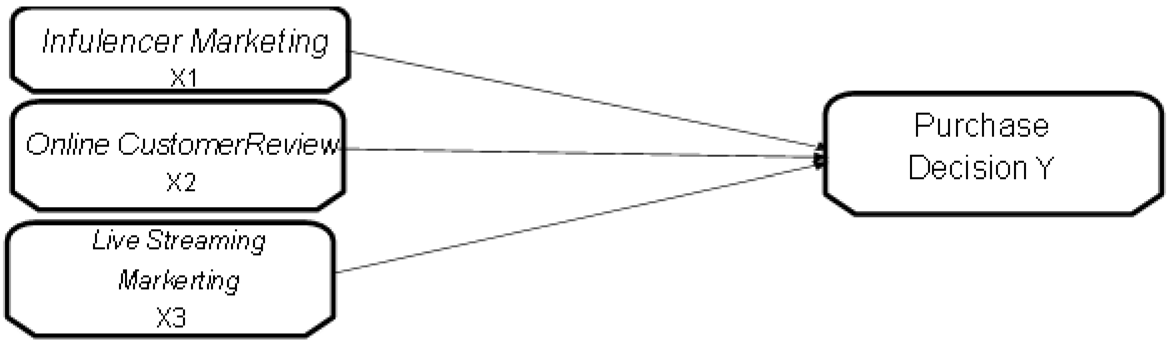

Figure 1. Frame of Thought

3. Research Methods

3.1 Research Design

This research method uses a quantitative approach, where the quantitative approach is an approach in which it uses a lot of numbers, which is used to examine certain populations or samples, data collection using research instruments, and data analysis is quantitative or statistical with the aim of testing predetermined hypotheses. This research aims to explain the casual relationship between the independent variables (influencer marketing, online customer, and live streaming marketing) and the dependent variable (purchase decision).

3.2 Population and Sample

3.2.1 Population

The population in this study were all students of Sanata Dharma University Yogyakarta use the TikTok app.

3.3 Sample

The sample in this study was taken using nonprobability sampling technique (purposive sampling). Where the data used in this study is data from the results of field observations, namely by distributing questionnaires in the form of Google Forms to respondents via WhatsApp and Instagram. The characteristics of the respondents in this study are:

1) Active students of Sanata Dharma University who use the TikTok app
2) Ever shop for skincare at Tiktok Shop
3) Ever seen skincare influencer content on TikTok app
4) Ever seen an online customer review of skincare on the TikTok Shop application
5) Ever seen live streaming skincare on TikTok app

The calculation of the sample size is calculated using the Rao Purba formula as in previous research conducted by (Agustin, 2022), Rao Purba is a formula used to determine the sample size of an infinite population, as for the calculation as follows:

$$n = \frac{Z^2}{4\,(Moe)^2}$$

$$n = \frac{1{,}96^2}{4\,(0{,}10)^2}$$

$$n = 96{,}04$$

Description:
n = Number of samples
Z = 95% sampling confidence level or 1.96 Moe = Maximum tolerable error rate, usually 10%

From the above calculations, it shows a value of 96.04, it is concluded that the minimum sample size is 96 people, therefore the researcher decided on the number of respondents. Used in this study were 100 respondents to fulfill the adequacy of the sample because it is likely that the distribution pattern of characteristics investigated in the population is well distributed in the subjects drawn as samples and data processing and data processing was calculated using SPSS.

3.4 Data Analysis Technique

This research uses a data collection method in the form of a questionnaire that contains statements to clarify the indicators of each variable and is distributed online through social media platforms such as WhatsApp, Instagram, Line, and others. This approach proves effective for researchers if they have an accurate understanding of the variables being measured and the expectations of respondents. The population used in this study are active students of Sanata Dharma University who have TikTok social media accounts and have shopped online through TikTok Shop, researchers need 100 respondents who have been calculated based on the Rao

Purba formula as a sample in this study. This research was also conducted based on data obtained from Databoks, social media, and previous studies. As for some data analysis techniques and processes that will be used and carried out in this study as follows.

3.4.1 Normality Test

The Normality Test is conducted to test whether in a regression model, an independent variable and the dependent variable or both have a normal or abnormal distribution (Ghozali, 2016). As is known, the T and F tests assume that the residual values follow a normal distribution. If there is a violation of this assumption, the statistical test becomes invalid for a small sample size. The data normality test can be done using the One Sample Kolmogorov Smirnov test, namely, if the significance result is above 5% or 0.05, the data has a normal distribution. If the One Sample Kolmogorov Smirnov test results produce a significant value below 5% or 0.05 then the data does not have a normal distribution.

3.4.2 Multicollinearity Test

Multicollinearity testing is carried out to determine whether the regression model performed shows a correlation between independent variables or independent variables (Ghozali, 2016). Multicollinearity has an effect that causes high variables in the sample. This means that the standard error is large, as a result the coefficient is tested, the t-count will be smaller than the t-table. The provisions of the Multicollinearity Test are, First, based on the Tolerance Value, if the tolerance value is greater than 0.10 then there is no multicollinearity. If the tolerance value is smaller than 0.10 then multicollinearity occurs. Second, based on the VIF value, if the VIF value is < 10.00, it means that there is no multicollinearity in the regression model. If the VIF value> 10.00, it means that there is multicollinearity in the regression model.

3.4.3 Heteroscedasticity Test

The purpose of the Heteroscedasticity Test is to determine whether the variance discomfort in the regression model occurs between residuals from one observation to another. If the variance is different, it is called Heteroscedasticity. The way to determine the presence or absence of Heteroscedasticity in a multiple linear regression model, namely by looking at the Scatterplot graph or from the predicted value of the dependent variable, namely SRESID. With the residual error, ZPRED. If there is no certain pattern and does not spread above or below zero on the y-axis, it can be concluded that there is no Heteroscedasticity.

3.4.4 Multiple Linear Regression Test

Multiple linear regression tests are used to see whether the model built has a linear relationship or not. This test model is to find information related to the magnitude of the influence of variable X on variable Y.

3.4.5 Simultaneous Test (F Test)

The simultaneous test (F test) aims to determine whether the regression model analyzed is good enough to explain the relationship (bound) between the independent and dependent variables.

Simultaneous Test Terms (F Test):

i. Based on the significance value of the Anova Output
   a. If the significance value <0.05 then there is an effect of X1, X2, X3 simultaneously on y.
   b. If the significance value> 0.05 then there is no simultaneous influence of X1, X2, X3 on y.

ii. Based on the comparison of the calculated F value with the F table
   a. If the value of F count> F table then there is an effect of X1, X2, X3 simultaneously on Y.
   b. If the value of F count < F table then there is no simultaneous influence of X1,X2, X3 on Y.

3.4.6 Partial Test (T Test)

Partial Test (T Test) aims to determine whether the independent variable or independent variable (X) partially affects the dependent variable (Y).

Partial T test conditions:

i. Significance value (Sig.)
   a. If the sig value <0.05 then there is an influence of the independent variable (X) on the dependent variable (Y).
   b. If the sig value> 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y).

ii. Based on the comparison of the t value with the t table
   b. If the t value> t table then there is an influence of the independent variable (X) on the dependent variable (Y).
   c. If the calculated t value < t table then there is no influence of the independent variable (X) on the dependent variable (Y).

4. Discussion

4.1 Description of Respondent Characteristics

Based on the testing conducted, the researcher shows that 46.5% of respondents are in the age range of 21-25 years, while 53.5% of respondents are in the 18-20 years, 75.2% are female and the remaining 24.8% are male. Based on the data collected, it can be seen that 40.6% of Sanata Dharma University students' income or pocket money is in the range of Rp. 1,000,001-Rp. 2,000,000.

4.2 Research Instrument Test

The test results show that of the 20 statements tested, all meet the validity criteria. Broadly speaking, this validity is determined by evaluating the significance threshold (0.05) and comparing the calculated r value with the r table value. In this case, the r table is 0.1966. In addition, it is evident that each variable has a high level of dependability, this is indicated by the presence of Cronbach's Alpha values above 0.60. This indicates that any statements relating to these variables are considered reliable and dependable (reliable).

4.3 Classical Assumption Test

4.3.1 Normality Test

Table 1. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parametersa,b	Mean	-,0054596
	Std. Deviation	1,82748169
Most Extreme Differences	Absolute	,134
	Positive	,100
	Negative	-,134

Test Statistic			,134
Asymp. Sig. (2-tailed)			,000[c]
Monte Carlo Sig. (2-tailed)	Sig.		,050[d]
	99% Confidence Interval	Lower Bound	,044
		Upper Bound	,055

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. Based on 10000 sampled tables with starting seed 299883525

The significance value of monte carlo is 0.050> 0.05, so the data above is normally distributed.

4.3.2 Multicollinearity Test

Tabel 2

a. Dependent Variable: scoretotaly

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	,614	1,435		-,428	,670		
	scoretotalx1	,279	,103	,234	2,712	,008	,582	1,718
	scoretotalx2	,220	,101	,183	2,174	,032	,607	1,646
	scoretotalx3	,515	,083	,491	6,177	,000	,683	1,464

The tolerance value on each independent variable is:

- Influencer marketing: 0,582
- Online customer review: 0.607
- Live streaming marketing: 0,683

All three values are greater than 0.10, so the data in this study does not occur mutikolenieritas. The VIF values on the independent variables are:

- Influencer marketing: 1,718
- Online customer reviews: 1,646
- Live streaming marketing: 1,464

All three values are smaller than <10, so the data in this study does not occur multicollinearity.

4.3.3. Heteroscedasticity Test

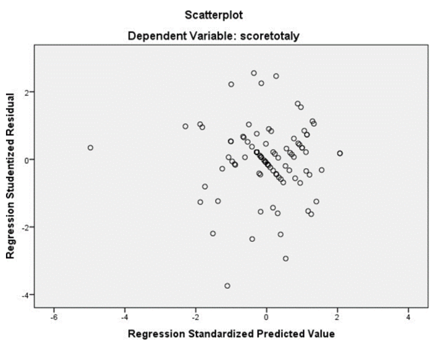

Figure 2

The Scatterplot results above can be seen that the data points do not form a certain pattern and the data spreads above and below the number 0 on the Y axis, therefore it can be concluded that this research data does not occur heteroscedasticity**.**

4.3.4. Multiple Linear Regression Test

Table 3. Model Summaryb

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,765a	,586	,573	1,847

e. Predictors: (Constant), scoretotalx3, scoretotalx2, scoretotalx1
f. Dependent Variable: scoretotaly

The R square value is 0.586 or equal to 58.6%. This figure means that the influencer marketing (X1), online customer review (X2), and live streaming marketing (X3) variables simultaneously (together) affect the purchasing decision variable (Y) by 58.6%. While the rest (100%-58.6%=41.4%) is influenced by other variables outside of this regression equation or variables not examined.

4.3.5. F test

F table is obtained in the distribution of statistical r table values at 5% or 0.05 significance using the formula:

$$Ftable = (k; n\text{-}k)$$

Description:
K = Number of independent variables (free variables or X) n = Number of respondents.

$$Ftable = (3; 3\text{-}100)$$
$$Ftable = (3; 97)$$

From this formula, the Ftable obtained is 2.70.

Table 4. ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	463,005	3	154,335	45,229	,000b
	Residuals	327,585	96	3,412		
	Total	790,590	99			

g. Dependent Variable: scoretotaly
h. Predictors: (Constant), scoretotalx3, scoretotalx2, scoretotalx1

The significant value of the ANOVA table is 0.00 which means that it is below 0.05 so it is concluded that all the independent variables studied have a simultaneous effect (together) on the dependent variable.

The calculated F value is 45.229> F table 2.70, so the independent variables studied simultaneously (together) affect the dependent variable.

4.3.6. T test

The formula for finding the t table value:

T table : (a/2 ; n - k - 1 or residual df)
T table : (0,05/2 ; 100-3-1)
T table: (0,025 ; 96)

Then t table = number 0.0; 96 can be found in the distribution of static t table values. Based on the distribution of the t table, 1.984 is obtained.

Table 5. Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	,614	1,435		-,428	,670		
scoretotalx1	,279	,103	,234	2,712	,008	,582	1,718
scoretotalx2	,220	,101	,183	2,174	,032	,607	1,646
scoretotalx3	,515	,083	,491	6,177	,000	,683	1,464

Dependent Variable: scoretotaly

Influencer Marketing (X1) influence on purchasing decisions (Y)
a. The value of t count 2.712> t table 1.984 then X1 has an effect on Y.
b. The significance value is 0.008 <0.05, so X1 has an effect on Y
The effect of Online Customer Review (X2) on purchasing decisions (Y)
a. The value of t count 2.174> t table 1.984 then X2 has an effect on Y
b. The significance value is 0.032 <0.05, so X2 has an effect on Y
The effect of Live Streaming Marketing (X3) on purchasing decisions (Y)
a. The calculated t value is 6.177> t table 1.984 then X3 has an effect on Y
b. The significance value of 0.000 <0.05 so X3 has an effect on Y

4.4 Multiple Linear Regression Analysis Equation

Table 6

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	,614	1,435		-,428	,670		
scoretotalx1	,279	,103	,234	2,712	,008	,582	1,718
scoretotalx2	,220	,101	,183	2,174	,032	,607	1,646
scoretotalx3	,515	,083	,491	6,177	,000	,683	1,464

a. Dependent Variable: scoretotaly

In this study the multiple regression equation used is:

$$Y = a+b1X1+b2X2+b3X3$$

Description:
Y = Purchase decision
a = Constant
b1 = Influencer marketing regression coefficient
b2 = Online customer review regression coefficient
b3 = Live streaming regression coefficient
X1 = Influencer marketing variable
X2 = Online customer review variable
X3 = Live streaming variable

$$Y = 0.614 + 0.279X1 + 0.220X2 + 0.515X3$$

- The magnitude of the constant is 0.614, which means that there is a positive influence on the independent variables, namely Influencer Marketing, Online Customers Review, and Live Streaming Marketing.
- The regression coefficient value for the Influencer Marketing variable of 0.279 is positive, so the Influencer Marketing variable shows a unidirectional relationship with the Purchase Decision dependent variable. The regression coefficient value of 0.279 means that for each additional variable of one unit, the dependent variable will increase by 0.279.
- The regression coefficient value for the Influencer Marketing variable of 0.220 is positive, so the Online Customers Review variable shows a unidirectional relationship with the Purchase Decision dependent variable. The regression coefficient value of 0.220 means that for each addition of the variable by one unit, the dependent variable will increase by 0.220.
- The regression coefficient value for the Influencer Marketing variable of 0.515 is positive, so the Live Streaming Marketing variable shows a unidirectional relationship with the Purchase Decision dependent variable. The regression coefficient value of 0.515 means that for each one-unit addition of the variable, the dependent variable will increase by 0.5

5. Conclusions, Limitations And Implications

Based on the findings obtained from the analysis, testing and discussion, the following conclusions can be drawn:

1. Influencer marketing variables partially influence or have a significant impact on purchasing decisions for skincare products at TikTok Shop.
2. Online customer review variables partially influence or have a significant impact on purchasing decisions for skincare products at TikTok Shop.
3. Live streaming marketing variables partially influence or have a significant impact on purchasing decisions for skincare products at TikTok Shop.
4. Influencer marketing factors, online customer reviews, live streaming marketing have a positive and statistically significant influence or simultaneously (together) on purchasing decisions for skincare products at TikTok Shop. Therefore, it can be concluded that hypothesis 3 in this study has been supported.
5. Influencer marketing, online customer reviews, and live streaming marketing variables have a positive impact on purchasing decisions for skincare products at TikTok Shop.

There are several aspects to consider in this research. One limitation is the sample size, which consists of 100 respondents. Although their contributions are valuable, these 100 respondents may not be able to cover the entire demographic diversity of Tiktok Shop users. Then, the second limitation is related to the research variables, this study only focuses on three main variables, namely Influencer Marketing, Online Customer Review, and Live Streaming Marketing. This allows additional components to contribute to purchasing decisions that have not been examined in this study.

This study found that Influencer Marketing, Online Customer Review, and Live Streaming Marketing have a statistically significant influence on consumer purchasing decisions on skincare products at TikTok Shop. Therefore, marketers must be able to optimally utilize the TikTok Shop platform in their marketing strategy. Marketers need to design more effective marketing strategies and relevant for skincare products at TikTok Shop. In addition, marketers also need to continue to monitor changes in trends and consumer behavior and update marketing strategies regularly to stay competitive and survive in the competitive market.

Suggestions for sellers of skincare products at TikTok Shop to be able to use effective marketing strategies by utilizing the power of the right Influencer in accordance with the brand image of skincare products so that it can help increase brand awareness and can build consumer confidence in skincare products at TikTok Shop. Then marketers also need to actively interact and respond to reviews given by consumers online.

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Appendix

Validity test table

Table 7

Variables	Indicator	R count	R Table	Description
INFLUENCER MARKETINGX1	X1.1.1	0,362	0,196	Valid
	X1.2.1	0,806	0,196	Valid
	X1.2.2	0,605	0,196	Valid
	X1.2.3	0,775	0,196	Valid
	X1.2.4	0,773	0,196	Valid
	X1.3.1	0,361	0,196	Valid
ONLINE CUSTOMER REVIEW X2	X2.1.1	0,727	0,196	Valid
	X2.1.2	0,689	0,196	Valid
	X2.2.1	0,726	0,196	Valid
	X2.2.2	0,796	0,196	Valid
	X2.3.1	0,712	0,196	Valid
LIVE STREAMING MARKETINGX3	X3.1.1	0,8	0,196	Valid
	X3.2.1	0,764	0,196	Valid
	X3.3.1	0,848	0,196	Valid
	X3.4.1	0,801	0,196	Valid
	X3.5.1	0,786	0,196	Valid
PURCHASE DECISION Y	Y.1.1	0,825	0,196	Valid
	Y.1.2	0,774	0,196	Valid
	Y.1.3	0,847	0,196	Valid
	Y.1.4	0,783	0,196	Valid
	Y.1.5	0,808	0,196	Valid

Reliability Test Table

Table 8. Case Processing Summary

		N	%
Cases	Valid	99	100,0
	Excludeda	0	,0
	Total	99	100,0

a. Listwise deletion based on all variables in theprocedure.

Table 9. Reliability Statistics

Cronbach's Alpha	N of Items
,900	24

Table 10. Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
item1	121,35	212,864	,292	,900
item2	121,59	208,572	,426	,898
item3	121,43	209,534	,538	,898
item4	121,82	206,763	,477	,897
item5	121,64	203,213	,673	,895
scoretotalx1	109,65	173,761	,686	,894
item6	121,32	210,099	,464	,898
item7	121,27	211,955	,337	,900
item8	121,34	207,248	,548	,897
item9	121,40	206,100	,597	,896
item10	121,29	209,515	,508	,898
scoretotalx2	108,45	177,801	,637	,895
item11	121,52	204,252	,643	,895
item12	121,37	207,869	,626	,897
item13	121,30	206,948	,617	,896
item14	121,29	206,883	,579	,897
item15	121,27	205,425	,578	,896
scoretotalx3	108,58	165,737	,717	,896
item16	121,64	202,846	,723	,894
item17	121,49	205,538	,606	,896
item18	121,43	205,779	,652	,896
item19	121,38	205,667	,663	,896
item20	121,46	202,313	,710	,894
scoretotaly	109,23	157,160	,804	,893

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BEYOND LIKES AND FOLLOWS: HOW AI INFLUENCERS DRIVE REAL SALES FOR INDONESIAN MSMEs

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ABSTRACT

Micro, Small, and Medium-Sized Enterprises (MSMEs) is a very important industry in Indonesia. MSMEs support large-scale businesses and they are crucial to job creation, poverty alleviation, growth, and social inclusion. The purpose of this study is to determine the influence of ai influencers on digital marketing content and ultimately affect the sales of Indonesian MSMEs. This research uses theoretical literature review as a research method. Authors found that AI influencers affect digital marketing contents, and digital marketing contents affect sales of Indonesian MSMEs. Indonesian MSMEs should use AI influencers to promote their products or services.

***Keywords**: Indonesia, MSMEs, sales, AI, influencer*

1. Introduction

Micro, Small, and Medium-Sized Enterprises (MSMEs) are involved in the production, manufacturing, and processing of goods and commodities. Their contributions to the expansion of an entrepreneurial culture, equitable growth, and the decrease of rural-urban inequities are noteworthy. MSMEs support large-scale businesses and they are crucial to job creation, poverty alleviation, growth, and social inclusion in the modern global economy.

The global economy has experienced unparalleled digitalization in the last three decades (Kraus et al., 2022). It has replaced traditional management techniques with technology-mediated ones for managerial and operational responsibilities in enterprises (Aslam et al., 2022; T. Wang, 2021). Either to maintain their competitive position in the market, ensure their survival, or gain market share was the goal (Pizzo et al., 2022). This technological development in business was made possible by the Internet and information technologies (Yuan et al., 2021). Mobile devices with internet connectivity allow users to purchase whenever and wherever it's convenient for them from a huge online market. Nowadays, consumers have access to hundreds of different brands, types, and price points for their purchases. They may now swiftly and remotely compare various things according to their pricing and quality as well. It enables clients to electronically trade products and services at any time, over large distances. Over the past five years, e-commerce has grown significantly and now constitutes a sizable portion of the internet and related technologies (Mishra & Mukherjee, 2019). Its estimated pace of practice is expected to remain the same or increase. Business companies are constantly upgrading their technology, which increases their reliance on intelligent technology such as artificial intelligence and ordinary internet technologies (Sestino & De Mauro, 2021).

Avatars, AI-generated content, and computer-generated universes that foster hitherto unheard-of levels of social connectedness are all products of the rapid growth of artificial intelligence (AI) (Ahn et al., 2022; Miao et al., 2021). This revolutionary technology leads to increased client engagement through extensive and powerful non-human digital communications that replicate a more realistic experience (Rahman et al., 2023). Despite the uncanny valley effect's unease and eerie effects being a source of criticism for anthropomorphic figures (Lou et al., 2022). One of the things produced by AI is Computer-Generated Imagery (CGI).

CGI influencers, like Lil Miquela and Imma, are an incredible invention that pushes the limits of virtual media by using AI to create digital personas that mimic real people in appearance and behavior (Drenten & Brooks, 2020).Apart from their carefully chosen online persona, CGI influencers possess the ability to convey emotions in a manner that avatars are unable to. CGI influences can replicate the nuances of human expressions with the application of animation and rendering techniques (Ahn et al., 2022). The ability of CGI influencers to reliably portray a wide range of emotions may prove difficult for their human counterparts to match. In addition to (Ekman, 1992) list of the six basic emotions—happiness, sorrow, surprise, fear, anger, and disgust—a more advanced method of evaluating facial expressions involves measuring the movements of the facial muscles using action units (AUs) (Ngan & Yu, 2018).

The rise of virtual influencers on well-known platforms indicates that they have effectively navigated the uncanny valley for a large number of people. Partnerships with giant industries like Calvin Klein, Puma, and Prada demonstrate that, from a marketing viewpoint, working with CGI influencers gives firms increased control and safety over their marketing efforts (Drenten & Brooks, 2020; Sands et al., 2022). While there is disagreement over the morality of computer-generated imagery influencing, computer-generated universes are undoubtedly the future of technology. In order to advance understanding of online influencer marketing(Cheung et al., 2022), marketers are advised to get ready for next-level social, design, and creative experiences in AI, as highlighted by recent studies (Grundner & Neuhofer, 2021). To promote user engagement (Cheung et al., 2022) and, indirectly, enhance parasocial interactions on social media (Mrad et al., 2022), it is crucial to understand how customers respond to CGI influencers (Chuah & Yu, 2021; Lou et al., 2022). CGI influencers can be used by MSMEs, in improving the quality of their marketing content. Indonesian MSMEs need to use CGI influencers, despite using another AI tools, for example chatbots. We use theoretical literature review in this research to determine the influence of AI influencers on MSMEs' sales.

2. Literature Review

2.1 Indonesian MSMEs

Particularly in developing countries—like Indonesia—MSMEs are essential to gross domestic product (GDP) per capita development and generate more jobs than large firms (Reeg, 2015). Known sources of MSME include individual entrepreneurs and family-run or non-family businesses (Memili et al., 2015). In order to grow or survive, these businesses require special operational characteristics and resources. MSMEs in Indonesia can be categorized using either the classifications of Badan Pusat Statistik (BPS), which separates MSMEs according to the number of workers, or Law No. 20/2008, which divides MSMEs according to the value of assets or sales. The author of this study classified small firms with 5–19 employees and medium-sized businesses with 20–99 employees according to the BPS.

2.2 The dynamics of open innovation in MSMEs

According to (Gassmann et al., 2010), open innovation (OI) is the process of using intentional knowledge inflows and outflows to boost internal innovation and widen the markets for innovation's external application. It is built on the idea of organizational boundaries and is adamant about the idea that innovations and industry best practices shouldn't be restricted to a company or sector (Dahlander et al., 2021). Over the past ten years, the body of academic research on OI has increased dramatically (Obradović et al., 2021). But the bulk of research on

OI has focused on large businesses (Barrett et al., 2021), and it has been noted that there is a lack of empirical research on the use of OI in the context of MSMEs (Obradović et al., 2021).

2.3 Challenges and limitations for MSME's digital transformation

Studies reveal that small and medium-sized enterprises lack sufficient expertise about technology. Many MSMEs lack the knowledge necessary to fully utilize the potential of digital transformation technologies. These companies typically don't know much about the advantages of the solutions that are offered (Gams & Kolenik, 2021). Furthermore, due to budgetary limitations, MSMEs have restricted access to outside consultants (Akpan et al., 2020), which intensifies the scarcity of more experienced information technology (IT) specialists who can get greater value from more sophisticated digital transformation instruments (X. Song et al., 2019), such big data and machine learning. SME's have lagged behind in the digital transformation process and, as a result, in gaining subject-matter expertise, even with the initial and more basic stages of digitalization (T. Wang, 2021). The availability, benefits, and successful integration of digital technology with business models and procedures are some of the obstacles that have been noted in the literature (Shamsi et al., 2022). Furthermore, internet platforms might not give user businesses easy access to customer data, which would restrict their comprehension of the clientele (Piccialli et al., 2021).

Digital marketing use to promote goods and services (Mehta & Kaye, 2021). MSME's are unable to use digital marketing platforms or engage in e-commerce due to a supply-demand imbalance (Al-Emran & Granić, 2021). As a result, it is critical to spread the word about how important it is to use technology for marketing and to appreciate the opportunities it offers (Al-Nuaimi et al., 2022). However, because of their smaller networks, decreased ability to find and access talent, and generally worse working conditions, MSME's have a harder time recruiting and keeping qualified workers than do major corporations (Shamsi et al., 2022). Due to their smaller workforces and inability to release employees for training, MSMEs also incur higher costs for customized training (Shamsi et al., 2022).

2.4 Digitalization's benefits for MSMEs

Technology is used by a variety of marketing initiatives in both small and large sectors to further their development (Sembiring et al., 2022), including MSMEs. In order to promote economic growth and the quickly accelerating globalization of society, MSMEs must be digitally transformed and restructured (Grewal et al., 2021). This will foster innovation and ensure the long-term commercial sustainability of MSMEs. Additionally, digitalization offers a number of prospects for greater integration into international markets, interactivity, and sustainable growth of MSME's (Piccialli et al., 2021). Digitalization has the potential to reduce expenses, save time and resources, and be especially beneficial for smaller enterprises with weaker internal resources and less market and bargaining power to handle complex business environments (Piccialli et al., 2021).

2.5 Artificial Intelligence (AI)

Artificial Intelligence (AI) is a relatively new technology that has enormous applicability across a range of fields (Ahmad et al., 2021, 2022; Kolotylo-Kulkarni et al., 2021) and aims to increase human intelligence or work capacity. AI is a technical phrase that evaluates and realizes a human's regular mental process through intellectual development and stimulation (Ahmad et al., 2022). The foundation of AI technology is made up of algorithms that mimic the functions of the human mind. Artificial Intelligence (AI) integrates social science and engineering through a wide range of applications that improve society. It is capable of identifying human commands and using algorithms to interpret data in a similar way to how human minds operate. Advances in computer technology and artificial intelligence are closely linked to advancements in the economy and society.

The advancement of contemporary science and technology has led to an increase in the commercial applications of artificial intelligence (AI), which have changed how we live and work. It has several benefits, particularly in e-commerce, and is increasingly becoming its driving force (Helmy Mohamad et al., 2022). Artificial Intelligence (AI) is gaining momentum in academia and industry, drawing academics to expand its usefulness across various domains and propel its technological advancements. These days, it aids people in carrying out all kinds of duties, etc. As a result, it is among the key origins of the modern era of development (Ran et al., 2020).

2.6 The rise of influencers in CGI

The creation of humanoid items for use in services and marketing has been made possible by the growing sophistication of AI (Lou et al., 2022; Wirtz et al., 2018). Examples of artificial intelligence (AI) in the physical world include humanoid chatbots (Spillner & Wenig, 2021), virtual agents (Sands et al., 2022), avatars (Miao et al., 2021), and humanoid robots in hotels, frontline, restaurants, and airports (Wirtz et al., 2018; C.-E. Yu, 2020). The anthropomorphic characteristics shared by the aforementioned examples serve to humanize digital experiences in situations where face-to-face connection is not possible (Araujo, 2018). The degree of human-likeness of robots and AI, however, is a key critique of these technologies (C.-E. Yu, 2020). Many consumers find existing applications to be rather unreal, which leaves them feeling unsettling and creepy (Söderlund, 2022). The "uncanny valley effect," describes people's unfavorable emotional responses to anthropomorphic traits or audiovisual simulations that closely resemble people (Mori et al., 2012). Uncanny valley appears to be out of step with the more recent advancements in computer graphics, although being grounded on sound knowledge (Söderlund, 2022; Zhang et al., 2022).

The fusion of robots and visuals, which resulted in the creation of CGI, is one cutting-edge and innovative example (Ahn et al., 2022; Lou et al., 2022). The ability to create CGI has improved with time (Miao et al., 2021). Since CGI is pushing innovation in movies and video games, it seems inevitable that CGI will become a standard marketing tool in the future. According to Lou et al. (2022), CGI influencers are a relatively recent phenomenon on social media. CGI influencers, the human-like virtual influencer receives much less favorable responses (Arsenyan & Mirowska, 2021). But what distinguishes CGI influencers is that they are created with the express purpose of appearing and acting in a way that content marketers find appealing(Drenten & Brooks, 2020). CGI influencers have high perceived physical and social appeal due to their adoption of digital personas (Mrad et al., 2022), which in turn encourages consumer engagement (Ahn et al., 2022).

There is no denying the powerful influence that CGI influencers have (Deng & Jiang, 2023). According to recent studies, consumers' decision-making, brand appraisal, and online experiences can all be greatly influenced by CGI influencers (Ahn et al., 2022; Batista da Silva Oliveira & Chimenti, 2021; Mrad et al., 2022). As a result, it is important to reconsider how people and technology interact, as well as how reality and artifice clash in digital settings (Drenten & Brooks, 2020). However, given the novelty of computer-generated characters in marketing (Lou et al., 2022; Miao et al., 2021), there is still a dearth of information regarding consumer experiences with CGI influencers, which calls for more research (Ahn et al., 2022).

2.7 Participation of users in the social actor framework

It is vital to go back to the origins of human communication with socially conscious computers in order to solidify our understanding of virtual influences (Deng & Jiang, 2023; Gambino et al., 2020). The computers are social actors (CASA) paradigm, which has its roots in human-computer interaction, is based on the idea that interacting with computers and other new media is inherently social and natural (Nass et al., 1994). Customers typically assume that computers that exhibit human-like characteristics—such as language use, human-like facial features, and the capacity to express emotions—will adhere to a variety of social norms (E. Wang, 2017). But it's important to remember that not all social technologies fall under the purview of the CASA theory (Nass & Moon, 2000). Gambino et al. (2020) stated that this paradigm is applicable solely in cases where technology artifacts demonstrate sufficient social cues that suggest their capacity to function as a benchmark for social interaction.

Previous researches revealed that service robots with gesture-based interfaces can encourage user interaction and foster communication (Chuah & Yu, 2021; Mara & Appel, 2015). Anthropomorphism has been reaffirmed more recently as a key mechanism via which customers react in a social way (Xu et al., 2022) . Engagement is a noticeable characteristic when analyzing human social behaviors on social media (Lim & Rasul, 2022). As an example, when virtual agents exhibit emotion in a dramatic way, user involvement can be measured by likes or comments (Chuah & Yu, 2021). Customers of today, who have access to a wealth of knowledge, are more eager to participate in fruitful conversations of fresh perspectives (Lim, 2020).

User engagement has been a crucial success factor in evaluating social media marketing strategies in recent years (Jones & Lee, 2021). According to J. Yu & Egger (2021) the engagement rate is specifically the degree of interaction between users and social media material, including likes and comments. Positive feelings like enjoyment and enthusiasm are frequently linked to liking behaviors, while higher levels of involvement and interactivity on social media are suggested by commenting behaviors (Swani et al., 2017). Research in marketing has shown that user engagement and brand loyalty (Labrecque, 2014), trust (Batista da Silva Oliveira & Chimenti, 2021), and reputation (Song et al., 2020) are positively correlated. Because of this, marketers that work with virtual influencers who have human-like traits are interacting socially with their audience in a way that is in line with the social aspects of the CASA paradigm (Nass et al., 1994). Therefore, businesses may produce more effective and captivating social media content that connects with their audience and fosters higher levels of engagement by knowing how humanlike variables may influence one's behaviors (Cheung et al., 2022; Fotheringham & Wiles, 2023).

2.8 Digital landscape's emotive displays

A rising corpus of research demonstrates the potential of AI to create emotional connections as computers become more sophisticated and intelligent in terms of their extensive uses (Huang & Rust, 2020). According to (Rincon et al., 2018), the CASA paradigm is echoed by the idea that emotional attachments may be formed when interacting with anthropomorphic objects and experiencing psychological traits. Assuming that face-to-face communication can be extended to computer-mediated communication (McShane et al., 2021), pertinent instances can be found in live streaming platforms, where expressing emotions is a potent catalyst for interaction (Lin et al., 2021) with virtual or non-human entities (Chuah & Yu, 2021). More specifically, the six core emotions (disgust, anger, surprise, fear, and sadness) as defined by Ekman (1992) have been shown to have a significant impact on consumer behavior in retail settings (Pantano & Scarpi de Claricini, 2022), social media user engagement, and social interactions (Landwehr et al., 2011). For example, a happy display raises the degree of customer satisfaction (Chuah & Yu, 2021). When people express fear, it suggests a need or urgency that motivates them to act (Roberts & David, 2019). In order to promote emotional involvement, sadness may arouse empathy and emotional resonance (Taruffi et al., 2021). However, if anger is portrayed carelessly, it could be misconstrued and lead to unintentional offense or controversy (Campos et al., 2013). In the same way, one can strategically employ shock (Chuah & Yu, 2021) and disgust (Fischer et al., 2012) to pique customers' interest in digital media. Through the presentation of surprise, marketers can pique consumers' attention by integrating unexpected experiences into user interfaces (Chuah & Yu, 2021). Furthermore, drawing attention to undesirable aspects using disgusting expressions is likely to get people to notice and interact with the brand message (Fischer et al., 2012).

2.9 Business Performance of MSMEs

Business Performance (BP) is crucial for corporate performance in a competitive business environment (Srimulyani et al., 2023). BP is a strategic component of business management (Chuang & Lin, 2017). Four perspectives are available for measuring business performance (BP): financial, customer, innovation and learning, and internal processes (Taouab & Issor, 2019). In an attempt to expand the company they oversee, business managers incorporate it into every aspect of their daily operations (Srimulyani et al., 2023). The performance of MSMEs can be evaluated by three criteria (Sanchez-Marin & Baixauli-Soler, 2015): 1) Profitability examines how well a business does in terms of reaching its set of financial objectives; 2) productivity, which considers staff productivity as well as the accomplishment of corporate performance in meeting consumer demands and wishes; 3) the market evaluates a company's performance based on its position in the market, market share, and product sales accomplishments. Business development could be affected by BP (Srimulyani et al., 2023). A company's business performance (BP) is divided into two categories: financial performance, which is measured by financial activities and units of currency, and non-financial performance, which is measured by non-financial activities and units of currency and includes things like customer satisfaction with products, organizational performance, innovation performance, and brand strength and reputation (Seo & Lee, 2019). Sales volume, return on capital, turnover rate, and held market share are all indicators of BP (Ontorael et al., 2017). This research uses real sales for measurement of BP.

2.10 Innovation and MSMEs' Business Performance

Innovation can boost corporate performance (Bărbulescu et al., 2021). Consumers seek products that are innovative and tailored to their needs (Barbu et al., 2021). Due to intense rivalry and quick technical advancements, businesses must constantly develop their products to maintain a competitive edge (Farida & Setiawan, 2022). Businesses need to be innovative with the items they frequently market if they want to have a competitive advantage (Amin & Aslam, 2017; Danso et al., 2019; Leiblein et al., 2022). To be competitive in the market and avoid falling behind their rivals, businesses must preserve their competitive advantage in a number of ways (Malesev & Cherry, 2021). The notion of innovation is multifaceted and has a lengthy history, primarily stemming from the rivalry among businesses and the diverse tactics they utilize (Xiong et al., 2021).

The MSMEs' scale, adaptability to change, risk-taking prowess, and quick reaction to market developments have all been shown to be assets. Both large and small businesses are subject to pressures to innovate (Aksoy, 2017). Comparative advantages over large companies in terms of innovation have the potential to make SMEs more competitive than large businesses (Arias-Aranda et al., 2001). Researchers agree that SMEs need to foster an innovative culture in order to increase their level of innovation (Büschgens et al., 2013; Dabić et al., 2019; Hilmarsson et al., 2014; Hogan & Coote, 2014; Tang et al., 2020). Certain small firms in Java communities were collaborating with one another, which benefited the companies in the community, encouraged the growth of innovation, raised individual incomes, and enhanced regional income (Prasetyo et al., 2022).

3. Research Methods

A theoretical literature review is conducted in order to achieve the research's goals and objectives, and a conceptual framework for future study is offered. We presented research method that uses by previous researchers (Torkayesh et al., 2023; Vasiljeva et al., 2017). We used 98 articles as study material in this research.

4. Research Findings and Discussion

In the current research, the authors consider the sales of Indonesian MSMEs as dependent variable that affected by digital marketing contents, and AI influencer as a variable affect digital marketing contents. The conceptual model of the research is given at the Figure 1.

Figure 1. Conceptual model of the research

This section explores the implications of our research on the impact of AI influencers on the digital marketing environment for MSMEs in Indonesia. According to our research, there is a strong correlation between MSMEs' sales performance and AI influencers and the content they produce. The emergence of AI influencers offers MSMEs a special chance to create compelling and useful content for digital marketing. Influencers powered by AI can be trained to create content that appeals to particular target markets, which could raise brand recognition and encourage consumer interaction. This is consistent with data-driven marketing techniques becoming more and more important in today's digital environment.

According to our research, AI influencers can have a favorable effect on Indonesian MSMEs' sales. AI influencers can boost sales conversions and aid in the expansion of MSMEs by providing relevant content that appeals to prospective clients. This research emphasizes how AI-powered marketing may help MSMEs become more powerful and level the playing field in the cutthroat online market. Recognizing that the area of AI influencer marketing is still in its infancy and that further investigation is required to fully grasp its long-term implications is crucial. It is also necessary to address the ethical issues related to the disclosure and openness of AI-generated content.

Based on the conceptual model, authors stated the following research questions:

- RQ1: How can AI influencers be effectively integrated into the digital marketing strategies of Indonesian MSMEs?
- RQ2: What types of content created by AI influencers resonate most with Indonesian consumers?
- RQ3: Can AI influencers measurably improve brand awareness, engagement, and sales for Indonesian MSMEs?
- RQ4: Are there cultural or ethical considerations for using AI influencers in the Indonesian market?

In this research, authors analyze based on existing theory that AI influencers affect digital marketing contents, and digital marketing contents affect sales of Indonesian MSMEs. Indonesian MSMEs should use AI influencers to promote their products or services.

5. Conclusion

Based on the conceptual research, authors conclude that AI influencers affect digital marketing contents, and sales of Indonesian MSMEs are affected by digital marketing contents. Indonesian MSMEs should use AI influencers to boost their sales. Suggestions for further research are to conduct empirical research on the concept of this research.

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THE INFLUENCE OF USING E-WALLETS AND DISCOUNTS ON IMPULSE BUYING IN THE MARKETPLACE

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ABSTRACT

One of the developments in technology is the use of E-Wallets. The existence of discounts on online purchases is one of the influences on impulse buying behavior. The aim of this research is to collect data and analyze the relationship or influence of E-Wallets and discounts on impulse purchases in the market. This research is a quantitative study to determine the effect of E-Wallets and discounts on impulse purchases in the market. Data collection was carried out by collecting information through questionnaires. The population in this research are students who use E-Wallets, often make online purchases in the marketplace and often use discounts in the marketplace. The sampling method used was Purposive Sampling. This method requires a sample that owns and uses an E-Wallet, frequently makes online purchases in the marketplace, frequently uses discounts for purchases in the marketplace, and a limited sample size. The consideration in determining the sample in Purposive Sampling is the suitability of the characteristics of the respondents to the research objectives. The research results show that the E-Wallet variable has a positive and insignificant effect on Impulse Buying. Meanwhile, the Discount variable has a positive and significant effect on Impulse Buying.
***Keywords**: Impulsive Buying, Discounts, E-Wallet, Marketplace, Online.*

1. Introduction

As time goes by, all aspects of life, such as technology, have become one aspect of life that is developing very rapidly.(Martini & Hertina, 2023) WrongOne of the things in technological development is the use of E-Wallets. E-Wallet is a means that makes it easy for people to save money and make payments electronically where users only make transactions via smartphone without needing to take out their wallet. The ease of use of this technology has resulted in the number of internet users increasing(Naimah et al., 2023). The impact on the user side of this non-cash payment is that the payment method becomes faster(Steven et al., 2023). Based on the Katadata.co.id page, it is revealed that the payment methods frequently used today are:

Figure 1. Proportion of Digital Payment Method Choices Used by Respondents When Shopping on E-Commerce 2023.

There are various types of payment methods provided in E-Commerce. On March 18-31 2023, Kredivo together with Katadata Insight Center (KIC) conducted an online survey entitled Indonesian E-Commerce Consumer Behavior Report 2023. The report above shows that E-Wallets are one of the methods that people often use when shopping. This percentage will continue to increase from 60.9 percent in 2022 to 84.3 percent in 2023.

On the other hand, consumer purchasing decisions are also changing along with technological developments so that consumers are now more easily influenced by information they get from the internet and social media such as Tiktok, Shopee which often provide very different prices. from offline stores so many people are interested in buying online with payment via E-Wallet. Based on our experience, if you pay with E-Wallet, users will get a discount. So from this experience the majority of people prefer to make payments using E-Wallet. One of the media such as Shopee is holding promotions on twin dates such as discounts on Shopee 7.7 Mega electronic sales in July and the launch of new products with quality that continues to be improved every promo period.(Martini & Hertina, 2023). Indirectly, with discounts like those carried out by Shopee, this can give rise to impulse purchases among people.

Impulse Buying is an individual activity that spends money that cannot be controlled, usually goods resulting from impulse purchases are goods that are not really needed by consumers(Ahmad Azwari & Lia Febria Lina, 2020)Factors that influence impulse buying behavior are marketing characteristics in the form of advertising that can make it easier for potential buyers to find out about the products being offered.(Naimah et al., 2023)**.**According to Suratno (2021) It was stated that the thing that caused sudden purchases was because users often opened online shop sites(Wijaya & Tjiptodjojo, 2023)**.**Impulse buying usually occurs if consumers receive something that can trigger purchasing stimulation, including price discounts and ease of use with easy payments.(Kusnawan et al., 2019). The activity of opening an online shop is something that people often do to fill their free time. By opening an online shop, users hope to get discounts or be able to buy the items they are looking for.

Today's students are individuals who have impulsive behavior due to increasingly increasing lifestyles, one of which is because of the ease of technology. In the current generation, current students are generation Z who were born from 1997 to 2012, where the current generation is very dependent on technology, namely the internet, which supports their daily activities. In previous research conducted by Nadhilah in 2021, it was stated that there are three basic reasons for using digital wallets or E-Wallets among students, namely promotional offers, features that attract attention, comfort and ease of use of E-Wallets which make their use sufficient. . effective in the process of determining purchasing decisions among students where the main factors for students to use digital wallets are because they are easier, safer, the features offered are complete and there are lots of promos and cashback provided.(Suhardi et al., 2024).Therefore, we make students the objects of research that we will carry out.

This research activity tries to determine the effect of impulse buying on students in the marketplace due to the ease of use of E-Wallets and the discounts offered. As well as to collect data and analyze the relationship or influence of E-Wallets and discounts on impulse buying behavior in the market. Through the results of this research, it is hoped that it can increase awareness and literacy regarding E-Wallets and help in formulating better policies.

2. Literature Review

2.1 Empirical Literature

Research from Suhardi, AA, Siregar, S., & Dharma, B (2024) entitled "Consumption Behavior of Students in Using Digital Wallets: Case Study of UINSU Medan Students". The research results show that digital wallet users have an influence on impulse buying. This can be seen from the use of digital wallets to fulfill all needs such as online shopping, ordering transportation, food, drinks, etc (Suhardi et al., 2024). Research by Risca Kurnia Sari, Satria Putra Utama, & Anisa Zairina (2021) entitled "The Effect of Online Shopping and E-Wallet on Consumer Impulse Buying". The results of the research are that the variables of online shopping and E-Wallet simultaneously influence Impulse Buying (Sari et al., 2021).

Research from Yuni Yuniawati, Istichanah (2023), entitled "The Influence of Discounts, Product Quality and Lifestyle on Consumer Impulse Buying Decisions for UNIQLO Products". The results of this research show that partially (individually), discounts have a positive effect on Impulse Buying decisions (Yuniawati & Istichanah, 2023). Martini Ervita, & Hertina, Dede (2023) with the title "The Effect of Price Discounts and Product Quality on Online Impulse Purchases (Case Study of Shopee Users in Andir District, Bandung City) (Martini & Hertina, 2023). This research uses quantitative research and uses multiple linear regression analysis. The research results show that price discounts have a positive and significant effect on impulse purchases among Shopee users in Andir District, Bandung City.

2.2 Theoretical Literature

2.2.1 Electronic Wallet

According to Sari (2018), E-Wallet is a non-cash payment method, without having to go to a physical shop. Consumers can fulfill their needs anywhere and use E-Wallet as a non-cash payment tool(Suhardi et al., 2024). Some of the functions of an E-Wallet are as a place to store money, pay, or carry out other transactions online or connected to the internet network.(Suhardi et al., 2024). E-Wallet products include Ovo, Gopay, Shopeepay, Dana, and so on which have various features that can provide convenience and are popular with the public.(Suhardi et al., 2024).

2.2.2 Discount

Discounts are one of the strategies used by sellers to increase their sales. According to Tjiptono, a discount is a discount given by a seller to a buyer as appreciation for certain activities carried out by the buyer and to make the seller feel happy.(Martini & Hertina, 2023)**.**

2.2.3 Impulse Buying

According to Ermy Wijaya (2019), impulse buying is a shopping activity without self-control or without thinking long (Naimah et al., 2023). Impulse buying has several dimensions, including spontaneity of purchase, power of purchase, excitement and stimulation, and indifference to consequences. Impulse buying is a situation when consumers see certain products and brands and are then interested in getting that product. This happens because there is an attractive stimulus from the shop(Yuniawati & Istichanah, 2023). Suratno (2021) said that what causes sudden purchases is because users often open online shop sites(Wijaya & Tjiptodjojo, 2023). According to Stern (Stern, 1962), impulse buying is divided into four types: first, pure impulse buying which is related to emotions or the desire to have a product because of the cheap price or to look for new products. Second, reminder impulse purchases occur because consumers are reminded of the product again. Third, impulse buying suggestions occur when someone first sees the product and feels satisfied, or due to influence and suggestions from other people. Fourth, planned impulse buying, namely when someone has planned beforehand to buy a product but has not yet decided on the brand, size, etc.(Ravenska & Zulvia, 2019).

2.3 Hypotheses Development

2.3.1 There is an influence of E-Wallet Use on Impulse Buying

According to Prameswari (2022), several main factors influence students in using E-Wallet, namely comfort, security, cashback, promos, completeness of features, and the desire to try new technology. E-Wallet is a tool that makes it easier for people to carry out online transactions. E-Wallet can be an alternative for making payments when consumers want to buy goods online, for example at Shopee, Tiktok, Lazada, and so on. Consumers tend to be interested in shopping online because Shopee and Tiktok often provide prices that are much different or easier than offline. This factor can encourage consumers to buy existing goods spontaneously even though the goods are not really needed.(Yuniawati & Istichanah, 2023)

H1: There is an influence of E-Wallet use on Impulse Buying

2.3.2 There is an influence of discounts on Impulse Buying

The results of Yuni Yuniawati and Istichanah's research show that discounts partially have a positive effect on impulsive purchasing decisions. Apart from that, discounts simultaneously also influence impulse purchases. The results of Ahmad Aswari, Lia Febria Lina's 2020 research also show that discounts have a positive and significant effect on impulse purchases on the online shopping site Shopee Indonesia, as evidenced by the results of distributing questionnaires which state that consumers will buy discounted products impulsively when they see them. The tendency to be tempted by discounts is one of the factors that triggers consumers to carry out impulsive buying behavior. When sellers offer big discounts within a certain time limit, consumers usually don't want to miss this opportunity, which can lead to buying goods without planning.(Ahmad Azwari & Lia Febria Lina, 2020)**.**Based on research by Gumilang & Nurcahya (2016) it is also stated that discounts have a positive and significant influence on impulsive purchases. The more discounts the seller offers, the higher the impulse buying behavior.

H2: There is an influence of discounts on Impulse Buying

Figure 2 below illustrates the research model framework

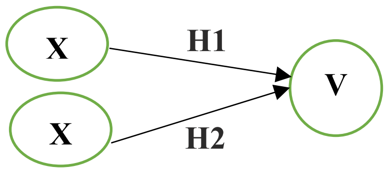

Figure 2. Research Model Framework

3. Research Methods

The variables in this research consist of two variables, namely the Independent variable and the Dependent variable. An Independent Variable is a variable that is not bound or does not depend on other variables, while a Dependent Variable is a variable that is bound or dependent or has an impact that occurs because of the Independent variable that binds it. In this research, the Independent variables are E-Wallet and Discounts, while the Dependent variable is impulsive buying behavior.

E-Wallet measurement indicators consist of: (Yuniawati & Istichanah, 2023)

a. Benefits and advantages.
b. Ease of use.
c. Trust

Discount measurement indicators consist of: (Kusnawan et al., 2019)

a. The amount of the discount is the size of the discount given when the discount occurs.

b. Discount period, namely the time period given for the applicable discount to occur.
c. Types of products that receive discounts, namely product choices that have discount offers.

Impulse buying measurement indicators consist of:(Naimah et al., 2023)

a. Spontaneity of purchase.
b. Purchasing power.
c. Excitement and stimulation.
d. Indifference to consequences.

3.1 Research Design

This research uses quantitative methodology, with numerical data and statistical analysis. The research uses secondary data sources obtained from existing information such as in journals. According to Sahir (2022), quantitative research methods are research using statistical analysis so that the data and results obtained will be in the form of numbers. The aim of quantitative research is to determine the relationship or influence between one variable and another variable. This research uses two types of data, namely primary and secondary data. Primary data is obtained from the results of a processed questionnaire which will be distributed via the internet. Meanwhile, secondary data sources are obtained from existing information such as in journals. Sanusi stated that secondary data is data that already exists or has been grouped by related parties(Ahmad Azwari & Lia Febria Lina, 2020)

3.2 Population and Sample

According to Sugiyono (2019), population is a certain area or object that has a number or characteristics that have been determined by researchers to study and draw conclusions.(Yuniawati & Istichanah, 2023).The sampling method used was Purposive Sampling. This method requires a sample that owns and uses an E-Wallet, frequently makes online purchases in the marketplace, frequently uses discounts for purchases in the marketplace, and a limited sample size. The consideration in determining the sample in Purposive Sampling is the suitability of the characteristics of the respondents to the research objectives. In this research, the population to be studied are students who use E-Wallet and have carried out online shopping activities. This research took 100 students who were part of the population and as respondents. The formula used to determine the number of respondents is the Rao Purba formula as follows:

$$\text{n} = \frac{Z^2}{4(moe)^2}$$

Information :
N = Number of samples
Z = Confidence level for sample determination 95% or 1.96
Moe = Maximum tolerable error rate, usually 10%

$$\text{n} = \frac{1{,}96^2}{4(0{,}1)^2}$$

$$\text{n} = \frac{3{,}8416}{0{,}04}$$

$$\text{n} = 96{,}04$$

$$\text{n} = 96\ (100)$$

From the results of the calculations above, the number of respondents in the study was 100 respondents

.

3.3 Research Data

The data collection technique uses a questionnaire created using Google Form media. The criteria that are the object of this research are students in general who use digital wallets or E-Wallets and often make purchases online. There are three variables used in this research, namely the E-Wallet and discount variables as the influencing or independent X variable and the impulsive buying variable as the influenced or dependent Y variable.

3.4 Data Analysis Techniques

The analysis technique used in the research is multiple linear regression analysis which functions to obtain a comprehensive picture or look for the influence of two or more independent variables or classic assumption. The classical assumption test consists of several parts, namely normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, and linearity test. After carrying out validity, reliability and classical assumption tests, the next step is to carry out multiple linear analysis. This analysis consists of the coefficient of determination, F test, and T test.

3.4.1 Validity and Reliability Test

The validity test is carried out with the aim of finding out whether the statements used in the questionnaire are valid or not. Reliability testing is carried out to determine the consistency of a questionnaire so that it can be said to be appropriate and reliable for measuring research variables.

3.4.2 Normality test

According to Ghozali (2016), this test is carried out to test whether in a regression model an independent variable and a dependent variable or both have a normal or abnormal distribution. This test can be carried out using the One Sample Kolmogorov Smirnov test with the following conditions: if the significance value is above 5% or 0.05 then the data is normally distributed, whereas if it is below it then the data is not normally distributed. normal distribution. Data can be said to be good if it has a normal distribution.

3.4.3 Multicollinearity Test

The aim is to find out whether in the regression model there is a correlation between the independent or dependent variables (2016). This can be seen from the tolerance value and Variance Inflation Factory (VIF) value. Based on the tolerance value, if the value is greater than 0.10 then multicollinearity does not occur, whereas if the value is smaller than 0.10 then multicollinearity occurs. Based on the VIF value, if the value is less than 10.00 then multicollinearity does not occur, whereas if the VIF is more than 10.00 then multicollinearity occurs.

3.4.4 Heteroscedasticity Test:

The aim is to find out whether in a regression model there is a discrepancy or inequality of variance from the remainder of one observation to another observation. If the variances are different then it is called heteroscedasticity. To find out, look at the scatterplot graph or from the predicted value of the dependent variable, namely SRESID, with the remaining error, namely ZPRED. A significance value of more than 0.05 indicates the absence of heteroscedasticity.

3.4.5 Multiple Linear Regression Analysis Equation

The regression analysis model used is:

$$Y= a+bX1+b2X2$$

Information :
Y = Impulse Buying
α = Constant
b1 = E-Wallet regression coefficient
b2 = Discount regression coefficient
X1 = E-Wallet Variable
X2 = Discount Variable

3.4.6 Coefficient of determination

The coefficient of determination is used to determine how much the independent or independent variable is able to explain the variance of the dependent variable. This is shown by the Adjusted R Square value. A negative value indicates that the independent variable cannot explain the variance of the dependent variable.

3.4.7 F test

This test is carried out to determine whether there is a significant influence between the independent or independent variables in multiple linear regression on the dependent or dependent variable. A significance value of less than 0.05 indicates that there is a simultaneous influence between variable X on variable Y. A significance value of more than 0.05 indicates that there is no simultaneous influence of variables. .

3.4.8 T test

This test is carried out to find out whether there is a significant influence between the independent or independent variables on the dependent (dependent) variable. A significance value of less than 0.05 indicates that there is an influence of the independent variable on the dependent variable, whereas a significance value of more than 0.05 indicates that there is no influence of the independent variable on the dependent variable. The calculated t value is greater than the t table which shows that there is an influence between the independent variable on the dependent variable. Meanwhile, if the calculated t value is smaller than the t table, it means that there is no influence between the independent variable and the dependent variable.

4. Research Findings And Discussion

4.1 Validity Test

Table 1. Validity Test

Variable	Goods	Count	table	Information	*Signature (2 tails)*	Signature	Information
Electronic Wallet	X1.1	0.771	0.196	Valid	0,000	0.05	Valid
	X1.2	0.650	0.196	Valid	0,000	0.05	Valid
	X1.3	0.684	0.196	Valid	0,000	0.05	Valid
	X1.4	0.433	0.196	Valid	0,000	0.05	Valid
	X1.5	0.726	0.196	Valid	0,000	0.05	Valid
	X1.6	0.575	0.196	Valid	0,000	0.05	Valid
	X1.7	0.693	0.196	Valid	0,000	0.05	Valid
	X1.8	0.607	0.196	Valid	0,000	0.05	Valid
	X1.9	0.632	0.196	Valid	0,000	0.05	Valid
Discount	X2.1	0.481	0.196	Valid	0,000	0.05	Valid

	X2.2	0.351	0.196	Valid	0,000	0.05	Valid
	X2.3	0.577	0.196	Valid	0,000	0.05	Valid
	X2.4	0.376	0.196	Valid	0,000	0.05	Valid
	X2.5	0.661	0.196	Valid	0,000	0.05	Valid
	X2.6	0.649	0.196	Valid	0,000	0.05	Valid
	X2.7	0.623	0.196	Valid	0,000	0.05	Valid
	X2.8	0.663	0.196	Valid	0,000	0.05	Valid
	X2.9	0.638	0.196	Valid	0,000	0.05	Valid
Variable Y (Impulse Buying)	Y.1	0.637	0.196	Valid	0,000	0.05	Valid
	Y.2	0.787	0.196	Valid	0,000	0.05	Valid
	Y.3	0.784	0.196	Valid	0,000	0.05	Valid
	Y.4	0.711	0.196	Valid	0,000	0.05	Valid
	Y.5	0.678	0.196	Valid	0,000	0.05	Valid
	Y.6	0.686	0.196	Valid	0,000	0.05	Valid
	Y.7	0.342	0.196	Valid	0,000	0.05	Valid
	Y.8	0.491	0.196	Valid	0,000	0.05	Valid
	Y.9	0.557	0.196	Valid	0,000	0.05	Valid
	Y.10	0.539	0.196	Valid	0,000	0.05	Valid
	Y.11	0.628	0.196	Valid	0,000	0.05	Valid

4.2 Reliability Test

Table 2. Reliability Test Table

Variable	***Cronbach's Alpha***	**r-Table**	**Information**
Electronic Wallet	0.798	0.600	Reliable
Discount	0.734	0.600	Reliable
variable Y	0.846	0.600	Reliable

From the table above, it is known that the Cronbach's Alpha value is greater than the r-table. So the data is said to be reliable.

4.3 Normality Test

Table 3. Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Nonstandardized Residues
N		100
Normal Parameters, b	Means	.0000000
	Std. Deviation	6.21100149
The Most Extreme Difference	Absolute	.106
	Positive	,093
	Negative	-.106
Statistical Tests		.106
Asymp. signature. (2-tail)		.008c
A. Normal test distribution.		
B. Calculated from data.		
C. Lilliefors Significance Correction.		

Based on the data above, the significance value is 0.008 and greater than 0.05. So the data above has a Normal distribution.

4.4 Multicollinearity Test

Table 4. Multicollinearity Test Results

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficient	Q	signature.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	6,074	6,985		,870	,387		
	AmountX1	,055	,168	.031	,330	,742	,893	1,119
	AmountX2	,828	,158	,489	5,251	,000	,893	1,119

a. Dependent Variable: TotalY

The tolerance value for the E-Wallet variable (X1) is 0.893 and the discount variable (X2) is 0.893. Both values are greater than 0.10, which indicates that the data in this study does not contain multicollinearity. The VIF value for the E-Wallet variable (X1) is 1.119 and the discount is also 1.119. Both values are smaller than 10. This shows that the data in this study does not contain multicollinearity.

4.5 Heteroscedasticity Test

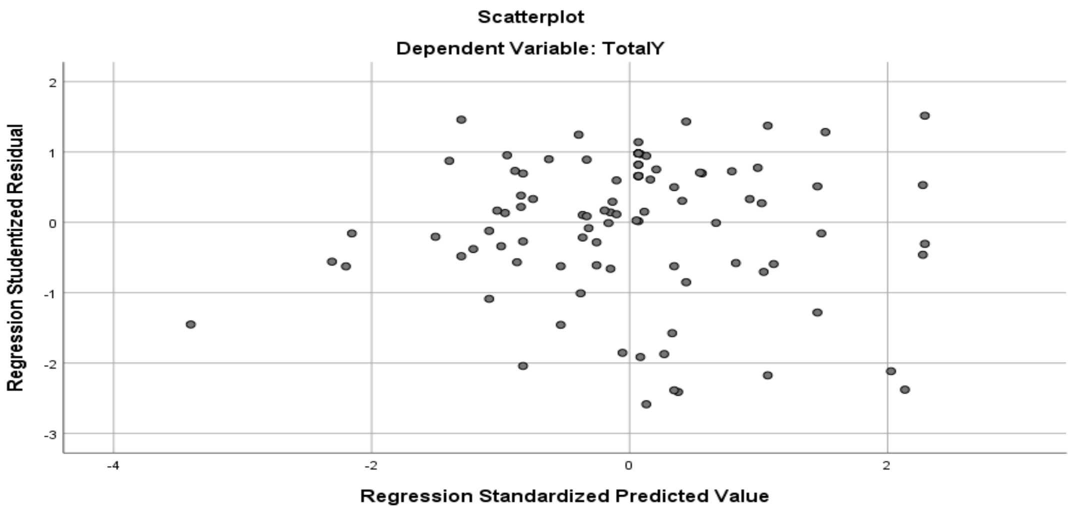

Figure 3. Heteroscedasticity Test Results

From the results of the scatter plot above, it shows that the data points do not form a particular pattern and the data does not gather, but spreads above and below the number 0. Therefore, this research data does not have heteroscedasticity.

4.6 Multiple Linear Regression Analysis Equation

In this research the multiple linear regression equation used is:

$$Y= a+bX1+b2X2$$

Information :
Y = Impulse Buying
α = Constant
b1 = E-Wallet regression coefficient
b2 = Discount regression coefficient
X1 = E-Wallet Variable
X2 = Discount Variable

u= 6.074+0.55X1+0.824X2

From the results above it is known that the constant is 6.074. This means that there is a positive influence on the independent variables, namely E-Wallet and discounts.
The regression coefficient value for the E-Wallet variable (X1) is 0.55 and has a positive influence. This shows that there is a unidirectional relationship with the dependent variable of impulsive buying. If the E-Wallet variable (X1) increases by one unit, then impulse purchases will also increase by 0.55.
The regression coefficient value for the Discount variable (X2) is 0.824 and has a positive influence on the Impulse Buying variable (Y). This means that if the discount variable (Y) increases by one unit, then impulse buying (Y) will increase by 0.824.

4.7 Coefficient of determination

Table 6. Results of the coefficient of determination

Model Summary b

Model	R	R square	Adjusted R Square	Std. Estimation Error
1	,500a	,250	,234	6,275
A. Predictors: (Constant), TotalX2, TotalX1				
B. Dependent Variable: TotalY				

The R Square value from the results above is 0.250 or equal to 25 percent. This means that the E-Wallet (X1) and Discount (X2) variables together (simultaneously) have an influence on the Y variable or Impulse Buying by 25%. Meanwhile, the remainder (100%-25%= 75%) is influenced by other variables not studied.

4.8 F Test

Table 7. F Test Results

ANOVA

Model		Sum of Squares	df	Means Square	F	signature.
1	Regression	1269.673	2	634,836	16,124	,000b
	Remainder	3819.077	97	39,372		
	Total	5088.750	99			

A. Dependent Variable: TotalY
B. Predictors: (Constant), TotalX2, TotalX1

The significance value from the ANOVA table above is 0.00, which is smaller than 0.05. This shows that all independent variables (X1 and X2) have a simultaneous (together) influence on the dependent variable (Y). The calculated F value of 16.124 is greater than the F table of 3.09.

So the independent variables (X1 and X2) have a simultaneous (together) influence on the dependent variable (Y).

4.9 T Test

Table 8. T Test Results

Coefficient[A]

Model		Unstandardized Coefficients		Standardized Coefficient		
		B	Std. Error	Beta	Q	signature.
1	(Constant)	6,074	6,985		,870	,387
	AmountX1	,055	,168	.031	,330	,742
	AmountX2	,828	,158	,489	5,251	,000

a. Dependent Variable: all

This test is carried out to determine whether the independent variable (X1) partially (individually) has an influence on the dependent variable (Y). From the results above, the following interpretation is obtained:

Effect of E-Wallet (X1) on Impulse Buying (Y):
The calculated value of the E-Wallet variable (X1) is 0.330, which is smaller than the t table of 1.98. So X1 has no effect on Y. The significance value of 0.742 is greater than 0.05, so X1 has no effect on Y.

Effect of Discounts (X2) on Impulsive Buying (Y):
The calculated value of the variable X2 is 5.251 which is greater than the t table of 1.98. So there is an influence of X2 on Y.

4.9.1 The Effect of E-Wallets on Impulsive Buying

The results of testing this hypothesis show that E-Wallet does not have a significant influence on impulse buying. This can be seen from the calculated t value which is smaller than the t table (0.330<1.98). However, the regression coefficient value shows that the E-Wallet variable has a positive value of 0.55. So E-Wallet has a positive and insignificant effect on impulse buying. There is a positive relationship between E-Wallet and impulse buying, but the second relationship is not strong or significant enough. The results of this study contradict research by Suhardi, AA, Siregar, S., & Dharma, B (2024), which shows that the use of E-Wallet has an effect on Impulse Buying (Suhardi et al., 2024).

4.9.2 The Effect of Discounts on Impulsive Buying

The results of hypothesis testing show that there is a positive and significant influence of discounts on impulse buying. This is proven by the t-statistic for the discount variable being greater than the critical t-value (5.252 > 1.98). This means that discounts influence consumers in impulsive buying behavior on the Marketplace. This is in line with research by Gumilang & Nurchaya (2016) which states that discounts have a positive and significant effect on impulsive purchases (Ahmad Azwari & Lia Febria Lina, 2020). The more discounts offered, the higher the impulse buying behavior. The research results of Ahmad Aswari and Lia Febria Lina (2020) also show that discounts have a positive and significant effect on impulse purchases on online shopping sites (Ahmad Azwari & Lia Febria Lina, 2020).

5. Conclusion

E-wallet and discounts when used together have an influence on impulse buying. This means that the combination of E-Wallet and discounts encourages consumers to make impulse purchases. Partial use of E-Wallet does not have a significant effect on impulse buying. This means that E-Wallet can encourage impulse buying behavior but its influence is not strong enough. Partial discounts have a positive and significant influence on impulse buying. The limitation of this research is that it involves or uses data from one population, especially students, so that the research results cannot be generalized to other populations. The results of this research contribute to providing an understanding of the influence of E-Wallets and discounts on impulse purchases. Further research is needed to examine the impact of E-Wallets and discounts on other populations. Apart from that, further research can also be carried out to examine other factors that can influence impulse buying.

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THE EFFECT OF ELECTRIC ENERGY, HUMAN DEVELOPMENT INDEX, AND LABOR ON ECONOMIC GROWTH IN INDONESIA

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ABSTRACT

Economic growth is one of the main indicators of a country's progress, therefore this study aims to analyze the effect of electrical energy, human development index (HDI), and labor on economic growth in Indonesia. The data used in this study are secondary data in the form of panel data obtained from the annual report of the Central Statistics Agency (BPS) from 2018 to 2022, consisting of 34 provinces in Indonesia. The dependent variable in this study is economic growth, while the independent variables are electrical energy distribution, human development index (HDI), and labor. To determine the effect of electrical energy, human development index (HDI), and labor on economic growth in Indonesia, this study uses the panel data regression analysis method. The results showed that the three variables studied, namely electrical energy, labor and HDI, had a significant effect on economic growth in Indonesia. The variables of electrical energy and labor have a positive and significant effect on economic growth in Indonesia. While the human development index (HDI) variable has a significant negative effect.

***Keywords**: Economic Growth, Electric Energy, Labor*

1. Introduction

One indicator of the success of a country's economic development is by measuring the country's economic growth. Economic growth measures the long-term ability of a country to provide goods and services to its population. (Nurdin & Fuady, 2021). Economic growth shows how economic activity will increase people's income over a certain period of time. One measure of economic growth is the Gross Domestic Product (GDP), which is the added value obtained from economic production activities. (Amdan & Sanjani, 2023).

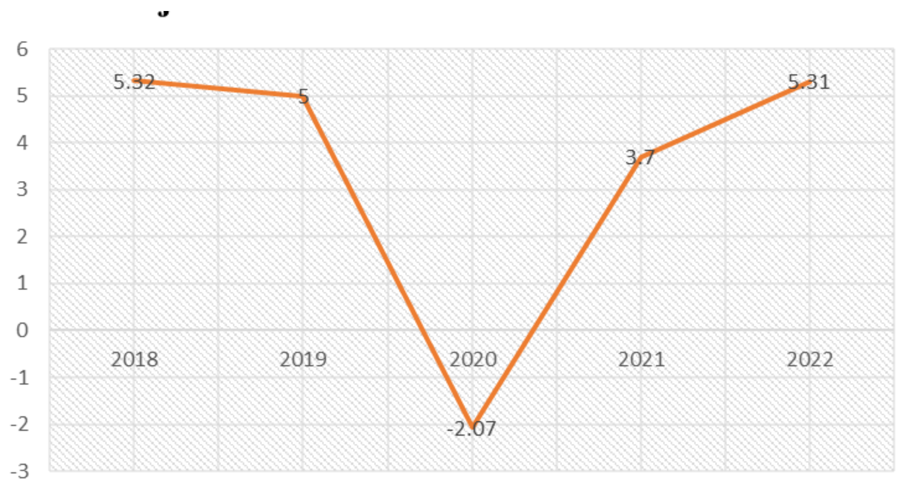

Figure.1. Indonesia's Economic Growth Rate 2018-2022
Source: BPS, data processed (2023)

The figure above shows the percentage of economic growth in Indonesia for 5 years from 2018-2022. The Central Bureau of Statistics (2023) reported that Indonesia's economic growth in 2019 decreased by 5 percent compared to the previous year. In 2020 Indonesia experienced a drastic contraction of -2.07 percent due to the impact of the covid-19 pandemic. This impact resulted in a decrease in community productivity. However, in 2021 & 2022 Indonesia's economic growth began to recover by reaching 3.7 percent and increasing to 5.31 percent.

The Indonesian government has made various efforts to increase economic growth. One of these efforts is to improve infrastructure, including electricity infrastructure. (Rediansyah et al., 2023) With the development and advancement of technology today, it is undeniable that electricity has become a primary need in supporting people's lives so that the government always ensures the availability, quality and sustainability of this electrical energy. However, electricity distribution is still uneven in Indonesia (Rezagama & Hadiwidodo, 2016) In some remote areas, there are still many people who do not have access to electricity. This causes low productivity of people in the area and hampers economic growth (Ministry of Energy and Mineral Resources, 2010) In the study of (Kamilla & Hutajulu, 2020; Prastika, 2023; Purim & Krismanti, 2021; Rediansyah et al., 2023; Salahuddin et al., 2018) shows that electrical energy has a positive and significant effect because electrical energy can increase productivity and efficiency in the production process, which in turn will encourage the country's economic growth. Whereas in the study (Riana, 2014) electricity did not have a significant effect because of the unevenness of electricity infrastructure.

Another indicator that can also affect economic growth is the Human Development Index (HDI). Increasing the Human Development Index (HDI) through education and health aims to improve people's welfare and economic growth. The HDI itself consists of three basic dimensions used to measure success in efforts to develop the quality of human life, namely longevity and healthy living, knowledge, and decent living standards. (Nisa & Rafikasari, 2022; Theophilia & Wijaya, 2023).. In the study of (Istianto et al., 2021; Olivia Theophilia & Riko Setya Wijaya, 2023; Taqi et al., 2021) HDI has a significant and positive effect on economic growth because an increase in HDI indicates an increase in the quality of human resources, such as education and health, which can increase productivity and innovation in a country's economy. However, in the study of (Ishak et al., 2020; Muqorrobin & Soejoto, 2017) HDI has a negative effect on economic growth due to low HDI, resulting from a lack of educational participation and high school dropout rates.

In addition to electrical energy and the human development index, indicators that can affect economic growth are labor. Labor is one of the inputs in driving the productivity of a region's economic growth. (Astawan, 2015) A larger number of workers will increase the amount of productive labor, the greater the productive labor, the greater the output produced. The theory is in line with studies from (Astawan, 2015; Nurul Fitriani, 2018; Shahid & Ali Khan, 2020; Tasrif et al., 2019; Vernanda et al., 2023) in contrast to the results of the study (Prameswari et al., 2021) where labor has a negative effect on economic growth due to the level of technology used, and external factors are more dominant.

Based on the study gap, description and problems, the purpose of this study is to analyze the effect of electrical energy, human development index (HDI), and labor on economic growth in Indonesia .

2. Literature Review

Economic Growth is a sustainable change in a country's economic situation towards better conditions. So that the development of economic activity that causes an increase in goods and services produced by the community and an increase in people's prosperity is called economic growth. (Dwi Putri et al., 2020; Subekti, 2023).. Economic growth is one of the main indicators of a country's progress. In Indonesia, economic growth is influenced by various factors, including electrical energy, the Human Development Index (HDI), and labor.

The first indicator that can affect economic growth is electrical energy. Electrical energy is everything related to electric power generation, electric power distribution, electric power transmission, substations, or other electrical instruments that are useful for supporting economic development. (Rediansyah et al., 2023). In the study (Kamilla & Hutajulu, 2020; Prastika, 2023; Purim & Krismanti, 2021; Rediansyah et al., 2023; Salahuddin et al., 2018) shows that electrical energy has a positive and significant effect on economic growth in Indonesia, while in the study (Riana, 2014) electricity does not have a significant effect because of the uneven electricity infrastructure in Papua.

In addition, the human development index can also affect the level of economic growth. A high human development index indicates that people have a better quality of life. This can increase productivity and drive economic growth. In studies (Istianto et al., 2021; Olivia Theophilia & Riko Setya Wijaya, 2023; Taqi et al., 2021) HDI has a significant and positive effect on economic growth in Indonesia However, in studies (Ishak et al., 2020; Muqorrobin & Soejoto, 2017) HDI has a negative effect on economic growth in Makassar and East Java provinces.

Labor is an important resource in economic development, and workers who work and generate income will contribute to the economy because they will consume by buying goods and services. (koyongian et al., 2019)The study of (Astawan, 2015; Nurul Fitriani, 2018; Shahid & Ali Khan, 2020; Tasrif et al., 2019; Vernanda et al., 2023) shows that labor has a positive and significant effect on economic growth in Indonesia in contrast to the results of the study of (Prameswari et al., 2019). (Prameswari et al., 2021) where labor has a negative effect on economic growth in the province of East Java.

3. Research Methods

This study uses secondary data in the form of panel data. The dependent variable is Economic Growth and the independent variables are electrical energy distribution, human development index (HDI), and labor obtained from the Indonesian Central Bureau of Statistics (BPS). The type of data used is panel data with the analysis year 2018-2022 and the unit of analysis 34 provinces in Indonesia. In this study, the panel data regression analysis method was used to determine the effect of electrical energy, human development index (HDI), and labor on economic growth in Indonesia. The REM, FEM, CEM Model Test is used to select the most appropriate regression model and produce more accurate conclusions about the relationship between variables and then this study uses the t test, f test, and simultaneous R square test to test the hypothesis The model parameters used in this study are as follows:

$$\boldsymbol{PE_{it} = \beta_0 + \beta_1 EL_{it} + \beta_2 IPM_{it} + \beta_3 TK_{it} + e_{it}}$$

Description:
PE : Economic Growth (Billion Rupiah) EL: Electric Energy (Gwh)
HDI : Human Development Index (%)
TK : Labor (%)
e : Error Term
It : Panel

Furthermore, the hypothesis testing carried out is :
The t-test : Used to test hypotheses about the effect of individual independent variables on the dependent variable. The t-test produces a t-statistic and p-value. If the p-value < α (significance level), then the null hypothesis is rejected and the alternative hypothesis is accepted.

F test : Used to test the hypothesis simultaneously about the effect of all independent variables on the dependent variable. The F test produces an F-statistic value and p-value. If the p-value < α, then the null hypothesis is rejected and the alternative hypothesis is accepted.
Simultaneous R-Square Test : Used to test how large a proportion of the variation in the dependent variable is explained by all the independent variables. The R-Square value indicates the goodness of fit of the model.

In addition, the classic assumption test is also carried out :
Multicollinearity : There is no strong linear relationship between independent variables. The multicollinearity test can be done by looking at the VIF (Variance Inflation Factor) value. If the VIF value is greater than 10 or the tolerance value is low, then there is multicollinearity.
Normality : To determine whether the data in the linear regression model is normally distributed or not. If the Jarque-Bera value is more than 0.05 then the data is normally distributed.

4. Research Findings and Discussion

4.1 Descriptive Statistics

In this study, economic growth is the dependent variable while the variables of electrical energy, labor and human development index are the independent variables. The following are the results of statistical description testing on these variables.

Table 1. Results of Descriptive Statistics

Variables	N		Max	Mean		Std. Deviation
Economic Growth	170	0.24	17.55	2.9416	4.15617	
Electrical Energy	170	183.32	56226.11	7408.6279	12349.00709	
Labor	170	15.89	70.43	40.8294	10.42098	
HDI	170	0.47	81.65	70.6968	6.64684	

Economic growth variables, from these data it can be described that the minimum value is 0.24 while the maximum value is 17.55 and the average value of the economic growth variable is 2.9416 with a standard deviation of 4.15617. The electrical energy variable, from the data it can be described that the minimum value is 183.32 while the maximum value is 56226.11 and the average value of the electrical energy variable is 7408.6279 with a standard deviation of 12349.00709. The labor variable, from the data, it can be described that the minimum value is 15.89 while the maximum value is 70.43 and the average value of the labor variable is 40.8294 with a standard deviation of 10.42098. HDI variable, from the data it can be described that the minimum value is 0.47 while the maximum value is 81.65 and the average value of the HDI variable is 70.6968 with a standard deviation of 6.64684Source: Data processed by the author, 2024

4.2 Model Estimation Test Results

In the regression model estimation method using panel data can be done through three approaches, namely the *Common Effect Model*, *Fixed Effect Model* (FEM), and *Random Effect Model* (REM). To choose the most appropriate model, there are several tests that can be carried out, namely the Chow test, Lagrange Multiplier , and Hausman.

Table 2. Chow Test Results

Effect Test	*Statistic*	*d.f.*	*Prob.*
Cross-section F	0.160120	(4,162)	0.9581
Cross-section Chi-squere	0.670786	4	0.9549

Source: Data processed by the author, 2024

Based on the test results, it can be seen that the *chow* test has a *chi-square* probability result greater than 0.05 (prob. 0.9549> 0.05) so that it can be said that the best model test is the *Common Effect Model.*

Table 3. Lagrange Multiplier Test Results

	Cross-section	*Test Hypothesis Time*	*Both*
Breusch-Pagan	1.938147	302.3780	304.3162
	(0.1639)	(0.0000)	(0.0000)

Source: Data processed by the author, 2024

Based on the results of the Lagrange multiplier test conducted, the *Breusch-Pagan* value <0.05. Thus, the right model to use is the *Random Effect Model*.

Table 4. Hausman Test Results

Test Summary	*Chi-Sq. Statistic*	*Chi-Sq. d.f.*	*Prob.*
Random Cross-section	0.640481	3	0.8871

Source: Data processed by the author, 2024

Based on the table above, the tests that have been carried out produce a *Cross Section Random* probability value > 0.05. Thus, the appropriate model to use is the *Random Effect Model*. After the *Chow*, *Lagrange Multiplier*, and *Hausman* tests were conducted, it was found that the *Random Effect Model was* chosen to be the most appropriate model.

4.3 Classical Assumption Test Results

In this study, the classic assumption test used is the multicollinearity test, and the normality test only because the data used in this study is panel data with the Random Effect Model approach.

Table 4.5. Multicollinearity Test Results

Electrical Energy	**Labor**	**HDI**
1.000000	0.030192	0.042484
0.030192	1.000000	0.022421
0.042484	0.022421	1.000000

Source: Data processed by the author, 2024

The multicollinearity test is conducted to test whether there is a correlation between independent variables or independent variables in the regression model. The correlation coefficient of electrical energy, labor, HDI must be <0.85, so based on table 4.5 all independent variables pass the multicollinearity test.

Table 4.6. Normality Test Results

Mean	-4.15e-16
Median	-0.161201
Maximum	6.758899
Minimum	-5.149291
Std. Dev.	1.643297
Skewness	0.499591
Kurtosis	7.677912
Jarque-Bera	162.0753
Probability	0.000000

Source: Data processed by the author, 2024

It can be seen in the figure where the value of *Jarque-Bera* is 162.07> 0.05, so it can be concluded that the data is normally distributed (passes normality).

4.4 Panel Data Regression Analysis Results

The panel data regression model is a regression model used to determine the effect of one or more predictor variables on a response variable with a data structure in the form of panel data.

Table 7. Results of Panel Data Regression Analysis Using *Random Effect Models*

Variables	***Coefficient***	***Std. Error***	***t-Statistic***	***Prob.***
C	**1.834551**	1.392069	1.317859	**0.1894**
Electrical Energy	**0.000297**	1.09E-05	27.10667	**0.0000**
Labor	**0.043410**	0.013302	3.263400	**0.0013**
HDI	**-0.040514**	0.019900	-2.035919	**0.0433**
R Squared	**0.843669**		*Mean Dependent Var*	2.941588
Adj.R-S	0.840843		*S.D. Dependent Var*	4.156166
F-statistic	298.6156		*Durbin-Watson stat*	2.122590
Prob(F-statistic)	**0.000000**			

Source: Data processed by the author, 2024

1. Partial Test (t-Statistic)

   Based on the regression results from table 4.5 above, electrical energy has a significant positive effect with a probability value of 0.0000. The coefficient value of 0.000297, shows that when electrical energy increases by 1 gigawatt (Gwh), it will cause an increase in economic growth of 0.0297%.

   Then the labor variable has a significant positive effect with a probability of 0.0013. The coefficient value of 0.04 shows that every increase in labor by 1 percent will cause an increase in economic growth by 4% in Indonesia.

   HDI has a negative and significant effect with a probability of 0.0433 on the decline in economic growth. The coefficient value of -0.040514, shows that every 1 percent increase in HDI will cause a 4% decrease in economic growth in Indonesia.
2. Simultaneous Test (F Test)

   The results of the panel data regression analysis in table 4.6, produce an F statistic value of 298.6156 with a *Prob (F-statistic*) value of 0.000000 <0.05. This means that the variables of electrical energy, labor, and HDI affect economic growth in Indonesia simultaneously or together.

3. Determination Coefficient Test

The results of the regression analysis in table 4.6 show the coefficient of determination known through the value in *Adjusted R-Square*, which is 0.840843, which means that the independent variables of electrical energy, labor, and HDI affect the dependent variable, namely economic growth by 84%, while the other 16% is influenced by other variables not included in the research model.

4.5 Discussion

Based on the test results conducted by the author, it shows that the three variables studied, namely electrical energy, labor and HDI, have a significant effect on economic growth in Indonesia. The electrical energy variable has a positive and significant effect on economic growth in Indonesia, this is in line with the results of studies conducted by (Kamilla & Hutajulu, 2020; Prastika, 2023; Purim & Krismanti, 2021; Rediansyah et al., 2023; Salahuddin et al., 2018) which say that electrical energy has a positive and significant effect on economic growth because electrical energy plays a fundamental role in driving economic growth in Indonesia. access to electrical energy allows people to carry out various economic and social activities that require electricity, such as working, studying, and accessing information. This increases people's productivity and welfare, which in turn drives economic growth. the government needs to pay attention to the use of this electrical energy well Indonesia can utilize electrical energy as the main driver to achieve sustainable economic growth and improve the welfare of its people.

Labor variables also have a positive and significant effect on economic growth in Indonesia, this is in line with the results of studies from (Astawan, 2015; Nurul Fitriani, 2018; Shahid & Ali Khan, 2020; Tasrif et al, 2019; Vernanda et al., 2023) which says that labor has a positive and significant effect on economic growth in Indonesia because a skilled and competent workforce can produce more goods and services in less time. This increase in productivity will increase overall economic output. And the more people who work and have income, the purchasing power of the community will increase. This increase in purchasing power will expand the domestic market for domestically produced products and services.

In contrast to electrical energy and labor, the HDI variable has a negative and significant impact on economic growth in Indonesia, this is in line with the results of studies from (Ishak et al., 2020; Muqorrobin & M., 2020), 2020; Muqorrobin & Soejoto, 2017) HDI has a negative effect on economic growth. Although the human development index (HDI) is usually considered a positive indicator of a country's overall progress, there are certain circumstances where HDI can have an indirect negative impact on economic growth. this is due to skills mismatches and labor market imbalances, if the education system is not aligned with the skills required by the labor market, this can lead to skills mismatches. this can result in educated individuals who have difficulty finding suitable jobs, while companies face a shortage of qualified labor. So the government needs to take strategic steps to improve the quality and relevance of education and skills development, streamline bureaucratic processes, reduce unnecessary red tape, and expedite business approvals to create a more conducive environment for investment and entrepreneurship, strengthen the legal framework and institutions to ensure the protection of intellectual property rights for both domestic and foreign investors, which will boost trust and confidence in the business climate, link social security benefits to skills development and training programs, which will encourage individuals to continuously upgrade their skills and remain employable in a changing economy.

5. Conclusion

Based on the research results described above, it can be concluded that the three variables studied, namely electrical energy, labor, and the Human Development Index (HDI), have a significant effect simultaneously on economic growth in Indonesia. The positive and significant effect of the use of electrical energy and labor can be seen from their ability to increase productivity and efficiency in various production processes. The higher level of use of electrical energy and labor triggers an increase in production output, which in turn will boost the country's economic growth. On the other hand, the negative and significant effect of HDI indicates that aspects such as lack of participation in education, high dropout rates, as well as other issues related to health and accessibility of education in Indonesia may become obstacles in achieving optimal economic growth. Therefore, efforts to improve these aspects need further attention as part of a sustainable economic development strategy for Indonesia.

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THE INFLUENCE OF WORK LIFE BALANCE, WORK LOAD, AND WORK ENVIRONMENT ON THE PERFORMANCE OF WOMEN TEACHERS WITH JOB STRESS AS A MEDIATION STUDY OF FEMALE TEACHERS AT GOLEWA RAYA DISTRICT HIGH SCHOOL

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ABSTRACT
This study aims to determine: (1) the direct influence of work – life balance on female teacher perfomance, (2) the direct influence of workload on female teacher perfomance, (3) the direct influence of work environment on female teacher perfomance, (4) the influence of work – life balance on female teacher perfomance mediated by work stress, (5) the influence of workload on female teacher perfomance mediated by work stress, (6) the influence of work environment on female teacher perfomance mediated by work stress. The sampling technique used non – probability sampling. Data were obtained by distributing questionnaires about work – life balance, workload, work environment, work stress, and teacher perfomance to 74 married female teachers in Senior High Schools in Golewa Raya District. Data analysis was conducted using SmartPLS 4.0. The result of the study indicate that: (1) work – life balance directly positively influences female teacher perfomance, (2) workload directly negatively influences female teacher perfomance, (3) work environment positively influences female teacher perfomance, (4) work – life balance does not to influence female teacher perfomance mediated by work stress, (5) workload does not influence female teacher perfomance mediated by work stress, (6) work environment does not influence female teacher perfomance mediated by work stress.
***Keywords**: work – life balance, workload, work environment, work stress, teacher perfomance*

1. Intoduction

Education plays a crucial role in shaping human character, knowledge, personality, and ethics, as well as enhancing the quality of human resources. Teachers, as a key aspect of academic success, bear significant responsibility in the learning process and assisting students in achieving their educational goals. Teachers play a vital role in developing the potential of the nation's future generations, in accordance with Law Number 14 of 2005 concerning Teachers and Lecturers. Married female teachers face additional challenges, such as the responsibility of caring for children and spouses, as well as managing household duties. Moreover, they must balance between work and family and confront demands from both family and society. These high responsibilities and demands can affect the performance of a female teacher. There are several variables considered to affect the performance of female teachers, either directly or indirectly. These variables include work-life balance, workload, and work environment. If the results of this study show that any or all of these variables influence performance, whether directly or mediated by work stress, then schools should ensure that they assign reasonable workloads to female teachers and improve the work environment in schools.

The best approach for female teachers themselves is to enhance their work-life balance to avoid conflicts between family and work. The measures mentioned above aim to improve performance by assigning reasonable workloads and enhancing the work environment and work-life balance.However, over time and with the advancement of the era, the responsibilities of being an educator have grown significantly. Increasing job demands and rising livelihood needs compel teachers to work harder to achieve optimal results. There are many new challenges in learning programs and ways of educating students' character, particularly for high school teachers. From the research conducted by Pradnyani & Rahyuda (2022), it was concluded that work-life balance has a positive effect on performance and a negative effect on work stress. This means that the better the work-life balance experienced by workers, the lower the work stress they will encounter. The research conducted by Yuzalmi (2023) shows that the workload variable has a significant partial effect on teacher performance. The research conducted by Rezeki, Pasaribu, & Bahri (2023) shows that the work environment has a significant direct effect on nurse performance. The research conducted by Pradnyani & Rahyuda (2022) found that work stress affects performance and that reducing work stress will improve performance. Based on the background above and the results of research conducted by several researchers, the author is interested in conducting a study titled "The Influence of Work-Life Balance, Workload, and Work Environment on the Performance of Female Teachers with Work Stress as Mediation." Based on the research problem above, the research questions are as follows, does work-life balance have a directly effect on the performance of female teachers? Does workload have a directly effect on the performance of female teachers? Does the work environment have a directly effect on the performance of female teachers? Does work-life balance affect the performance of female teachersmediated by work stress? Does workload affect the performance of female teachers mediated by work stress? Does the work environment affect the performance of female teachersmediated by work stress?

2. Literature Review

2.1 Empirical Literature

2.1.1 Human Resource Management

According to Sidabutar, Amini, Banurea, Nasution & Sadikin (2023:1886), management is a process that utilizes both science and art to organize and direct a group of people and other resources effectively and efficiently to achieve organizational goals. Damanik, Situmorang, Nisa, Khotimah & Nur (2023:3696) state that management is a series of activities carried out to organize and utilize resources to achieve organizational goals. Meanwhile, according to Tarigan, Setiawam & Panjaitan (2023:2), human resources generally refer to individuals of working age, whether they have entered the workforce or are already employed. Simply put, human resources are individuals working in a company or institution and are commonly referred to by various terms such as employees, assistants, laborers, workers, or staff. The management of human resources in educational institutions is key to success in improving the quality of education. This is because human resources are the most important factor in the educational process. According to Tiara, Supriyadi & Martini (2023:450), human resource management in an organization is a strategy for managing the workforce to support the achievement of organizational goals by developing human resource competencies. This means that educational organizations or schools must ensure that their human resource management focuses on developing specific competencies relevant to the duties and responsibilities of a teacher. These competencies include training programs that support work-life balance and appropriate workload management to effectively carry out teaching duties. Thus, human resource management can help improve teacher performance in achieving school goals. The functions of human resource management according to Zohriah & Diba (2023:5453-5454) are as follows: a) Planning is a management function related to future planning by educational institutions to achieve goals. b) Organizing is an action taken by an educational institution to implement plans that have been formulated to achieve goals. c) Actuating is the activity carried out by a manager to initiate and carry out activities in accordance with planning and organizing, to achieve predetermined goals. d) Controlling is a continuing management task aimed at ensuring that activities are carried out according to the plans that have been made.

2.1.1 Teacher Perfomance

Syahputra, Pristiani, Siregar, Budiarta, & Hasyim (2023:158) suggest that teacher performance is the achievement or outcome of their duties and responsibilities, with a primary focus on their ability to transform learners from a state of ignorance to knowledge, from dependency to independence, and from incompetence to competence. According to Syabarrudin (2023:126), a teacher's performance reflects their abilities as educators who fulfill various competencies such as creativity, innovation, and active engagement in teaching and learning activities, which in turn can lead to optimal student achievement in accordance with school standards. Based on the two definitions above, it can be concluded that teacher performance is their ability to transform learners into independent and competent individuals through creativity, innovation, and active teaching, and to achieve standards-based achievement. According to Supardi (2013:40), there are six indicators of teacher performance as follows: a. Ability to develop lesson plans and programs b. Ability to establish personal relationships c. Ability to establish interpersonal relationships d. Ability to conduct assessments e. Ability to implement enrichment programs f. Ability to implement remedial programs

2.1.2 Work Life Balance

The decline in teacher performance is often attributed to the lack of balance between personal life and work, resulting in teachers losing focus in their teaching activities. Rahardjo (2023:1796) explains that work-life balance is the condition in which an individual can evenly distribute their roles between work at the workplace and their roles as individuals, partners, parents, or family members. According to Fauzi & Ekhsan (2023:451-452), work-life balance refers to the extent to which an individual is involved and balanced in the allocation of time and emotional involvement between their roles in personal life and work, without experiencing conflicts between these roles. Pranindhita & Wibowo (2020:573) state that work-life balance has four indicators, including work interference with personal life, personal life interference with work, personal life enhancement of work, and work enhancement of personal life. By optimizing work-life balance, teacher performance can improve as they can carry out teaching tasks more effectively, avoid stress, and maintain a high level of focus.

2.1.3 Workload

One of the challenges encountered by teachers in enhancing their performance is workload. When the workload becomes overwhelming, it creates an uncomfortable work atmosphere for teachers and can swiftly induce work-related stress. Dawam & Setiawan (2022:77) define workload as the situation where a worker confronts a set of tasks that must be completed within specified time constraints, becoming their responsibility and burden. Hasibuan & Munasib (2020:250) elaborate on workload as the tasks individuals must accomplish within a particular job or role, usually within defined timeframes, which can impact employee performance under normal conditions. It's crucial for school management to comprehend teachers' workload and ensure that assigned tasks align with individual capabilities and allotted timeframes, aiming to preserve workload equilibrium for optimal and productive teacher performance. Following the aforementioned definitions, workload refers to a set of tasks that a worker must fulfill within a specific job or role, within predetermined time limits, with these tasks becoming the individual's responsibility and potentially influencing teacher performance if carried out under normal conditions. Workload indicators, as proposed by Putra (2012, in Jalil 2019:121), encompass targets to be achieved, job conditions, and job standards. Additionally, workload indicators as per Hernawan (2022:102) include the pursuit of continuous improvement in work and the completion of challenging tasks, signifying individuals' commitment and competence in handling tasks effectively amidst varying work demands.

2.1.4 Work Environment

Creating a comfortable work environment is essential for enhancing job satisfaction and ultimately impacting teacher performance positively. Nabawi (2019:173) defines the workplace as encompassing all elements surrounding employees, visible or not, that influence how they execute their tasks. A supportive work environment can elevate employee morale and job satisfaction. When teachers operate within a conducive teaching environment, equipped with adequate facilities, supported by colleagues and school management, and nurtured by a positive atmosphere, they tend to deliver quality education to students more effectively. In essence, a favorable work environment assists teachers in improving their performance in fulfilling their duties at school. Referring to Rio et al. (2023:5181), the work environment encompasses all factors surrounding workers that can impact how they perform their tasks and responsibilities. Based on these understandings, the work environment includes visible and invisible elements that affect task execution and responsibility fulfillment. A supportive work environment boosts employee or teacher morale, job satisfaction, and contributes to their ability to provide quality services or education. Elements influencing the physical conditions of the work environment, proposed by Nitisemito (1992) (in Lukito & Alriani, 2019:27-28), include coloration, illumination, air quality, noise, workspace, security, and cleanliness. Sedarmayanti (2007) (in Sampurno & Wibowo, 2015:170) identifies workplace environment indicators such as illumination, air temperature, air circulation, and noise. Additionally, Nitisemito (1992) (in Jalil, 2019:125) suggests workplace environment indicators such as work atmosphere, relationships with colleagues, and the availability of employee facilities. Each of these aspects collectively shapes the work environment, influencing teacher satisfaction and performance.

2.1.5 Work Stress

Work-related stress poses a significant challenge, potentially leading to employee dissatisfaction and a subsequent decline in performance. Lukito & Alriani (2019:28) characterize work-related stress as an excess of psychological and physical pressure stemming from workplace actions and situations, often including demands that surpass an individual's capabilities. In the case of teachers, such stress can manifest as heavy burdens, negatively impacting their well-being and effectiveness. Muhbar & Rochmawati (2019:82) further elaborate that work-related stress among teachers arises from the pressure of meeting job demands, compounded by family issues, excessive workload, and other unavoidable factors. From these definitions, it's evident that work-related stress encompasses both psychological and physical strains resulting from workplace dynamics, potentially exacerbated by external factors. Robbins (2006) (in Jalil, 2019:122-123) identifies five key indicators of work-related stress: task demands, role demands, interpersonal demands, organizational structure, and leadership styles. Each of these factors contributes to the overall stress experienced by employees, including teachers, affecting their job satisfaction and performance. Thus, addressing work-related stress is crucial for maintaining a conducive work environment and sustaining employee well-being and productivity.

2.2 Hypothesis

1. Work-life balance directly effect the performance of female teachers
2. Workload directlyeffect the performance of female teachers
3. The work environment directly effect the performance of female teachers
4. Work life balance affects the performance of female teachers mediated by work stress
5. Workload affects the performance of female teachers mediated by work stress
6. Work environment affect the performance of female teachers mediated by work stress?

3. Research Methods

The research methodology adopted for this study involves the utilization of a Likert scale for measurement, a method widely recognized for assessing attitudes and opinions. As elucidated by Fauzi, Dencik, & Asiati (2019:64), the Likert scale offers respondents a range of options to express their level of agreement or disagreement with statements, spanning from strongly positive to strongly negative. In this investigation, respondents are tasked with using a five-point Likert scale, ranging from "strongly disagree (SD)" to "strongly agree (SA)," to provide nuanced insights across various research variables, particularly focusing on the dynamics of work-life balance, workload, and the working environment. The data collection process encompasses both primary and secondary sources, providing a comprehensive understanding of the factors under scrutiny. Primary data is acquired through the distribution of questionnaires among married female high school teachers in the Golewa Raya District, offering firsthand insights into their perceptions and experiences. Meanwhile, secondary data comprises information obtained from school records, relevant literature, and previous studies, supplementing the primary data with additional context and insights. A key aspect of the data collection process is the utilization of online questionnaires administered via Google Forms.

This methodological approach aligns with Sugiarto's assertion (2017:185) that questionnaire techniques facilitate data collection independent of the physical presence of researchers, allowing for remote participation and enhanced accessibility. Furthermore, instrument testing procedures, including validity and reliability testing, are seamlessly integrated into the subsequent Partial Least Square (PLS) analysis phase. Validity testing, as outlined by Kasmir (2022:259), serves as an initial assessment of the measurement tools' accuracy and effectiveness in capturing the intended constructs. It ensures that the questionnaire items effectively measure the targeted variables, thereby enhancing the robustness and credibility of the research findings. Concurrently, reliability testing, as expounded by Sugiarto (2017:209), evaluates the consistency and stability of the measurement instruments across multiple administrations, ensuring reliable and replicable data outcomes. The analytical framework employed in this study revolves around Partial Least Squares (PLS) analysis, a versatile modeling technique widely used in Structural Equation Modeling (SEM). This approach, as detailed by Kasmir (2022:270), enables the simultaneous examination of multiple variables and their interrelationships, offering a nuanced understanding of complex phenomena. PLS analysis comprises two primary sub-models: the inner model, which assesses the direct effects between variables, and the outer model, which evaluates validity and reliability. Additionally, the research formulates and tests hypotheses concerning the direct effects of work-life balance, workload, and the working environment on female teachers' performance. These hypotheses are rigorously examined, considering a significance level of 0.05, to ascertain the statistical validity of the proposed relationships. Moreover, mediation hypotheses are explored, examining the mediating role of stress between the aforementioned variables, thus providing deeper insights into the underlying mechanisms shaping teacher performance outcomes. Overall, the meticulous execution of this multifaceted research methodology aims to provide comprehensive insights into the intricate interplay between work-life dynamics, workload management, the quality of the working environment, and their collective impact on the performance of female teachers in the Golewa Raya District.

4. Research Findings and Discussion

4.1 Measurement Model Testing

4.1.1 Outer Model

Abdilah & Hartono (201:196) stated that in the PLS measurement model, parameters for testing convergent validity include factor loading, AVE, and communality. In this study, particularly in data analysis using the SmartPLS application, the researcher used loading factor parameters expected to be > 0.7 and AVE > 0.5. After distributing questionnaires to 74 respondents, namely female teachers at SMA Golewa Raya District, the data were processed using PLS 4.0. The results showed the loading factor values as follows

Table 1. Loading Factor Values Before Deletion

No	Statement	Loading Factor Value	Status
1	WLB 1	0.942	Valid
2	WLB 2	0.928	Valid
3	WLB 3	0.927	Valid
4	WLB 4	0.929	Valid
5	BK 1	0.962	Valid
6	BK 2	0.968	Valid
7	BK 3	0.964	Valid
8	BK 4	0.968	Valid
9	BK 5	0.964	Valid
10	SK 1	0.754	Valid
11	SK 2	0.803	Valid
12	SK 3	0.694	Not Valid
13	SK 4	0,741	Valid
14	SK 5	0.743	Valid
15	LK 1	0.674	Not Valid
16	LK 2	0.679	Not Valid
17	LK 3	0.674	Not Valid
18	LK 4	0.979	Valid
19	LK 5	0.694	Not Valid
20	LK 6	0,992	Valid
21	LK 7	0,971	Valid
22	KG 1	0,838	Valid
23	KG 2	0,656	Not Valid
24	KG 3	0,625	Not Valid
25	KG 4	0,885	Valid
26	KG 5	0,827	Valid
27	KG 6	0,616	Not Valid

Source: Data processed using SmartPLS 4.0

Based on Table IV.8 above, it shows that there are statements that are not valid, namely SK3, LK1, LK2, LK3, LK5, KG2, KG3, and KG6 because they have loading factor values < 0.7, so these statements must be deleted. Here are the loading factor values after removing the invalid statements."

Table 2. The Loading Factor Values After Deletion

No	Statement	Loading Factor Value	Status
1	WLB 1	0.942	Valid
2	WLB 2	0.928	Valid
3	WLB 3	0.927	Valid
4	WLB 4	0.928	Valid
5	BK 1	0.962	Valid
6	BK 2	0.968	Valid
7	BK 3	0.964	Valid
8	BK 4	0.968	Valid
9	BK 5	0.964	Valid
10	SK 1	0.729	Valid
11	SK 2	0.761	Valid
12	SK 4	0.783	Valid
13	SK 5	0,770	Valid
14	LK 4	0,986	Valid
15	LK 6	0,993	Valid
16	LK 7	0,978	Valid
17	KG 1	0,862	Valid
18	KG 4	0,902	Valid
19	KG 5	0,880	Valid

Source: Data processed using SmartPLS 4.0

Based on the table above, it can be seen that the loading factor values are > 0.7, thus it can be concluded that the indicators of these variables already have good convergent validity. Among these five variables, measurement items LK 4 and LK 6 have the highest outer loading (0.986) and (0.993), indicating that both measurement items are related to supportive work environment conditions in the school environment. Furthermore, another parameter to measure convergent validity is Average Variance Extracted (AVE) 0.5. Below are the AVE values presented in the table.

Table 3. Average Variance Extracted Value

No	Variable	Value (AVE)	Status
1	Work Life Balance	0,867	Valid
2	Workload	0,932	Valid
3	Work Environment	0,971	Valid
4	Work Stress	0,579	Valid
5	Teacher Perfomance	0,777	Valid

Source: Data processed using SmartPLS 4.0

Based on the table above, it can be seen that the Average Variance Extracted (AVE) > 0.5, indicating that these indicators have good convergent validity.

4.1.2 Discriminant validity test

Table 4. The Square Root of AVE Values and Latent Variable Correlations

Variable	Work Life Balance	Workload	Work Environment	Work Stress	Teacher Perfomance

Work Life Balance	0,931				
Workload	0,839	0,965			
Work Environment	0,728	0,747	0,986		
Work Stress	0,225	0,320	0,366	0,761	
Teacher Perfomance	0,391	0,343	0,474	0,603	0,882

Source: Data processed using SmartPLS 4.0

Based on the table above, the variable work-life balance has a square root of AVE (0.931) greater than its correlation with workload (0.839), work environment (0.728), work stress (0.225), and teacher performance (0.391). This indicates that the discriminant validity of the work-life balance variable is fulfilled. Similarly, the validity of workload, work environment, work stress, and teacher performance is also satisfied, as the square root of AVE is greater than the correlations between variables.

Table 5. Cronbach's Alpha and Composite Reliability

No	Variable	*Cronbach's Alpha*	*Composite Reliability*	Status
1	Work Life Balance	0,949	0,949	Reliabel
2	Workload	0,982	0,982	Reliabel
3	Work Environment	0,985	0,988	Reliabel
4	Work Stress	0,768	0,789	Reliabel
5	Teacher Perfomance	0,857	0,861	Reliabel

Source: Data processed using SmartPLS 4.0

Based on the table, the overall reliability of Cronbach's alpha and composite is fulfilled, as all values are > 0.7. The highest Cronbach's alpha value is 0.985 for the work environment variable, while the lowest value is 0.768 for the work stress variable. Similarly, composite reliability also indicates a highest value of 0.988 for the work environment variable, and a lowest value of 0.789 for the work stress variable.

4.1.3 Inner Model

Table 6. R2 Value

No	Variable	R^2
1	Work Stress	0,632
2	Teacher Perfomance	0,417

Source: Data processed using SmartPLS 4.0

Based on the table above, it can be concluded that 63.2% of the variability in work stress can be explained by factors such as work-life balance, workload, and work environment. Meanwhile, the remaining 36.8% may be influenced by other variables not examined in this study. Additionally, approximately 4.17% of the variability in teacher performance can be explained by factors such as work-life balance, workload, and work environment, while 58.3% is likely influenced by other factors not considered in this research.

4.1.4 Hypothesis Testing 1 – 6

In this study, the relationship between variables can be understood through the estimation results of path coefficients and their significance levels (p-value), which were analyzed using the SmartPLS 4.0 program.

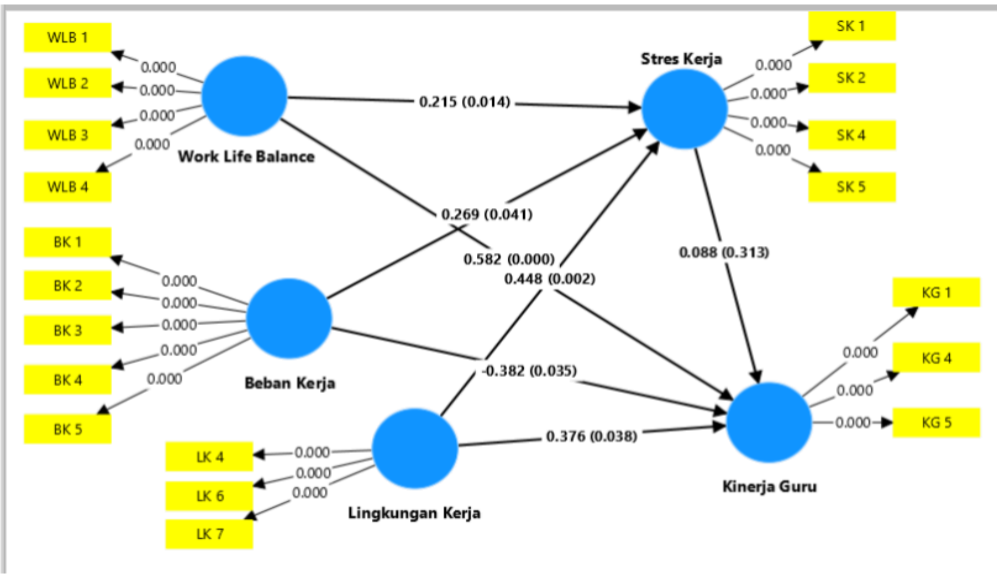

Figure 1. Testing Direct Effect Model with SmartPLS 4.0
Source: Data processed using SmartPLS 4.0

"In hypothesis testing, the assessment is based on the p-value. When the p-value > 0.05, H0 is accepted, indicating that the influence is not significant. However, if the p-value < 0.05, H0 is rejected, and Ha is accepted, indicating a significant influence. Additionally, the path coefficient is used to evaluate the strength of the influence between these variables. Below is the table of test results processed using SmartPLS 4.0."

Table 7. Estimation Results of Path Coefficients

No	Variable	*Original Sample* (O)	*Sampel Mean*	*P - value*	Description
Direct Effect					
1	WLB -> KG	0,582	0,561	0,000	Significant
2	BK -> KG	-0,382	-0,378	0,035	Significant
3	LK -> KG	0,376	0,392	0,038	Significant
4	WLB -> SK	0,215	0,246	0,014	Significant
5	BK -> SK	0,269	0,248	0,041	Significant
6	LK -> SK	0,448	0,431	0,002	Significant
7	SK -> KG	0,088	0,102	0,313	Not Significant

Source: Data processed using SmartPLS 4.0

Table 8. The Results of Path Coefficient Estimation

No	Variable	*Original Sample* (O)	*Sampel Mean*	*P - value*	Description
Indirect Effect					
1	WLB -> SK -> KG	0,019	0,024	0,343	Not Significant
2	BK -> SK -> KG	0,024	0,025	0,345	Not Significant
3	LK -> SK -> KG	0,039	0,043	0,317	Not Significant

Source: Data processed using SmartPLS 4.0

Based on the table above, the hypothesis testing results for hypotheses 1 – 6 are as follows:

i. Hypothesis Testing 1

a) Hypothesis

$H0_1$: Work-life balance does not have a direct effect on the performance of female teachers.

Ha_1: Work-life balance has a direct effect on the performance of female teachers.

b) Decision Basis

P-value ≤ 0.05 H01 rejected Ha1 accepted

P-value > 0.05 H01 accepted Ha1 rejected

c) Decision

P-value = 0.000 means H01 rejected Ha1 accepted

d) Explanation

Based on Table IV.7, the effect of work-life balance on the performance of teachers is indicated by a path coefficient of 0.582 with a p-value of 0.000 < 0.05, so $H0_1$ is rejected and Ha_1 is accepted, which means work-life balance directly affects the performance of teachers positively. In this study, it means that the better the work-life balance, the higher the performance, and vice versa, the worse the work-life balance, the lower the performance.

ii. Hypothesis Testing 2

a) Hypothesis

H02: Workload does not have a direct effect on the performance of female teachers.

Ha2: Workload has a direct effect on the performance of female teachers.

b) Decision Basis

P-value ≤ 0.05 $H0_2$ rejected Ha2 accepted

P-value > 0.05 $H0_2$ accepted Ha2 rejected

c) Decision

P-value = 0.035 means H02 rejected Ha2 accepted

d) Explanation

Based on Table IV.7, the effect of workload on teacher performance is indicated by a path coefficient of - 0.378 (negative) with a p-value of 0.035 < 0.05, so H02 is rejected and Ha2 is accepted, which means workload directly affects the performance of teachers negatively. In this study, it means that the higher the workload, thelower the performance, and vice versa, the lower the workload, the higher the teacher's performance.

iii. Hypothesis Testing 3

a) Hypothesis

H03: Work environment does not have a direct effect on the performance of female teachers.

Ha3: Work environment has a direct effect on the performance of female teachers.

b) Decision Basis
P-value ≤ 0.05 $H0_3$ rejected Ha3 accepted
P-value > 0.05 $H0_3$ accepted Ha3 rejected

c) Decision
P-value = 0.038 means H03 rejected Ha3 accepted

d) Explanation
Based on Table IV.7, the effect of the work environment on teacher performance is indicated by a path coefficient of 0.376 with a p-value of 0.038 < 0.05, so $H0_3$ is rejected and Ha_3 is accepted, which means the work environment directly affects the performance of teachers positively. In this study, it means that the more conducive the work environment, the higher the performance, and vice versa, the less conducive the work environment, the lower the performance.

iv. Hypothesis Testing 4 with Mediation Effect

a) Hypothesis
H04: Work-life balance does not have an effect on the performance of female teachers mediated by work stress.
Ha4: Work-life balance has an effect on the performance of female teachers mediated by work stress.

b) Decision Basis
P-value ≤ 0.05 $H0_4$ rejected Ha_4 accepted
P-value > 0.05 $H0_4$ accepted Ha_4 rejected

c) Decision
P-value = 0.343 >0.05, meaning $H0_4$ accepted Ha_4 rejected

d) Explanation
Based on Table IV.8, the effect of work-life balance on the performance of teachers mediated by work stress is indicated by a path coefficient (original sample) of 0.019 with a p-value of 0.343 > 0.05, so $H0_4$ is accepted and Ha_4 is rejected, meaning work-life balance does not affect the performance of teachers mediated by work stress. In this study, it means that neither good nor bad work-life balance leads to an increase or decrease in work stress and teacher performance.

v. Hypothesis Testing 5 with Mediation Effect

a) Hypothesis
$H0_5$: Workload does not have an effect on the performance of female teachers mediated by work stress.
Ha_5: Workload has an effect on the performance of female teachers mediated by work stress.

b) Decision Basis
P-value ≤ 0.05 $H0_5$ rejected Ha_5 accepted
P-value > 0.05 $H0_5$ accepted Ha_5 rejected

c) Decision
P-value = 0.345 > 0.05, meaning $H0_5$ accepted Ha_5 rejected

d) Explanation
Based on Table IV.8, the effect of workload on the performance of teachers mediated by work stress is indicated by a path coefficient (original sample) of 0.024 with a p-value of 0.345 > 0.05, so $H0_5$ is accepted and Ha_5 is rejected, meaning workload does not affect the performance of teachers mediated by work stress. In this study, it means that neither high nor low workload leads to an increase or decrease in work stress and teacher performance.

vi. Hypothesis Testing 6 with Mediation Effect

a) Hypothesis

$H0_6$: Work environment does not have an effect on the performance of female teachers mediated by work stress.

Ha_6: Work environment has an effect on the performance of female teachers mediated by work stress.

b) Decision Basis

P-value ≤ 0.05 $H0_6$ rejected Ha_6 accepted

P-value > 0.05 $H0_6$ accepted Ha_6 rejected

c) Decision

P-value = 0.317 > 0.05, meaning $H0_6$ accepted Ha_6 rejected

d) Explanation

Based on Table IV.8, the effect of the work environment on the performance of teachers mediated by work stress is indicated by a path coefficient (original sample) of 0.039 with a p-value of 0.317 > 0.05, so $H0_6$ is accepted and Ha_6 is rejected, meaning the work environment does not affect the performance of teachers mediated by work stress. In this study, it means that neither conducive nor non-conducive work environment leads to an increase or decrease in work stress.

4.1.5 A summary of the hypothesis testing results overall is shown in the following table

Table 9. Overall Hypothesis Testing Results

No	Hypothesis	Outcome
1	H1	Proven
2	H2	Proven
3	H3	Proven
4	H4	Unproven
5	H5	Unproven
6	H6	Unproven

Source: Data processed using SmartPLS 4.0

5. Conclucion

This research focuses on the influence of work-life balance, workload, and work environment on the performance of female teachers, mediated by work stress, among female teachers in high schools in the Golewa Raya District. The study involved a sample of 74 respondents, consisting of married female teachers in high schools in the Golewa Raya District. The research findings conclude that:

a. Work-life balance has a direct positive effect on the performance of female teachers.
b. Workload has a direct negative effect on the performance of female teachers.
c. The work environment has a direct positive effect on the performance of female teachers.
d. Work-life balance does not affect the performance of female teachers when mediated by work stress.
e. Workload does not affect the performance of female teachers when mediated by work stress.
f. The work environment does not affect the performance of female teachers when mediated by work stress.

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EFFECT OF HEALTH SPENDING, GRANT SPENDING AND TAXES ON ECONOMIC GROWTH ON SUMATRA IN 2019 – 2021

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ABSTRACT

Economic growth is an important reference in measuring the success of economic development, because it shows how much influence the policies implemented by the government on increasing economic growth. The purpose of this study is to determine how the effect of health spending, grant spending and taxes on economic growth in Sumatra. This study used explanatory research and descriptive research methods. The data used is in the form of panel data consisting of 10 provinces on the island of Sumatra, namely Aceh, North Sumatra, West Sumatra, Riau, Jambi, South Sumatra, Bengkulu, Lampung, Bangka Belitung Islands and Riau Islands in 2019-2021. The data used is sourced from the Central Statistics Agency (BPS) and the Directorate General of Financial Balance (DGT). This study used Panel Data Test, FEM, REM and CEM Model Test and Hypothesis Test. The best model selected is the FEM model with results showing that health spending has a positive but not significant influence on economic growth, grant spending has a significant negative influence on economic growth and taxes have a significant positive influence on economic growth on Sumatra Island in 2019-2021
***Keywords**: Economic growth, spending, taxes*

1. Introduction

Basically, the economic development of a region is a series of efforts that are carried out consciously and continuously with the aim of improving the situation simultaneously and continuously. In this context, economic development also aims to encourage equitable development and improve the welfare of the community evenly. A series of actions and policies known as economic development aims to improve people's quality of life, create more jobs, equalize income distribution, improve regional economic relations, and expand primary industry to secondary industry towards tertiary industry (Sari, 2017).

When the quantity and quality of factors of production increase, the capacity of a country to produce goods and services also increases. Economic growth is an important measure of the success of economic development because it shows the impact of development policies implemented. The process of increasing the production of goods and services used in the economic activities of a society is closely related to economic growth. According to Djojohadikusumo (1994), the production process involving various types of products through the use of production equipment and infrastructure is generally studied in the context of economic growth.

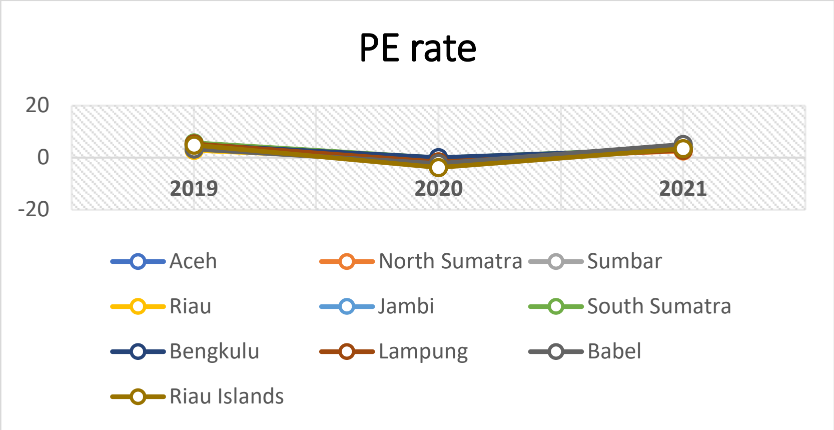

Figure 1. Economic Growth Rate in Sumatra 2019-2021
Source: data processed by the author, 2024

The COVID-19 pandemic halted Indonesia's economic growth in 2020 at -2.07 percent. However, the economy has recovered and grew 5.31% in 2022, which is the highest growth since 2014. Indonesia's economic growth in Q4-2022 recorded strong growth of 5.01% (yoy). In addition, Indonesia's economic growth throughout 2022 also recorded a remarkable growth of 5.31% (y.o.y), surpassing the government's target of 5.2% (y.o.y), and returning to the 5% level that existed before the pandemic.

Public economic theory discusses the role of government in an economic system.During this time there has been much controversy over the large role that government should play.This is because each individual has a unique perspective on how much money should be spent to generate benefits from government programs.However, there is no denying that the elderly community relies heavily on government services. Government spending and policies benefit many parties. Most studies show that public capital promotes economic growth (Aschauer, 1999).

Regional Law No. 22 of 1999, later amended by Law No. 32 of 2004, gives regions the authority to govern themselves by reducing the role of the central government.Local governments have broad rights and powers to meet the needs and desires of developing communities.This law stipulates that regions have the power to decide how to allocate resources for expenditure, taking into account the adequacy, needs and capacity of the region (Ngroho, 2009).Previously centralized national fiscal policy has now been decentralized through regional autonomy (Sipahutar, 2013). The transfer of funds from the center to the regions, which supports Indonesia's fiscal decentralization, gives regions the freedom to spend their own money. This obligation is stipulated in Law No. 33/2004 on Fiscal Balance between Central and Local Governments. One of the objectives of fiscal decentralization is to improve the efficiency of national resource allocation through transparent and accountable fiscal relations between central and local governments.nThis will be achieved through the use of instruments such as the General Allocation Fund (DAU), Special Allocation Fund (DAK) and Revenue Sharing Fund (DBH) to reduce horizontal inequality.

The regional autonomy policy is a strategic step in two ways. First, regional autonomy and decentralization efforts are used to overcome regional problems in Indonesia such as poverty, uneven development, low quality of life of local communities, and human resource development problems. Second, to welcome the era of economic globalization, Indonesia uses decentralization and regional autonomy to strengthen the regional economic base (Mardiasmo, 2009).

Health plays an important role in a country's development and economic growth. Without health, sustainable development goals cannot be achieved (Shaloho & Hardiawan, 2017). The entire health system costs the Indonesian government an enormous amount of money. This financing comes from various sources from local and central government (Dewi, 2017). Indonesia's health budget is influenced by the regional autonomy policy implemented by the central government (Harmana & Adisasmito, 2006).

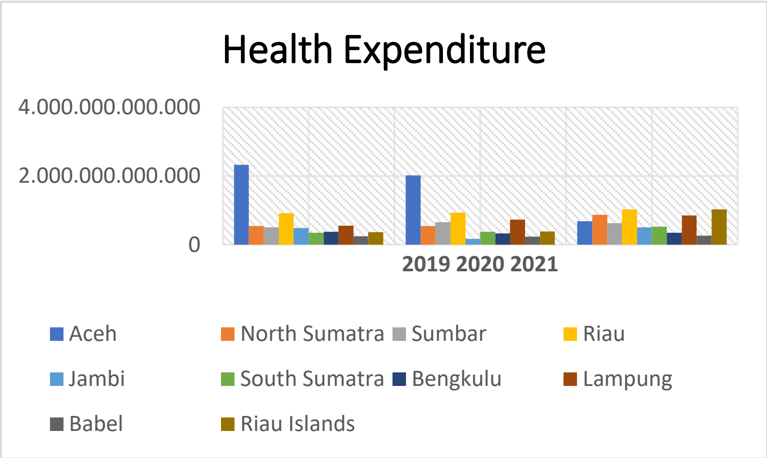

Figure 2. Realization of Health Expenditure in Sumatra 2019-2021
Source: data processed by the author, 2024

In 2019, the realization of health expenditure in Aceh Province was the highest at IDR 232 trillion. There was a significant difference between Aceh Province's health expenditure and other provinces in Sumatra in 2019. Then the second highest realization was Riau, which amounted to Rp. 919 billion. In 2020, these two provinces remain in the highest position. However, when compared to 2020, the realization of health expenditure for both provinces dropped dramatically.

The coronavirus pandemic has had a major impact on communities around the world, including Indonesia. To prevent the spread of new coronavirus infections, the Indonesian government began to urge people not to do activities outside the home. The Indonesian government has implemented social distancing and PSBB policies, also known as large-scale social restrictions, which are expected to reduce the impact of the economic crisis (Nasution, 2020; Kickbusch, 2020). The entire healthcare system incurs enormous costs for the Indonesian government. This funding comes from various sources from the local and central government (Dewi, 2017). Indonesia's 0 2,000,000,000,000 4,000,000,000,000 2019 2020 2021 Health Expenditure Aceh North Sumatra Sumbar Riau Jambi South Sumatra Bengkulu Lampung Babel Riau Islands health budget is influenced by the central government's regional autonomy policy (Harmana & Adisasmito, 2006). Regarding autonomy, the Provincial Government's policy is different.

The disbursement of subsidies plays an important role in the economic growth of a district/city. Grants are intended to achieve the objectives of city government programs and activities, taking into account the principles of justice, decency, rationality, and public interest. Grant costs are part of operational costs. Budget expenditures for daily activities of the central/regional government that provide benefits. Grants can provide business financing assistance to community groups and individuals to encourage economic growth. This can be seen from community efforts such as utilizing unused land, using new technology to manage businesses, and improving assets such as houses and cars. The regional agency administering grants and social assistance is responsible for the grants and social assistance process, starting from budgeting, implementation, accountability reporting, monitoring and evaluation. Grants and social assistance are provided in accordance with regional financial capabilities, with priority given to fulfill mandatory and discretionary expenditures.

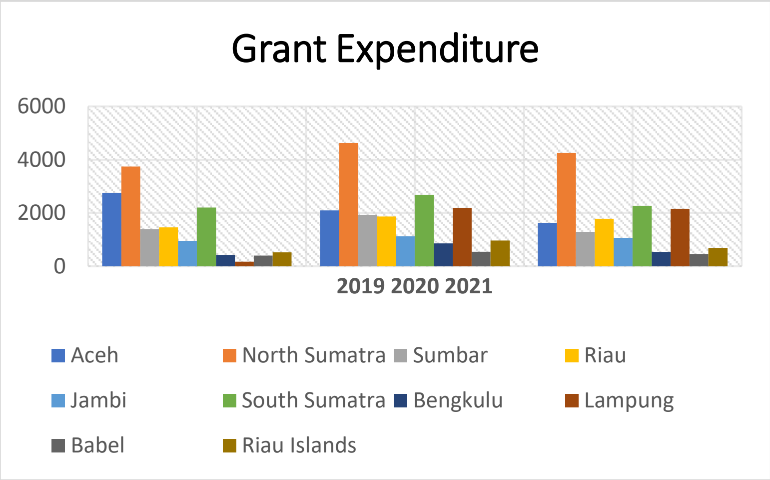

Figure 3. Realization of Grant Expenditure in Sumatra 2019-2021
Source: data processed by the author, 2024

Based on Figure 3, in 2019 the realization of grant expenditure in North Sumatra province has the highest value of Rp. 3745.89 billion and the lowest in Lampung Province, which is Rp. 172.46 billion. In 2020, North Sumatra province again had the highest realization of grant expenditure in Sumatra and the lowest was owned by Bangka Belitung province, which amounted to Rp. 549.01 billion. In 2021, 0 2000 4000 6000 2019 2020 2021 Grant Expenditure Aceh North Sumatra Sumbar Riau Jambi South Sumatra Bengkulu Lampung Babel Riau Islands grant expenditure in North Sumatra amounted to Rp. 4250.87 billion and the lowest was the province of Bangka Belitung, which amounted to Rp. 452.8 billion.

Local governments receive subsidies from the central government. The stability of the national economy and the fiscal balance between the central and local governments allow for the transfer of local government subsidies to other regions. Funding is provided for activities or programs carried out by one or more work units to achieve measurable objectives. These activities involve the mobilization of resources such as human resources (HR), capital goods such as equipment and technology, funds, or a combination of these resources as inputs to produce outputs. Therefore, it can be concluded that grant funds are allocated for basic needs related to local government functions such as: B. Improving basic services, education, health, adequate social and public facilities, and the development of social security systems. In other words, subsidies are allocated for public services and social security programs, not to promote economic growth.

Taxes are the main source of central and local government revenue. The capacity of local budgets to finance expenditures, both routine and development budgets, is influenced by the size of taxes (Simanjuntak & Mukhlis, 2012). The government uses various strategies to increase this tax revenue, including tax reform carried out by local governments. The purpose of this tax reform is to increase local tax revenue from the taxation sector. Furthermore, increasing people's prosperity will be achieved through economic growth and regional development (Saragih, 2018).

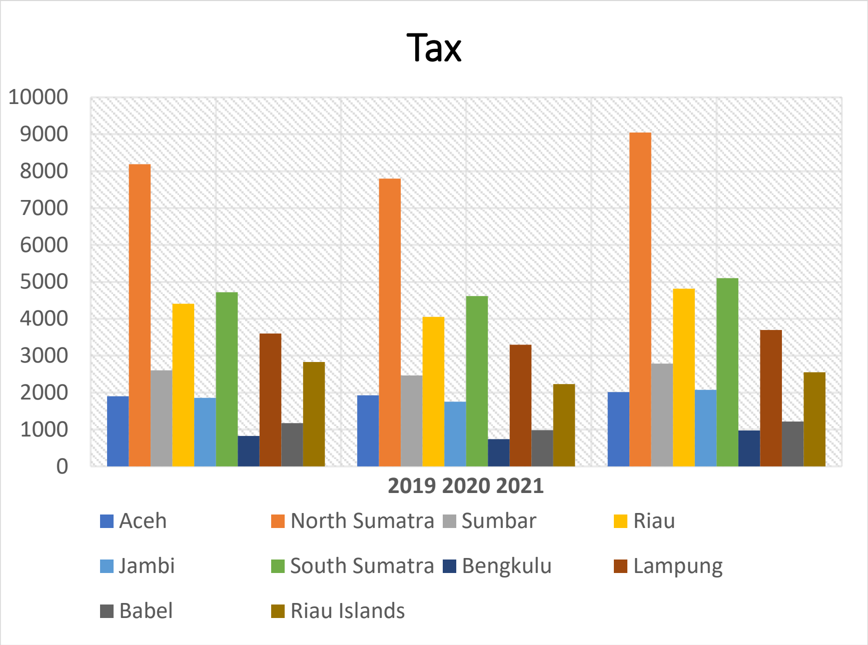

Figure 4. Tax Realization in Sumatra 2019-2021
Source: data processed by the author, 2024

North Sumatra's tax revenue in 2019-2021 is the highest compared to other provinces in Sumatra. In 2019 North Sumatra tax revenue amounted to Rp. 8184.62 0 5000 10000 2019 2020 2021 Tax Aceh North Sumatra Sumbar Riau Jambi South Sumatra Bengkulu Lampung Babel Riau Islands billion, in 2020 it amounted to Rp. 7798.45 billion and in 2020 it amounted to Rp. 9046.73 billion. Furthermore, in South Sumatra Province with revenue in 2019 amounting to Rp. 4722.41 billion, in 2020 amounting to Rp. 4613.36 billion and in 2021 amounting to Rp. 5099.58 billion.

Local taxes are mandatory contributions imposed based on applicable laws and regulations and are considered as community obligations or tax obligations. The purpose of regional autonomy and fiscal decentralization policies at the regional level is to provide faster, more effective and efficient services.

1.1 Problem Formulation

1. Is there an effect of health expenditure variables on economic growth in Sumatra partially?
2. Is there an effect of grant expenditure variables on economic growth in Sumatra partially?
3. Is there an effect of tax variables on economic growth in Sumatra partially?
4. Is there an effect of health expenditure, grant expenditure and tax variables on economic growth in Sumatra simultaneously?

1.2 Purpose of Writing

1. To analyze the effect of grant spending on Economic Growth in Sumatra partially.
2. To analyze the effect of health spending on Economic Growth in Sumatra partially.
3. To analyze the effect of taxes on Economic Growth in Sumatra partially.
4. To analyze the effect of health expenditure, grant expenditure and tax variables on economic growth in Sumatra simultaneously.

2. Literature Review

According to Skirno (2002), the development of economic activity that leads to an increase in the goods and services produced by a society and an increase in people's welfare is called economic growth. Economic growth is one of the main indicators of a region's progress. Economic growth is influenced by various factors such as health spending, subsidies, and taxes.

Health expenditure is government expenditure in the health sector to meet public health service needs. It includes various activities and programs organized by the government to improve health, prevent disease, and provide access and affordable health services for the community (Nasution, 2022), while according to Fuchs' (1986) theory, health expenditure is focused on what is effective.Rephrase Health Service Costs focuses on management and efficiency, the use of cost-benefit analysis, and the impact of health service costs on the national economy. He argues that high medical costs can affect people's welfare and the stability of the national economy, so more effective and efficient medical reforms need to be implemented to improve people's quality of life.

Various research findings show that government health expenditure allocated to local development, such as investment in health infrastructure, can boost overall economic growth and increase domestic economic activity. This study shows that there is a positive relationship between government health spending and economic growth. Research shows that health spending can help the economy because health enables individuals to work longer, harder, and more productively, and a healthy and productive workforce contributes to improved economic performance and GDP growth which has a positive and significant impact on growth. However, this is in contrast to the research findings that health spending has no significant impact on economic growth due to resource allocation (Echekoba & Chinelo, 2017). Inefficient medical resources can lead to wasted resources without providing tangible economic benefits.

Another indicator that can affect economic growth is grant expenditure. Grant expenditure is a budget allocation given by a country to individuals, institutions or other entities in the form of financial support for various purposes. Friedman (1995) states that the government can provide grant to individuals or families in the form of vouchers or direct financial assistance, which can be used to obtain education services from various providers, including private schools. Rephrase there is a positive relationship between government grant expenditure and regional economic growth. Government expenditures allocated to regional development include infrastructure investment can boost overall economic growth and increase domestic economic activity (Thantawi et al., 2023). Study results (Deswantoro et al., 2017; Rizki, 2021) show that grant spending has a negative impact on economic growth. This is due to untargeted grant spending, which creates a cycle of dependency and hampers Indonesia's economic development in the long run.

Tax is also one of the indicators that affect economic growth. Smith (1776) defines tax as a mandatory contribution paid by individuals or organizations to the government which is used to finance various public programs and services provided by the government. Taxes are also considered a regular and regular source of government revenue that can be used to carry out activities necessary for the development of the country's economy (Sari et al., 2022). The relationship between taxes and economic growth is positive Research results (Alpad, 2023; Saragih, 2018; Sihaloho, 2020) show that taxes effectively and efficiently have a positive and significant effect on economic growth Supporting economic growth and public interest. Contrary to research findings (Dewi & Triaryati, 2015), taxes have a significant negative impact on economic growth in Indonesia due to high levels of non-payment and over-management of taxes.

3. Research Methods

3.1 Type and Source of Data

This research uses explanatory and descriptive research methods. The data used consists of 10 provinces on the island of Sumatra from 2019 to 2021: Aceh, North Sumatra, West Sumatra, Riau, Jambi, South Sumatra, Bengkulu, Lampung, Bangka Belitung Islands, and Riau Islands. The data used comes from the Central Bureau of Statistics (BPS) and the Directorate General of Fiscal Balance (DJPK).

This research uses panel data testing, FEM, CEM, REM, CEM models, and hypothesis testing. Regression analysis can be used to determine the relationship between a dependent variable and one or more independent variables. Panel data regression is a regression technique that combines cross-sectional and time-series data. The use of panel data regression has several advantages, including better estimation, especially since increasing the number of observations automatically increases the degrees of freedom and avoids errors when eliminating existing variables. There are three types of estimation for panel data regression models: general effects model (CEM), fixed effects model (FEM), and random effects model (REM).

Table 1. Variable Description

Variables	Symbol	Unit
Dependent	Economi Growth (GRDP)	Percentage
Independent	Health Expenditure	Billion Rupiah
	Grant Expenditure	Billion Rupiah
	Tax	Billion Rupiah

Source: data processed by the author, 2024

3.2 Data Analysis Method

This study analyzes the effect of Health Expenditure, Grant Expenditure, and Taxes on Economic Growth in Sumatra Island for the period 2019-2021 using the model, namely:

$$PEit = \beta0 + \beta1\ BK + \beta it2\ BHit + \beta\ P3it + \mu it$$

Where:
PE_{it} : Economic Growth
BK_{it} : Health Expenditure
BH_{it} : Grant Expenditure
P_{it} : Tax

4. Research Findings and Discussion

4.1 Result

Based on the results of the data testing conducted, it was found that the fixed effect model is the best model to represent the relationship between variables. This model was selected through two tests: the Chow test and the Hausman test, so that of the three models (general effects model, random effects model, and fixed effects model), the fixed effects model is more likely to explain the results concluding that it is suitable. Panel data regression in research.

Table 2. Data Processing Results

Variables	FEM
Health Expenditure	1.175951 (0.4216)
Grant Expenditure	**-2.337729**** **(0.0443)**
Tax	**20.23100**** **(0.0041)**
C	-171.96652 (0.0051)
R Square	0.609468
Adj.R-S	0.333798
F-statistic	2.210861
Prob(F-statistic)	0.065812

Source: data processed by the author, 2024

4.1.6 Chow Test Results

The purpose of the Chow test is to determine whether the best model between the common effects model (CEM) and the fixed effects model (FEM) should be used when estimating panel data.Rephrase

Table 3. Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.147681	(9,17)	0.0835
Cross-section Chi-square	22.782199	9	0.0067

Source: data processed by the author, 2024

Based on the figure above, the cross section Chi-Square probability value is 0.0067, which means it is below 0.05, so the regression model chosen is the fixed effect model (FEM).

4.1.7Hausman Test Results

The Hausman test is defined as a test to select the best model between the fixed effects model and the random effects model.Rephrase The Hausman test, also known as the Hausman test, is a test used to determine the best method between fixed effects and random effects.

Table 4. Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	18.849243	3	0.0003

Source: data processed by the author, 2024

Based on the figure above, the probability value of cross section random is 0.0003, which means it is below 0.05, so the regression model chosen is the fixed effect model (FEM).

4.2 Discussion

Economic growth will increase if the quality of human resources is healthy. Health programs are investments that contribute to increased income and economic growth. In the results of the research that has been done, health spending has a positive influence on economic growth. This means that every increase in health spending by 1 billion rupiah can increase the value of economic growth by 1.175951 on the island of Sumatra. This is in line with studies conducted by (Setpres, 2020; Mushkin, 1962), (Apri, 2022; Raghupathi, 2020). The health budget allocation is also used for the sustainability of the national health insurance program, to strengthening to prevent, detect and respond to disease, and an integrated resilience system.

In supporting and supporting the achievement of the implementation of government, development and community functions, grant expenditures are provided in accordance with the urgency and by taking into account the principles of justice, appropriateness, rationality and benefits for the community. In the test results that have been carried out, the coefficient of grant expenditure on economic growth is - 2.337729, which means that grant expenditure has a significant negative effect on economic growth. This means that every increase in grant expenditure of 1 billion rupiah will reduce economic growth by 2.337729 one unit. The same results in research (Rizki, 2021), (Febriyanti, 2022).

The successful implementation of regional autonomy is assessed by how much a region's ability to finance activities or community needs that are the responsibility of the local government. This shows that if the increase in grant expenditure can be utilized properly, it can indirectly help the implementation of regional autonomy which will certainly increase regional development. According to the results obtained (Deswantoro et al., 2017; Rizki, 2021) grant expenditures have a negative effect on economic growth due to the inaccurate targeting of the distribution of grant expenditures, thus creating a cycle of dependence for regions on grant funding from the center and hindering economic development in the long term.

Increased economic growth is obtained through state revenue. In this case, taxes, which are a source of revenue, are considered to have a positive influence in increasing economic growth. Based on the results above, it is obtained that taxes have a coefficient value of 20.23100, which means that taxes have a significant positive effect on economic growth. This means that every increase in taxes of 1 billion rupiah will increase economic growth by 20.23100 one unit. This is in line with research conducted by (Rosi, 2022), (Miswar et.al, 2021), (Yunita & Sentosa, 2019), (Pratama & Widyastuti, 2022) which show the same results that taxes have a positive influence on economic growth. In the short and long term, taxes as a regular source of revenue can help increase economic growth.

5. Conclusion

The long-term improvement of a country's economy is called economic growth, which measures the success of economic development from one period to the next. When the quantity and quality of factors of production increase, the capacity of a country to produce goods and services also increases. In this study, the author investigates the impact of health spending, subsidies, and taxes on Sumatra's economic growth from 2019 to 2021.

Based on the panel data regression test that has been carried out, the results show that:

1. Health expenditure has a positive but insignificant effect on economic growth in Sumatra Island in 2019-2021.
2. Grant expenditure has a significant negative effect on economic growth in Sumatra Island in 2019-2021.
3. Taxes has a significant positive effect on economic growth on the Island of Sumatra

in 2019-2021.
4. Health expenditure, grant expenditure and taxes simultaneously has no effect on economic growth on the Island of sumatra in 2019-2021.

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THE INFLUENCE OF EXPERIENTIAL MARKETING, CUSTOMER VALUE, AND TRUST ON CUSTOMER SATISFACTION AT WARUNG KOPI KLOTOK, KALIURANG, YOGYAKARTA

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ABSTRACT

This research aims to determine the effect of Experiential marketing, Customer Value, and Customer Trust on Customer Satisfaction at Warung Kopi Klotok, Kaliurang, Yogyakarta. The data collection method uses a questionnaire method. The sampling technique in this study was purposive sampling technique based on certain criteria, namely people who have visited and made purchases at Warung Kopi Klotok with a sample size of 100 respondents. The data analysis technique used in this study is the validity and reliability instrument test. The data were analyzed using the classical assumption test and feasibility test. The results showed: (1) experiential marketing has a positive and significant effect on customer satisfaction, (2) customer value has a positive and significant effect on customer satisfaction, (3) trust has a positive and significant effect on customer satisfaction.
Keywords: *experiential marketing, customer value, trust, customer satisfaction*

1. Introduction

Indonesia is the country that is famous for being the best coffee producer in the world. Currently the development of coffee cultivation in Indonesia continues to experience tremendous progress. This can be seen from how some of Indonesia is known as the best coffee producer in the world such as in Lampung which has a type of robusta coffee. Sumatra Island is considered to be the largest producer of high quality coffee that has a high existence abroad. These types of coffee include North Sumatra sidikalang coffee, Mandailing coffee, Mayagayo air conditioning coffee and South Sumatra coffee.

Abundant coffee in Indonesia has become a mandatory drink for some Indonesians. Yogyakarta is one of the regions that has many coffee shops in it. In this region we find almost every corner of Yogyakarta city many places gathered on the edge of the road such as angkringan, coffee jos and others. This existence actually supports the increase in coffee business in Yogyakarta. The competition of the copies in Yogyakarta is great because it is a region that is intended by many consumers.

Warung Kopi Klotok is one of the coffee shops that are rising in Yogyakarta exactly in Kaliurang. Warung Kopi Klotok has a appeal in terms of presentation still using traditional impressions that make visitors feel comfortable, in addition to coffee food is also not less interesting because it is served in a good home concept, the attraction that makes Warung Kopi Klotok destination. This is what differentiates Warung Kopi Klotok in absorbing its own market share by daring to display the originality and authentic atmosphere of the village to attract consumers. Consumers who come diverse from surrounding residents, students, local tourists, artists, public figures and officials also visit this Warung Kopi Klotok.

Customers who come will be given a lot of knowledge about Indonesian culture. Unique and distinctive interior design, clean, neat environment, and friendly and fast-represent officers can provide a unique experience for each customer. Experiential Marketing is useful in creating customer satisfaction because the company can touch the emotions of each customer over the experience that has been felt. Consumer experience in consuming goods and services is closely related to the concept of experiential marketing. According to Kertajaya (2010) in Nafiah & Trihudiyatmanto (2021:64) Experiential marketing is a marketing concept that aims to shape loyal customers by touching customers' emotions by creating positive experiences and a positive feeling of their services and products. Warung Kopi Klotok applies experiential marketing as a way to make customers get a good experience. Customers who come will be given a unique experience in enjoying food. The concept of dining experience in rural style houses with the simplicity of Javanese home cuisine cooked with traditional firewood furnaces. Ancient building shaped without ceiling, visitors queue food at once can enjoy food in the dining room, in the front yard of the stall or in the yard of the owner's house face to face with rice fields. This is the difference between Warung Kopi Klotok Kaliurang and other Warung Kopi Klotok.

According to Slater and Narver (2000:) in Hairiah, Saroh & Hardati (2020:331) Customer value is the result that customers obtain in terms of greater value of the product or service offered in the customer cost life cycle. Customer value has a significant influence on customer satisfaction of Warung Kopi Klotok Kaliurang. The values Kopi Klotok offers, such as the distinctive coffee flavor, a beautiful rural atmosphere, and staff friendliness, can improve customer satisfaction and encourage them to come back again.

According to Imanda and Nuridin (2018) in Pringgadini & Basiya (2022:575) trust is the willingness of one party to accept risks from another based on belief and expectation that the other party will give treatment according to what it wants, although both parties do not know each other and can establish relationships in the long run. Trust is clearly useful and important to build customer satisfaction. Trust by customers is always associated with the level of satisfaction they get. Customer trust is an important factor that can affect customer satisfaction of Warung Kopi Klotok Kaliurang. Kopi Klotok builds trust by providing quality service and quality of visitor experience and providing special experiences without burdening visitors pockets. Reviews on Google can be an important source of information for customers to build trust in Kopi Klotok.

Research Dewi, Kumadji & Mawardi (2015) that experiential marketing has a significant influence on customer satisfaction. Khasanah Research (2015) produced customer value variables have the most influence on customer satisfaction by consumers among other free variables studied. This is a supportive influence between trust and customer satisfaction such as research conducted by Pratiwi (2015) and Assalafy (2019) which found that there is a positive and significant influence on customer satisfaction.

This research will conduct testing of several variables that can affect Customer Satisfaction. Variables in this study are Experiential Marketing, Customer Value, and Trust.

a. Does experiential marketing affect customer satisfaction?
b. Does customer value affect customer satisfaction?
c. Does trust affect customer satisfaction?

Based on the formulation of the problem that has been outlined, then the purpose of this research is:

a. To know the influence of experiential marketing on customer satisfaction.
b. To know the impact of customer value on customer satisfaction.
c. To know the influence of trust on customer satisfaction.

2. Literature Review

2.1 Experiential Marketing

According to Kertajaya (2010: 23) in Susanti, Welsa, and Cahyani (2021: 52) states that experiential marketing is a marketing concept that aims to shape loyal customers by touching customers' emotions by creating positive experiences and a positive feeling for their services and products. Experiential marketing is effective for marketers to build brand awareness, brand perception, brand equity, and brand loyalty to purchase decision from consumers. According to Smilansky (2018) experiential marketing is the process of identifying and satisfying consumer needs and profitable aspirations, involving consumers through two-way communication that can read brand personality to live to add to the value of consumers' targets. According to Smith & Hanover (2016:31) experiential marketing is the experience of creating emotions that encourage people to respond to each other and feel like they act in a certain way.

2.2 Customer Value

According to Woodruff (1997) in Krisnanto & Yulianthini (2021:76) customer value is the perceived choice of customers and evaluation of product attributes, attributes performance and consequences arising from the use of products to achieve consumer goals and intentions when using the product. The relationship of customer value to customer satisfaction is also associated with customer value as customer perception of the desired consequences of the product's use. Furthermore, it can also define customer value as customer perception of the desired consequences of the use of a product. According to Perwira et.al., (2016) customer value is the value of customer after feeling the benefits of positive or negative value products. Customer value is based on the difference between which customers have and which customers provide as possible different options. Means-End Chain, a simple knowledge structure that contains the attribute of consequences and values regarding product usability (Smith and Mark, 2007).

2.3 Trust

According to Sangadji and Sopiah (2013:201) in Hasanuddin & Wahono (2020:41), it states that trust is the power of knowledge possessed by consumers and all that consumers make that the product has objects, attributes, and benefits. Trust is clearly useful and important to build customer satisfaction and relationships. Factors that make up trust are trust value, reliance reliance and quality of communication. On good communication in trust will lead to customer satisfaction. Trust by customers is always associated with the level of satisfaction they get. In this case, the higher the sense of trust the customer feels, the higher the satisfaction obtained (Ball and Machas, 2004).

2.4 Customer Satisfaction

According to Kotler and Keller (2012) in Febrini, Widowati and Anwar (2019:38), customer satisfaction occurs when customer expectations are appropriate or can be met by performance or approach are met can even exceed customer expectations. A customer is someone who continuously and repeatedly comes to the same place to satisfy his desire by having a product or getting a service and paying for the product or service. In Suryadana & Octavia, (2015) there are three methods that can be used to measure the height of customer satisfaction: conduct periodic surveys, measure customer loss rate by directly observing the consumer who becomes a permanent customer, store information from customers. Customer satisfaction is a consequence of the comparison made by customers who compare between the levels of perceived benefits to the benefits expected by customers.

2.5 Hypothesis Development

In the present condition, experiential marketing is a marketing concept that aims to shape loyal consumers by touching their emotions and giving positive feelings for products and services, Kartajaya (2004) dalam Febrini et.al., (2019:38). Experiential Marketing is in fact more than just providing customers with information and opportunities to gain experience of the benefits of the product or service itself but also evokes emotions and feelings that impact customer satisfaction (Hamzah, 2007). Experiential marketing strategies that marketers use to shape memorable experiences for consumers. From the foundation of the theory exposed, it can be proposed hypotheses

H_1: Experiential Marketing partially affects customer satisfaction

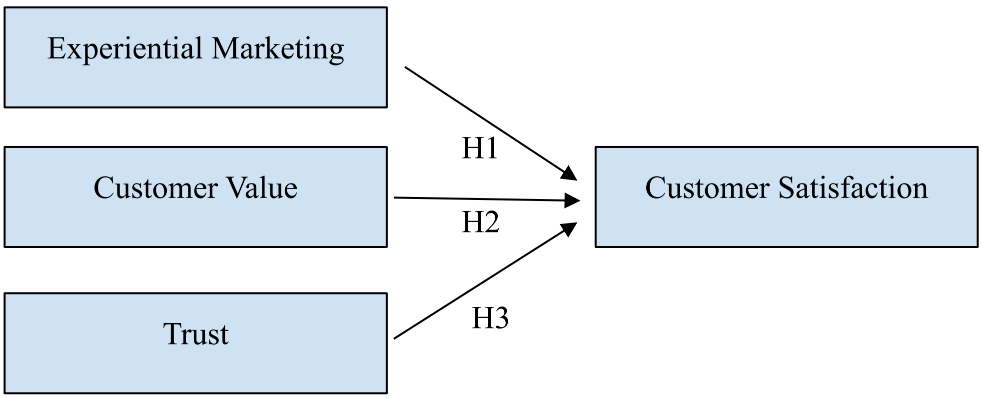
Customer value is a more directed goal of effect that the customer value feels stronger than customer satisfaction. As discussed by Heinonen et al. (2019), customer value perception needs to be noted that is taken as an antecedent in determining customer satisfaction. The higher the customer value the higher the customer satisfaction according to Lapierre (2000) in Khasanah (2015:3). From the foundation of the theory exposed, it can be proposed hypotheses

H_2: Customer value partially affects customer satisfaction

Trust is the ability of a product to be trusted, based on the belief that goods are capable of fulfilling the promised value and good intensity based on the belief that consumers can prioritize and meet the interests of consumers according to Chaudhuri and Holbrokk (2001) in Sebayang & Situmorang (2019:224). From the foundation of the theory exposed, it can be proposed hypotheses

H_3: Partial trust affects customer satisfaction

Figure 1. Conceptual Research Framework



3. Research Methods

3.1 Research Design

The research design used is descriptive study. According to Sugiyono (2018) descriptive research is a study conducted to determine the value of self-variable, either one or more (independent) variable without making comparisons, or connecting with other variables.

Table 1. Definition of Operations

Definition of Variable	Sub Variable	Indicator
Experiential Marketing **Theoretical definition:**	*Sense*	The aroma of the product can evoke consumer tastes.

Experiential Marketing According to Alma (2016:264), is a marketing concept that aims to form loyal customers by touching their emotions and giving positive feeding to products and services. **Operational Definition:** Experiential Marketing is the effort of marketers to pack products in Klotok Kopi Warung in such a way that it gives an emotional feel and provides a touching experience of the heart and emotions of the consumer.	*Feel*	Feel comfort with the service provided to customers
	Think	The menu offered varies
	Act	Visiting can have the opportunity to see the process of presenting the cuisine.
	Relate	The right location is used as a place to gather with friends
Customer Value **Theoretical definition:** According to Woodruff (2019), customer value is the choice and assessment that customers feel about the attributes of a product and service, performance characteristics, and the consequences of using a product to achieve consumer goals and intentions when using the product. **Operational Definition:** Customer value is the conformity of the perceived value of consumers Warung Kopi Klotok between product price and product quality received.	*Emotional Value*	Customers are satisfied with what Klotok Coffee has given.
	Social Value	Employees are friendly and polite to customers.
	Quality/Performance Value	Employees are able to provide complete product information.
	Price/Value of Money	The price offered is enough affordable

Trust **Theoretical definition:** Trust is the willingness of one to be aroused by the actions of another based on the expectations of one	Consistent in quality	The quality of the taste given according to no change
	Understand the consumer's wishes	Employees are quick to respond to consumers

who believes in it, without depending on one’s ability to supervise and control it (Mayer et al. in Prakoso, 2017) **Operational Definition:** trust is the customer’s belief that Klo tok Coffee Stalls can provide a positive experience and fit their expectations.	Composition of information with product quality	Information about the menu is clear and the conformity of the waiter's standard is good
	Consumer trust, reliable products	Quality Taste, food and beverage display according to what is listed on the menu.
Customer Satisfaction **Theoretical definition:** According to Syaifullah and Mira (2019:87) customer satisfaction is the result of comparison of performance or perceived results compared to their expectations so as to cause feelings of pleasure or disappointment. **Operational Definition:** Customer satisfaction is the level of consumer pleasure or disappointment towards the products, services and atmosphere offered by Warung Kopi Klotok.	Feeling satisfied (in the sense of satisfaction with the product and service)	The skill in the service procedure is appropriate
	Always buy products	Guaranteed quality of food and drinks
	Would recommend to others	With satisfied experience, it will recommend to others
	Fulfill customer expectations after buying the product	Fulfillment of expectations from presentation given

3.1.1 Population and Sample

The population used in this study is the whole community who have visited Warung Kopi Klotok Yogyakarta. The number of samples used is as many as 100 respondents. The sampling technique in this study is Purposive Sampling. The sample criteria are addressed to people who have visited and made purchases at Warung Kopi Klotok Yogyakarta.

3.1.2 Research Data

Research data is obtained from data collection by questionnaire method. By spreading questionnaires to respondents who have qualified as samples in the study.

3.2 Data Analysis Technique

3.2.1 Test Instrument Validity and Reliability

The data analysis techniques used in this study are the Validity Test and Reliability of the research questionnaire. Sugiyono (2019:176) explains that validity is an instrument that can be used to measure between data that occurs in objects and data that can be collected by researchers. The significance test is done by way of the r count value compared to the r table value. According to Sugiyono (2017: 130) states that reliability test is the extent to which the measurement results using the same object will produce the same data. Reliability of this questionnaire is tested using Cronbanch Alpha technique. According to Ghozali (2018) indicates that Cronbach's Alpha is acceptable if >0.6. The closer Cronbach's alpha to 1, the higher the reliability of internal consistency.

3.2.2 Classical Assumptions Test

For quantitative calculations in this study, the data analysis technique used is descriptive statistical analysis that provides an overview of the data viewed based on the Classical Assumption Test. According to Sugiyono (2017:239), normality tests are used to examine the variable normalities studied whether the data is distributed normally or not. This is important because if the data of each variable is not normal, the hypothesis testing cannot use parametric statistics. According to Ghozali (2016:82), the multicollinearity test aims to test whether the regression model is found to be a correlation between free (independent) variables. The basis of multicollinearity test decision making is as follows:

b. The magnitude of the variable Inflation Factor/VIF guidelines of a Multicholinerity free regression model i.e. VIF value < 10.
c. The magnitude of Tolerance guidelines a model of free regression Multicholinerity is the value of Tolerance < 0.1.

This variant homogeneity (constant variant) is known as ""homoscedasticity"" (homoscedasticity). There are cases where all disturbances do not have the same variant (the variant is not constant). The condition of this non-constant variant or nir-homogeneous variant is called "heteroscedasticity". If there is no certain pattern and does not spread above or below the zero on the y axis, then it can be concluded that there is no heteroskedasticity.

3.2.3 Test feasibility

The test was conducted to see if the model analyzed has a high degree of model eligibility, the variables used by the model is able to explain the phenomenon analyzed, two indicators used, (Ferdinand 2006:300) in Wulandari (2017:12). F test is used to know there is no joint influence between free variables on bonded variables.

3.2 Hypothesis Test

T statistical test or partial test aims to find out how far the influence of the free variable individually in explaining the bound variable (Ghozali, 2005:110) dalam Sahanggamu et.al., (2015:1090).

4 Results of Discussion

4.1 Data Analysis Technique

4.1.1 Test Instrument Validity and Realibility

Table 1. Validity Test Results

Variabel	Grain	R_{count}	r_{table}	Description	Sig (2 tailed)	Sig	Description
Experiential Marketing (X1)	X1.1	0.720	0,1966	Valid	0,000	0,05	Valid
	X1.2	0.799	0,1966	Valid	0,000	0,05	Valid
	X1.3	0.668	0,1966	Valid	0,000	0,05	Valid
	X1.4	0.660	0,1966	Valid	0,000	0,05	Valid
	X1.5	0.740	0,1966	Valid	0,000	0,05	Valid
Customer value (X2)	X2.1	0.743	0,1966	Valid	0,000	0,05	Valid
	X2.2	0.759	0,1966	Valid	0,000	0,05	Valid
	X2.3	0.754	0,1966	Valid	0,000	0,05	Valid
	X2.4	0.754	0,1966	Valid	0,000	0,05	Valid
Trust (X3)	X3.1	0.746	0,1966	Valid	0,000	0,05	Valid
	X3.2	0.767	0,1966	Valid	0,000	0,05	Valid
	X3.3	0.667	0,1966	Valid	0,000	0,05	Valid
	X3.4	0.684	0,1966	Valid	0,000	0,05	Valid
Customer satisfaction (Y)	Y.1	0.782	0,1966	Valid	0,000	0,05	Valid
	Y.2	0.831	0,1966	Valid	0,000	0,05	Valid
	Y.3	0.843	0,1966	Valid	0,000	0,05	Valid
	Y.4	0.706	0,1966	Valid	0,000	0,05	Valid

The results of the above validity test can be concluded that the r count value is greater than the table r and the sig value (2 tailed) is smaller than 0.05. Then the above variable is declared valid.

Table 2. Reability Test results

Variabel	Cronbach's Alpha	r-Tabel	Description
Experiential Marketing (X1)	0,760	0,1966	Reliabel
Customer value (X2)	0,745	0,1966	Reliabel
Trust (X3)	0,683	0,1966	Reliabel
Customer satisfaction (Y)	0,793	0,1966	Reliabel

The result of the above realibility test can be concluded that the Cronbach's Alpha value for all variables has a value above 0.60 and the Cronbach's Alpha value is greater than the r-Table. Then the data can be declared reliable or consistent.

4.1.2 Descriptive Analysis

Table 3. Gender

Gender	Frequency	Percentage
Female	79	79%
Male	21	21%
Total	100	100%

Based on the table above can be concluded that the consumer of Warung Kopi Klotok is the majority of respondents with a percentage of 79%.

Table 4. Age

Age	Frequency	Percentage
15-20 years	43	43%
20-25 years	57	57%
>25 years	0	0
Total	100	100%

Based on the table above can be concluded that the majority of Warung Kopi Klotok consumers are respondents aged 20-25 years with a percentage of 57%.

Table 5. Jobs

Type of job	Frequency	Percentage
Student	4	4%
Collage student	87	87%

Employee	9	9%
Total	100	100%

Based on the table above can be concluded that the majority of Warung Kopi Klotok consumers are respondents who have a job as a student with a percentage of 87%.

Table 6. Income

Average	Frequency	Percentage
<Rp 1.000.000	53	53%
Rp 1.000.000 – Rp 2.000.000	34	34%
Rp 2.000.000 – Rp 3.000.000	6	6%
>Rp 3.000.000	7	7%
Total	100	100%

Based on the table above can be concluded that the consumer of Warung Kopi Klotok is the majority of respondents who have an average income of less than Rp 1,000,000 with a percentage of 53%.

Table 7. Descriptive Statistics

Variabel	Mean	Description
Experiential Marketing (X1)	1,968	Setuju
Customer value (X2)	1,9875	Setuju
Trust (X3)	2,0125	Setuju
Customer satisfaction (Y)	1,945	Setuju

Based on the table above can be concluded that descriptive statistics with 100 respondents, the Trust variable has the highest average value of 2,0125.

4.2 Test Normality

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	1.25222779
Most Extreme Differences	Absolute	.086

	Positive	.086
	Negative	-.049
Test Statistic		.086
Asymp. Sig. (2-tailed)		.065[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

The signification value is 0.065 (>0.05) then the above data is normal distribution.

4.3 Multicholenial Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.314	.608		.516	.607		
	TotalX1	.120	.070	.155	1.708	.091	.467	2.142
	TotalX2	.367	.100	.322	3.662	.000	.500	2.000
	TotalX3	.418	.095	.415	4.421	.000	.438	2.285

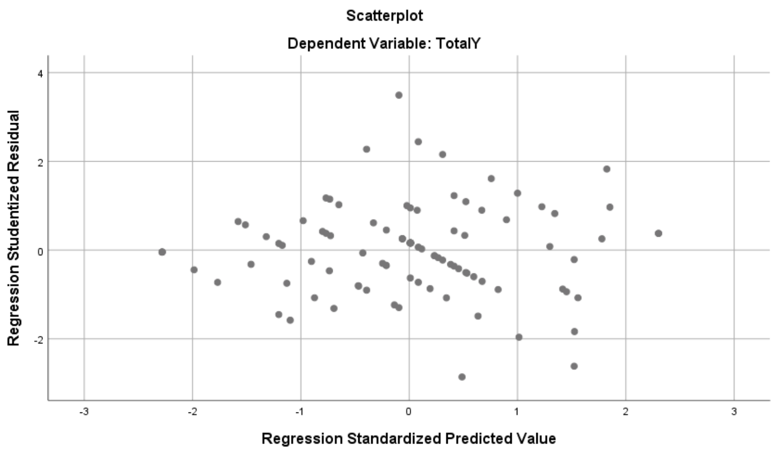
a. Dependent Variable: TotalY

The tolerance values of each independent variable are:
- Experiential Marketing : 0.467
- Customer Value : 0.500
- Trust : 0.438

All three are worth greater than 0.10, so the data in this study did not occur multicolenierity.
The VIF values on each independent variable are:
- Experiential Marketing : 2,142
- Customer Value: 2,000
- Trust: 2,285

All three are worth less than <10, so the data in this study did not occur multicolenierity

4.4 Test Heterokedasticity



The result of the scatter plot above can be seen that the point point data does not form a specific pattern and the data spread above and below the number 0 on the Y axis, hence it can be concluded that this data does not occur heterocedasticity.

4.5 Test F

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	263.921	3	87.974	54.403	.000[b]
	Residual	155.239	96	1.617		
	Total	419.160	99			

a. Dependent Variable: TotalY

b. Predictors: (Constant), TotalX3, TotalX2, TotalX1

The Significant Value of the ANOVA table is 0.00 which means below 0.05 so it is concluded that all independent variables studied simultaneously affect the dependent variable. Rated F count 54.403 > F table 2.70, then the independent variable studied simultaneously affects dependent variables.

4.6 Test T

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.314	.608		.516	.607
	TotalX1	.120	.070	.155	1.708	.091

	TotalX2	.367	.100	.322	3.662	.000
	TotalX3	.418	.095	.415	4.421	.000

a. Dependent Variable: TotalY

Experiential Marketing (X1) influence on customer satisfaction (Y)

- Value t calculating 1,708 > t table 0.67705 then X1 influence on Y

- Sig value 0.091 > 0.05 then X1 has no effect on Y

Customer Value Effect (X2) on customer satisfaction (Y)

- Value t calculating 3,662 > t table 0.67705 then X2 influence on Y

- Sig value 0.000 < 0.05 then X2 affects Y

Effect of Trust (X3) on customer satisfaction (Y)

- Value t calculating 4,421 > t table 0.67705 then X3 influence on Y

- Sig value 0.000 < 0.05 then X3 affects Y

5 Conclusion

The study aims to find evidence of the influence of experiential marketing on consumer satisfaction through purchasing decisions to consumers of Klotok Coffee Warung, using a sample of 100 respondents. In this study also used version 25 SPSS program to perform analysis such as Instrument test through validity test (correlations), reliability test (reliability statistics), classical assumption test using normality test, multicollinearity test, heterocedasticity test, f and t test. From the results of research on the results of analysis and discussion, it is found that Experiental Marketing is still relevant or can still be used to measure consumer satisfaction besides that consumer satisfaction can be obtained if the consumer is satisfied or experience when visiting Warung Kopi Klotok so that it brings up the positive trust and value of consumers.

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THE INFLUENCE OF MOTIVATION AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE AT PT. MANDIRI UTAMA FINANCE

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ABSTRACT

This study examines the impact of motivation and work environment on employee performance at PT. Mandiri Utama Finance. The researchers argue that motivation and work environment are crucial factors in determining employee performance, as they can either enhance or hinder employee productivity and job satisfaction. The study aims to identify the most influential factors of motivation, both intrinsic and extrinsic, and the aspects of the work environment that affect employee performance. The results of the study are expected to provide valuable insights for management to develop strategies and policies that can improve employee motivation and create a supportive work environment, ultimately leading to enhanced employee performance. The study contributes to the development of theory and knowledge in the field of Human Resource Management, providing a practical guide for organizations to improve employee performance.

Keywords: *motivation, work environment, employee performance*

1. Introduction

Human Resource Management (HRM) is one method designed to increase company efficiency and solve personnel or organizational problems systematically. Human resource management contains an understanding that is closely related to the management of human resources or employees in the company. Human resources can also be referred to as personnel. Human resource forecasting seeks to determine what employees the organization will need to sustain its growth and take advantage of future opportunities, so forecasters attempt to predict the number, type, and quality of people needed in the future, detail the range of responsibilities that will have to be fulfilled, and determine what skills and knowledge will be needed by members of the organization according to. Human resources are a key factor in an organization. In achieving organizational goals, motivation and work environment have an important role in improving employee performance. High motivation encourages employees to work more diligently and diligently in carrying out their duties. Conversely, a good work environment also contributes to improving employee performance. (*HUMAN RESOURCE MANAGEMENT*, 2021) Work motivation has a very important role in achieving optimal performance because of its dynamic nature in increasing work effectiveness.

Employees who have high work motivation will make maximum efforts to achieve success in their work. "Work motivation is an influential condition that generates, directs and maintains behaviors related to the work environment". Well-motivated employees tend to have high levels of productivity, are more dedicated, and have higher job satisfaction. However, not all employees have the same level of motivation. Some employees may have strong intrinsic motivation, while others may rely on extrinsic motivation. Therefore, it is important to understand how work motivation affects employee performance. (Sembiring, 2020) In addition to motivation, the work environment also has an important role in determining employee performance. The work environment can be defined as everything that concerns the physical and psychological aspects that will directly or indirectly affect employees". Furthermore, according to the conditions of the work environment, it is good or appropriate if humans can carry out activities optimally, healthy, safe and comfortable according to.

Environmental indicators are closely related to factors that affect the work environment. Some studies conducted also suggest that a good work environment will be able to provide job satisfaction for employees to provide optimal work results according to. The indicators described above are a description of the physical environment and non-physical environment, where by looking at these indicators we can examine the state of the work environment of an organization. Defining the work environment is everything that is around workers that can affect them in carrying out their duties. The work environment is everything that is around the worker that can affect him in doing the tasks charged. The organization must be able to pay attention to the conditions that exist in the organizational environment, both inside and outside the workplace room, so that employees can work smoothly, safely and comfortably according t. A conducive work environment can create a positive atmosphere and enable employees to work effectively. Factors such as social support, employee relationships, good communication, effective leadership, and career development opportunities can significantly affect employee performance. Conversely, a work environment that is not conducive can hinder employee motivation and performance.(Nurhandayani, n.d.) (*View of EFFECT OF WORK ENVIRONMENT AND COMPETENCE ON JOB SATISFACTION AND EMPLOYEE PERFORMANCE*, n.d.) (Nurhandayani, n.d.) (*View of EFFECT OF WORK ENVIRONMENT AND COMPETENCE ON JOB SATISFACTION AND EMPLOYEE PERFORMANCE*, n.d.)

In this context, the analysis of the influence of motivation and work environment on employee performance becomes very relevant. Through this research, the most influential motivational factors can be identified, both in terms of intrinsic and extrinsic, as well as aspects of the work environment that affect employee performance. The results of this analysis can provide valuable insights for management to develop strategies and policies that can increase motivation and create a work environment that supports employee performance. In addition, this research can also contribute to the development of theory and knowledge in the field of Human Resource Management. By deepening understanding of the relationship between motivation, work environment, and employee performance, this research can form the basis for future research and provide practical guidance for organizations in improving their employees' performance. Thus the factors that can affect employee performance at PT. Mandiri Utama Finance is Motivation and Work Environment

Based on the description above, the problems in this study are formulated as follows:

a. Is there any influence of work motivation on the performance of PT. Mandiri Utama Finance ?
b. Is there any influence of the work environment on the performance of PT. Mandiri Utama Finance ?
c. Is there an influence of work motivation and work environment simultaneously on the performance of PT. Mandiri Utama Finance ?

From the formulation of the problem, the objectives of this research can be formulated, namely:

a. To determine the effect of work motivation on the performance of PT. Mandiri Utama Finance
b. To determine the influence of the work environment on the performance of PT. Mandiri Utama Finance
c. To determine the effect of work motivation and work environment simultaneously on the performance of PT. Mandiri Utama Finance

The results of this study are expected to provide benefits for:

a. PT. Mandiri Utama Finance: Understand the factors that affect employee performance and formulate appropriate strategies to improve employee performance.
b. Employees: Understand the factors that can improve performance and increase work motivation.
c. Other researchers: As reference material, further research on the influence of motivation and work environment on employee performance.

2. Literature Review

2.1 Motivation

Motivation is a process that explains the intensity, direction, and perseverance of an individual to achieve his goals. Positing that "motivation is a group of factors that cause individuals to behave in certain ways. Stating "motivation is the desire to do something and determines the ability to act to satisfy individual needs".

Motivation indicators are: (Sembiring, 2020)

a. Promotion: A promotion is an increase in an employee's position that includes greater responsibility, higher status, better skills, and an increase in salary. A promotion is considered valid if it includes skills, greater responsibility and higher pay. Promotions are more important to employees than salary increases alone, and usually each promotion comes with greater financial rewards.
b. Work Performance: A person's career development is measured by his or her work performance in carrying out current duties.
c. The work itself: The responsibility for career development ultimately lies with the individual worker. Leaders, supervisors, acquaintances and personnel specialists only provide assistance.
d. Appreciation: Rewarding achievements and skills is important to motivate employees. This appreciation boosts morale and fulfills the need for challenge.
e. Confession: Companies must recognize employees' abilities and skills as a form of compensation.
f. Success in work: Success at work motivates employees, boosts morale, and provides a sense of pride in the tasks completed.

2.2 Work Environment

Employee performance is influenced by the work environment, which includes workplace conditions such as lighting, ventilation, noise, vibration, temperature, and chemical waste. The work environment includes facilities and infrastructure, work aids, cleanliness, lighting, quietness, and working relationships between employees. (*View of THE INFLUENCE OF MOTIVATION, AND WORK ENVIRONMENT, ON EMPLOYEE PERFORMANCE, WITH JOB SATISFACTION AS A MEDIATING VARIABLE AT PT BNI LIFEINSURANCE* , n.d.)

Work Environment Indicators (Sembiring, 2020)

a. Employee relations: Employee relationships include both individual and group relationships.
b. Work environment noise level: A noisy work environment causes unrest and interferes with employee performance.
c. Work regulations: Good and clear work rules improve employee satisfaction and performance, support career development, and help achieve company and individual goals.

d. Lighting: Lighting in the work environment does not only involve electric lighting, but can also use solar power.
e. Circulation: Adequate air exchange is important for health in the work environment. For this reason, ample ventilation should be considered, especially in hot rooms.
f. Security: A safe work environment creates peace and comfort, which improves morale.

2.3 Employee Performance

Performance is the result of a process that refers to and is measured over a certain period of time based on pre-established terms or agreements. Performance management is the process employers use to ensure employees are working in line with organizational goals. That the performance of employees depends on the willingness and also the openness of the employees themselves to do their jobs . (Yanuari, n.d.)

Employee Performance Indicators (Sembiring, 2020)

a. Quality of work Relating to punctuality, skills and personality in doing work.
b. Quality of work Relates to the assignment of additional tasks assigned by superiors to subordinates.
c. Resilience Relates to attendance rates, granting time off and schedule lateness at work.
d. Attitude Is an attitude that exists in employees that shows how far their responsibility attitude towards fellow friends, with superiors and how far the level of cooperation in completing work.

Research was conducted by Pratiwi S and her team to evaluate the effect of motivation and work environment on employee performance at PT Mandiri Utama Keuangan. The sampling method used is saturated sampling with a population and sample of 35 employees. The results showed that motivation and work environment have a positive and significant effect on employee performance.

2.4 Hypothesis Development

Here are some concepts and theories that can be used:

a. Maslow's Theory: Maslow's theory explains motivation as a need that must be met to improve effective performance. Proper motivation can increase employee morale and have an impact on work results.
b. Theory X and Theory Y: Theory X and Theory Y consider motivation and work environment as the two main factors that influence employee performance. Theory X emphasizes motivation as the main factor affecting performance, while Theory Y highlights the work environment as the main factor affecting performance.
c. Job Satisfaction Theory: Job Satisfaction Theory states that motivation and work environment are two factors that influence employee job satisfaction.
d. Need Theory: Need Theory explains that motivation is a need that must be met to create effective performance.
e. Equity Theory: Equity Theory states that motivation is a need that must be met to achieve effective performance.
f. Self-Determination Theory: Self-Determination Theory states that motivation is a need that must be met in order to achieve effective performance.

2.5 Hypothesis

2.5.1 The Effect of Motivation on Employee Performance

According to its essence, the purpose of providing work motivation to employees is to: move employees to be able to achieve the goals of their motives in accordance with the wishes of the company, Increase passion and morale, Increase work discipline, Improve work

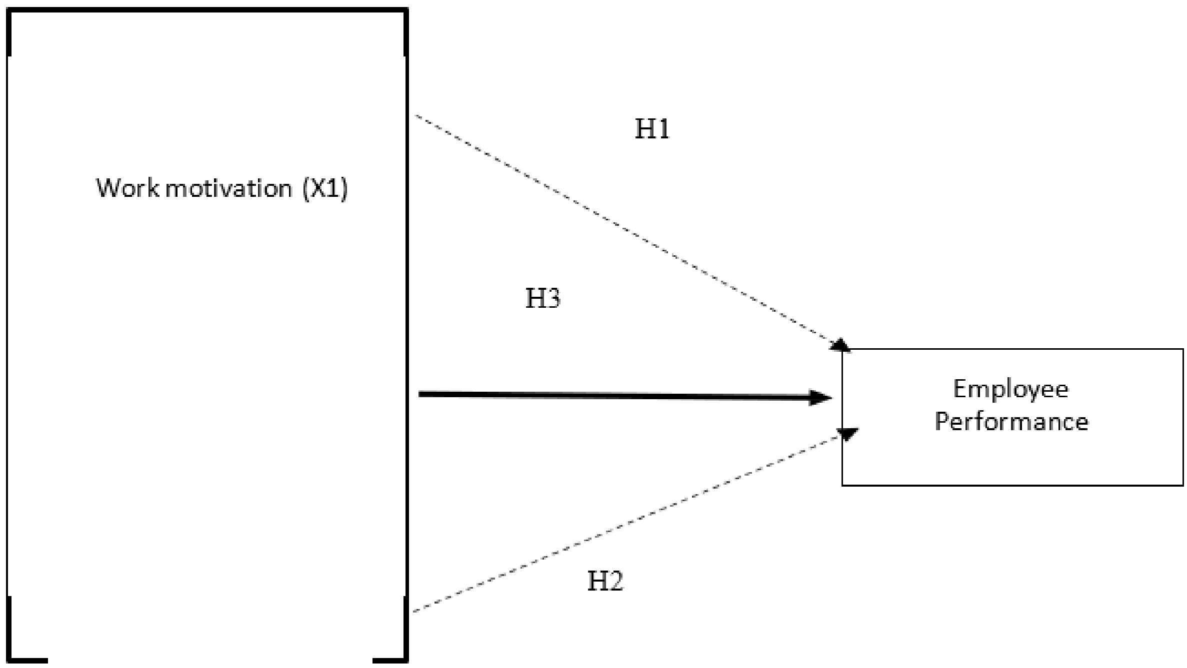
performance, Increase sense of responsibility, Increase productivity and efficiency and Foster employee loyalty to the company. (Sembiring, 2020) So the hypothesis proposed is:
H1 : Motivation affects employee performance at PT. Mandiri Utama Finance.

2.5.2 The Effect of the Work Environment on Employee Performance

Physical work environment is all physical conditions that exist around the workplace that can affect employees either directly or indirectly. While the non-physical work environment is all conditions that occur related to work relationships, both relationships with superiors and with colleagues, or relationships with subordinates.(Sembiring, 2020)
H2 : the work environment affects the performance of employees at PT. Mandiri Utama Finance.

2.5.3 The Effect of Motivation and Work Environment on Employee Performance

Motivation is the driver of an employee willing and willing to use his or her best skills to get the job done. The work environment is a workspace both physical and non-physical around employees that can affect employee performance. Performance is the result of work in quality and quantity achieved by employees while carrying out their duties in accordance with the responsibilities given to them. Employee performance increases when the company provides adequate compensation and is able to motivate employees to work better. Based on this explanation, hypothesis 3 was proposed, namely:
H3: Motivation and work environment affect employee performance at PT. Mandiri Utama Finance.



3. Research Methods

3.1 Research Design

In this study, the type of research we use is quantitative research. Quantitative research uses an associative descriptive approach. It aims to provide a factual explanation of the object of study and to test the extent to which the relationship between motivation-free variables (X1), and work environment (X2) is influential. As well as the dependent variable, namely simultaneous employee performance (Y).

3.2 Time and Location of Research
Time: we conducted this study for 3 months, from February to April 2024.
Location : Yogyakarta

3.3 Population and Samples
3.3.1 Population

Population describes a large and extensive amount of data in a study, where population is also a collection of all possible people, objects and other measures that are the object of attention in a study. The population is divided into two types namely the Infinite Population and the Finitive Population. (*BooksDigital-METHODOLOGYQUALITATIVEQUANTITATIVE research and combinations*, n.d.)

3.3.2 Sample

The sample is part of the population. The sample is determined by the researcher by considering several things, namely by considering the problems faced in a study, the goals to be achieved in a study, the research hypotheses made, research methods and the instruments of a study (*BooksDigital-METHODOLOGYQUALITATIVEQUANTITATIVE research and combinations* , n.d.)

In the sampling technique using *non-probability* sampling in the form of *purposive sampling*. The goal is to obtain rich and in-depth information: Samples are selected based on knowledge and research considerations to obtain relevant and in-depth information about research topics at PT. Mandiri Utama Finance.

3.4 Research Data

In the research conducted, there are independent variables and dependent variables including:

a. There are 2 Free Variables *(Independent)* including: Motivation (X1), and Work Environment (X2).
b. The dependent variable *in* this study is Employee Performance (Y).

In testing the variables of this study using a Likert scale with values of 1-5, namely Strongly Disagree (STS), Strongly Agree (ST), Neutral (N), Agree (S), Strongly Agree (SS). A data source is anything that can provide information regarding relevant research. This study will use the primary data type. Primary data is data collected through indirect interviews using questionnaires. The use of questionnaires is one of the data collection methods used to obtain information and also reveal things that respondents know. Therefore, the data source of this study was identified based on the responses of respondents who answered the distributed questionnaire questions. In this study, the data we obtained was obtained through filling out questionnaires by respondents. By filling out questionnaires, respondents are not required to come, but can be replaced by filling out questionnaires related to research and can be filled out by respondents. Questionnaires are used as research instruments for data collection. Therefore, in this study, instrument test techniques were used to obtain valid and reliable data results, therefore validity and reliability tests were used. (*View of EFFECTIVENESS OF THE USE OF PROGRESSIVE MUSCLE RELAXATION TECHNIQUES IN REDUCING THE PAIN LEVEL OF GASTRITIS PATIENTS AT THE MADANI PALU REGIONAL HOSPITAL* , n.d.)

3.5 Data Analysis Techniques

Data analysis techniques used in this study are validity and reliability tests, descriptive analysis of respondents and variables, classical assumption tests (normality, multicollinearity, and heteroscedasticity tests), linear regression analysis, hypothesis tests (F test or simultaneous test, and T test or partial test), validity and reliability tests. Therefore, SPSS was used for the data processing process in this study.

a. Validity Test
The data validity test aims to determine the extent of the validity of the questions and the distribution of questionnaires. Data validity tests are carried out using the product moment correlation method (pearson correlation). A data is said to be valid if it has a significance level of < 0.05%. (Feel et al., 2018).

b. Reliability Test
Reliability refers to the consistency and stability of the results of a particular measurement scale. According to if the number of question items for each variable is less than ten items, then the criterion number for measuring the reliability of the instrument is 0.60. (Feel et al., 2018)

c. Descriptive Analysis
Descriptive analysis emphasizes the processing of deductive and inductive inferences and analysis of the dynamics of relationships between observed phenomena, namely by using scientific logic in other words, descriptive analysis is a discussion that solves problems using empirical data according to (Yanuari, n.d.).

d. Descriptive Analysis of Respondents
The purpose of this study is to determine how the influence of motivation and work environment on employee performance at PT. Mandiri Utama Finance. The descriptive purpose of this study is to find out how these two factors affect employee performance at PT. Mandiri Utama Finance. Another goal of the study was to gain a better understanding of all respondents surveyed.

e. Descriptive Analysis of Variables
The purpose of this study's descriptive variable is to determine whether employee performance perceptions of PT motivation. Mandiri Utama Finance and employee performance towards the company.

f. Normality Test
The normality test aims to test whether in the regression model the confounding or residual variables have a normal distribution or not. The data normality test was carried out using the Kolmogorov-Smirnov (K-S) test with a significance level of 0.05. It can be concluded that if the significance value < 0.05 then the data distribution is abnormal, on the other hand if the significance value is > 0.05 then the distribution is normal. The normality test result has a significance value of 0.107 (X1); 0.272 (X2); 0.453 (X3); and 0.901 (Y). The value is greater than 0.05. Thus the research data can declared to have been normally distributed according to (Islamiati et al., n.d.)

g. Multicollinearity Test
The Multicollinearity Test aims to test whether in the regression model there is a correlation between independent variables". A good regression model should not have correlations between independent variables. To detect the presence or absence of multicollinearity using a test method by looking at the value of Variance Inflation Factor (VIF). If VIF > 10, then Multicollinearity occurs. If VIF < 10, then Multicollinearity does not occur. From the test results, it is known that the VIF value of each variable is 1.089 (X1); 1,141 (X2); and 1.051 (X3). The value is less than 10. Thus each variable does not occur multicollinearity according to (Islamiati et al., n.d.).

h. Heteroscedaticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residual of one observation to another". A qualified regression model is that there is a similarity in variance from the residual of one observation to another is still called homoscedasticity. The heteroschematicity model used is by looking at the scatter plot graph with a performance-bound prediction value (dependent) namely SRESID and with its residual Training, Motivation and Work Environment (independent) namely ZPRED. From the graph of scatterplots of residuals, there is no particular shape / pattern (wavy, widened, then narrowed, linear or quadratic patterns), so it can be stated in the study that heteroscedasticity does not occur according to (Islamiati et al., n.d.)

i. Multiple Linear Regression Analysis

Multiple linear regression analysis determines the linear relationship or influence between one or more independent variables and their dependent variables.

In this test has a formula that can be used for analysis:

$$Y = a + b1X1 + b2X2$$

Information:

Y = employee performance
a = regression constant
B1 = coefficient of regression of motivation
B2 = coefficient of regression of the working environment
X1 = motivasi
X2 = working environment

j. Simultaneous Test (Test F)

Test F determines whether the regression model under study adequately explains the (simultaneous) relationship between the independent variable and the dependent variable. In this study it was used to examine the significance of the influence of motivation and work environment on employee performance simultaneously.

k. Partial Test (T Test)

According to the t i ni test is used to test the significance of each independent variable partially or to find out the independent variable that is more influential between the two independent variables (X) on the dependent variable (Y). (Diana Putri Abdullah et al., 2018)

4. Discussion

4.1 Descriptive Statistical Analysis

Very High

Skala	Kelas	Motivasi	Lingkungan Kerja	Variabel Y
1	1,00 – 1,80	Sangat Tidak Baik	Sangat Tidak Baik	Sangat Rendah
2	1,81 – 2,60	Tidak Baik	Tidak Baik	Rendah

3	2,61 – 3,40	Cukup baik	Cukup Baik	Cukup
4	3,41 – 4,20	Baik	Baik	Tinggi
5	4,21 – 5,00	Sangat Baik	Sangat Baik	Sangat Tinggi

Good enough

Item	Pernyataan	Mean	Keterangan
1	Performa kerja karyawan dinilai dan dipertimbangkan dalam proses promosi jabatan di PT. Mandiri Utama Finance	3,50	Baik
2	PT. Mandiri Utama Finance mendukung karyawannya dalam meningkatkan prestasi kerja	3,43	Baik
3	PT. Mandiri Utama Finance menyediakan program pelatihan atau pengembangan khusus untuk karyawannya	2,91	Cukup Baik
4	Dampak positif penghargaan dan pengakuan terhadap kinerja karyawan sangat berpengaruh di PT. Mandiri Utama Finance?	3,06	Cukup Baik
5	PT. Mandiri Utama Finance melibatkan karyawan dalam menentukan bentuk pengakuan dan apresiasi yang diinginkan	2,85	Cukup Baik
6	PT. Mandiri Utama Finance memberikan umpan balik dan penghargaan kepada karyawan atas pencapaian mereka	3,32	Cukup Baik
	Total	3,18	Cukup Baik

From the table above, Pt. Mandiri Utama Finance shows that the descriptive analysis of motivation reveals that the average is 3.18, and is in the range of 2.61 – 3.40, indicating that the majority of employees have good work motivation.

Good enough

Item	Pernyataan	Mean	Keterangan
1	PT. Mandiri Utama Finance membangun rasa kebersamaan dan kekompakan di antara karyawannya	3,23	Cukup Baik
2	PT. Mandiri Utama Finance telah menerapkan upaya untuk mengurangi kebisingan	2,71	Cukup Baik
3	PT. Mandiri Utama Finance melibatkan karyawan dalam proses penyusunan peraturan kerja	2,56	Tidak Baik
4	PT. Mandiri Utama Finance memiliki desain bangunan dan tata letak ruangan yang memungkinkan masuknya cahaya alami yang cukup	2,80	Cukup Baik
5	PT. Mandiri Utama Finance memiliki desain bangunan dan tata letak ruangan yang memungkinkan pertukaran udara yang optimal	2,91	Cukup Baik
6	PT. Mandiri Utama Finance memasang kamera CCTV di area-area penting di lingkungan kerjanya untuk meningkatkan keamanan	3,23	Cukup Baik
	Total	2,91	Cukup Baik

From the table above, Pt. Mandiri Utama Finance shows that the descriptive analysis of motivation reveals that the average is 3.18, and is in the range of 2.61 – 3.40, indicating that the majority of employees have good work motivation.

Tall

Item	Pernyataan	Mean	Keterangan
1	Tepatkah karyawan dalam menyelesaikan pekerjaan sesuai dengan waktu yang ditentukan	4,03	Tinggi
2	Baikkah kepribadian karyawan dalam bekerja sama dengan tim	4,04	Tinggi
3	Kontribusi karyawan dalam mencapai tujuan perusahaan	4,18	Tinggi
4	Baikkah sikap karyawan dalam berkomunikasi dengan atasan dan rekan kerja	4,12	Tinggi
	Total	4,09	Tinggi

From the table above, Pt. Mandiri Utama Finance shows that the descriptive analysis of the work environment reveals that the average is 2.91, and is in the range of 2.61 – 3.40, indicating that the majority of employees feel the work environment is quite good.

4.2 Variable Validity Test

****. Correlation is significant at the 0.01 level (2-tailed).**

Variabel	Butir	r_{hitung}	r_{tabel}	Keterangan	Sig (2 tailed)	Sig	Keterangan
Motivasi	X1.1	0,710	>0,1646	Valid	0,000	0,05	Valid
	X1.2	0,837	>0,1646	Valid	0,000	0,05	Valid
	X1.3	0,757	>0,1646	Valid	0,000	0,05	Valid
	X1.4	0,822	>0,1646	Valid	0,000	0,05	Valid
	X1.5	0,807	>0,1646	Valid	0,000	0,05	Valid
	X1.6	0,794	>0,1646	Valid	0,000	0,05	Valid
Lingkungan Kerja	X2.1	0,752	>0,1646	Valid	0,000	0,05	Valid
	X2.2	0,743	>0,1646	Valid	0,000	0,05	Valid
	X2.3	0,664	>0,1646	Valid	0,000	0,05	Valid
	X2.4	0,738	>0,1646	Valid	0,000	0,05	Valid
	X2.5	0,813	>0,1646	Valid	0,000	0,05	Valid
	X2.6	0,702	>0,1646	Valid	0,000	0,05	Valid
Variabel Y	Y.1	0,793	>0,1646	Valid	0,000	0,05	Valid
	Y.2	0,909	>0,1646	Valid	0,000	0,05	Scale
	Motivation	Work Environment	Variable Y	1	1,00 – 1,80	Very Not Good	Very Not Good
	2	1,81 – 2,60	Bad	Bad	Low	3	2,61 – 3,40

4.3 Uji Realibility

Reliable

.752	**Cronbach's Alpha**	**Sig. (2-tailed)**	**Keterangan**
.000	.000	.000	.000
.000	.000	0,600	N
101	101	101	101

The main purpose of this study is to assess the level of consistency of measuring instruments in measuring variable indicators. This was done using Cronbach's Alpha reliability test. A variable is considered reliable if the value of Cronbach's Alpha coefficient is greater than 0.6. Based on the results of the analysis, all variables of promotion, price, product quality, and purchase decision showed a value of Cronbach's Alpha greater than 0.6. This shows that the measuring instruments used in this study are classified as reliable and reliable to measure these variables.

4.4 Normality Test

.308

.379		.513
1[a,b]	.702	.0000000
	.000	.000
.002	.000	.000
	.000	.084
	101	101
101		101
101		101

101

TotalX2

Pearson Correlation

a. Dependent Variable: TotalY

.752

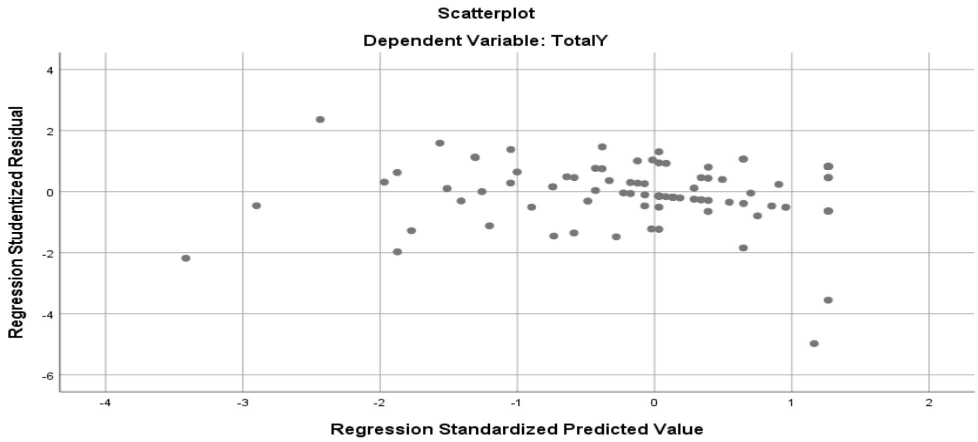
			.664	.738				1
.743		Sig. (2-tailed)	.000	.000	.813	.702	.000	.000
1	(Constant)	N	101		101	101		

**. Correlation is significant at the 0.01 level (2-tailed).	.055	Employee Performance	.092	Y.1	Y.2	Y.3	Y.4
Y.1	Pearson Correlation	1	.633	.539	.655	.793	1.859

Sig. (2-tailed)

It can be concluded that the analyzed regression model is free of multicholinerity. This shows that the regression coefficients in the model are stable and can be interpreted easily, the standard error regression coefficients are small and precise, and the regression model is efficient and able to predict the dependent variable accurately.

4.5 Heteroscedasticity Test



It can be concluded that the analyzed regression model is free from heteroscedasticity. This shows that the regression coefficients in the model are efficient and can be interpreted easily, the statistical tests in the model are valid and reliable, and the predictions of the dependent variable in the model are accurate.

b. Dependent Variable: totally

Model Summary^b

.000	.000	.000	.000	Std. Error of the Estimate
N	101	101	101	101

101

Y.2

- The value of R square is 0.135 or equal to 13.5%.
- This number means that the variables motivation (X1), Work Environment (X2) simultaneously (together) affect the variable of critical thinking ability (Y) by 13.5%.
- While the rest (100%-13.5% = 86.5%) are influenced by other variables outside this regression equation or variables that are not studied.

b. Predictors: (Constant), TotalX2, TotalX1

Pearson Correlation

.633		1	.757	.783	.909	Sig.
Sig. (2-tailed)	.000	118.007	.000	.000	.000	.001b
	101	101	101	101		
	.539	.757	1			

Sig. (2-tailed)

.000

- The Significant Value of the ANOVA table is 0.01 which means below 0.05 so it is concluded that all independent variables studied have a simultaneous effect (together) on the dependent variable.
- F value calculate 7.654 > F table 3.09, then the independent variables studied have a simultaneous effect (together) on the dependent variable

a. Dependent Variable: TotalY

.000

		.000		.000		
Model		101	101	101	t	N
Pearson Correlation	.655	.783	.740		.911	.000
	.000	.000	.000	.092	.000	.475
	101	101	101	101	101	TotalY

Pearson Correlation

The t test aims to determine whether the independent variable (X) partially (individually) affects the dependent variable (Y).

- Motivational Variables:
  Based on the results of the table above that the T-count value is 0.718 > the table T is 0.67700 then X1 has an effect on Y. And the sig value of 0.475 > 0.05 then X1 has no effect on Y.
- The value of T is calculated 2.333 > T table 0.67700 then X2 has an effect on Y. The value of sig 0.022 < 0.05 then X1 has an effect on Y.

5. Conclusions, Limitations, and Implications

The results of the research obtained in the discussion section above, aim to determine whether motivation, work environment, and employee performance have a significant effect or to determine simultaneously motivation, work environment, work motivation and work environment on the performance of PT employees. Mandiri Utama Finance.

Based on the results of data analysis, the conclusions that can be drawn are as follows:

a. Work motivation affects the performance of PT. Mandiri Utama Finance.
b. The work environment affects the performance of PT. Mandiri Utama Finance.
c. Work motivation and work environment affect simultaneously or simultaneously on the performance of PT. Mandiri Utama Finance.

Based on the results of the analysis to the conclusion, there are several limitations in this study, including:

a. The time needed in this study is quite short, about 2 months from March to April.
b. The time period used in the study is short enough to find out how influential each ratio is on company performance.

PT. Mandiri Utama Finance has an important role in supporting national economic growth and improving people's welfare. The company needs to continuously innovate and improve its services to overcome various challenges and achieve its goals.

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THE INFLUENCE OF PROMOTIONS, USER EXPERIENCE, AND CUSTOMER SATISFACTION ON SHOPEEPAY E-WALLET USER LOYALTY

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ABSTRACT
In 2023, ShopeePay ranks fourth in frequency, namely 60% as the most widely used e-wallet user in Indonesia. Users can experience the various benefits offered in the form of: cashback, promos, as well as features and application usage flows that are easy to understand so that there are various influences on why consumers remain loyal to using ShopeePay. This research aims to determine the influence of promotions, user experience, and customer satisfaction on loyalty. The type of research method is quantitative with surveys via questionnaires. The sampling technique is by purposive sample with 100 criteria respondents All ShopeePay users are active with at least one transaction a month and have a registered account for at least one year. The data analysis techniques in this research are the classical assumption test, multiple linear regression test processed using SPSS Statistics 25, and hypothesis testing. The research results show that: 1) promotion partially influences loyalty, 2) user experience partially it has no effect on loyalty, 3) customer satisfaction has an effect on loyalty.
Keywords: *shopeepay, promotions, user experience, customer satisfaction*

1. Introduction

The industrial era 5.0 ushers in a new era with increasingly sophisticated efficiency and productivity. This is indicated by the increasing use of the internet, high mobility of people in online activities which is characterized by people becoming increasingly accustomed to carrying out various activities online, such as shopping, ordering food and working, as well as digital-based economic activities through e-commerce, digital wallets, and other platforms. This is proof that we have entered the digital era.

The combination of technology and finance brings *Financial Technology* (*FinTech*), an innovation that is revolutionizing the way we manage and access finances. FinTech offers a variety of financial services that are easier, faster and more affordable than traditional financial services. According to Bank Indonesia (2018) *FinTech* is a combination of financial services and technology that has revolutionized business models and ways of transactions. Previously transactions required direct interaction and carrying cash, now they can be done online easily and quickly via *FinTech*.

People are increasingly interested in *FinTech*, especially digital payment systems. This can be seen from the increasing use of digital wallets, online transfers and other online payments. Increasing public interest in *FinTech* encouraging many e-commerce platforms to cooperate with the company *FinTech* others or even build their own digital payment systems. The aim is to make it easier for customers to make payments and increase their competitiveness in the e-commerce market.

One of *e-commerce* the namely Shopee which is building a digital payment system with the company *FinTech* PT AirPay International Indonesia. The digital payment system is ShopeePay. According to Shopee (2020), ShopeePay is *e-wallet* which offers practical solutions for all financial needs in daily activities. According to the site help.shopee.co.id ShopeePay is not only a digital payment system on the platform *e-commerce* Shopee, however, can carry out transactions *online* outside Shopee, such as bank transfers and transactions *offline* with Merchants who accept payments via QRIS and ShopeePay.

In addition to ShopeePay there is *e-wallet* others used by the public for transactions such as Gopay, OVO, Dana, and LinkAja. Following is the user data *e-wallet* the most widely used in Indonesia in 2023.

Table 1. E-wallet Users in 2023

No	*E-Wallet*	Percentage of Users
1	Gopay	71%
2	THIS	70%
3	Days	61%
4	ShopeePay	60%
5	LinkAja	27%

Sumber: Databoks (2023)

According to databoks (2023), survey *E-Wallet Industry Outlook 2023* from Insight Asia shows that 1,300 urban residents, 74 percent of whom have used it *e-wallet*. ShopeePay is in fourth place with a slight difference from Dana in terms of users *e-wallet*. ShopeePay has a user proportion of 60 percent, while Dana has a user proportion of 61 percent. The first and second positions are occupied by Gopay with 71 percent users and OVO with a user proportion of 70 percent. LinkAja occupies the lowest position with a user proportion of 27 percent.

Data shows that although ShopeePay is in fourth position in terms of number of users *e-wallet*, but it needs to be researched further whether there are certain influences that make consumers loyal to ShopeePay. According to Kotler and Keller 2009 (in Saragih and Prayitta 2023:22), loyalty is a customer's commitment to continue buying the same goods and services in the future, without being affected by changes in market situations. Consumer loyalty to a product or service can be influenced by several factors such as promotion, *user experience*, and customer satisfaction.

In promoting its services, ShopeePay offers various promos in the form of *cashback*, discounts and free shipping when shopping using the ShopeePay payment method at *e-commerce* Shopee. Payments with ShopeePay via QRIS at various merchants also often provide *cashback*. ShopeePay also promotes its services by providing promo notifications to users. According to Kotler and Keller 2016 (Isnaini and Istiyanto 2023:5), promotion is an activity or marketing strategy designed to increase sales or brand awareness of a product or service.

User experience is one of the factors in consumer loyalty because consumers feel that there is something unique or different about ShopeePay *e-wallet* other. It could be that as long as consumers use Shopeepay they feel safe when making transactions, which makes consumers loyal to use ShopeePay. *User experience* is the user's experience when interacting with a system which includes aspects of behavior, reactions, thoughts, emotions and perceptions (Yudarmawan et al, 2020)

The features provided by ShopeePay are interesting and useful for its users. These features can include security, convenience, and promos provided by ShopeePay to increase customer satisfaction. According to Dewi et al (2018), customer satisfaction is achieved when the product consumed is able to meet the customer's needs, desires and expectations.

Previous research (Kurniah and Awaluddin 2022) shows *user experience* has no effect on loyalty. In contrast to the results of previous research (Pamungkas 2013) stated that *user* *experience* influence on loyalty. On the other hand, previous research (Mursyid 2018) states that promotions have no effect on loyalty. However, there is a discrepancy in the results of previous research (Suryanto 2018) stating that consumer satisfaction and promotions partially influence loyalty.

2. Literature Review

2.1 Promotion

According to Handoko (2017:62-72) states that promotion is a field of marketing activities and is communication carried out company to buyers or consumers containing news (*information*), persuade (*persuasion*) and influence (*influence*). Tjiptono 2008:219 (in Samboro and Santoso 2017:4) defines sales promotion as a form of direct persuasion through the use of various incentives that can be arranged to stimulate immediate product purchases. From these two definitions, it can be concluded that promotion is a communication activity carried out to stimulate product purchases. According to Oktavenia & Ardani 2018:3 (in Sari 2021:16) states that there are 4 promotion indicators, namely:

a. Promotion frequency
b. Promotional quality
c. Promotion quantity
d. Promotion time
e. Accuracy or suitability of promotional targets

2.2 User Experience

User Experience or user experience according to Raharjo 2017 (in Fadilah 2022:11) is a learning from a person's experience of an object which then becomes a person's reflection of that object. According to Garrett 2011:6 (in Melina 2017:25) *user experience* is a person's experience in using a product or service in the real world. *User Experience* according to Schrepp, M., Hinderks, A., & Thomaschewski, J 2017 (in Fadilah 2022:13) is divided into 6 dimensions, namely:

a. Attractiveness (*Attractiveness)*
b. Clarity *(Perspicuity*)
c. Consumer Efficiency (*Efficiency*)
d. Consumer Dependency (*Dependency*)
e. Consumer Stimulation (*Stimulation*)
f. Novelty (*Novelty*)

2.3 Customer satisfaction

Idris, Sari et al 2019 (in Apriliani, Dwi et al 2020:22) say that customer satisfaction will occur if the customer is satisfied with the service that is in line with expectations, and in accordance with the price and service. According to Rangga and Nalendra (2018: 284) customer satisfaction is the existence of a factor that encourages the emergence of human desires aimed at achieving satisfaction. The following are indicators of customer satisfaction variables proposed by Philip Kotler 2007:206 (in Kusumawati 2015:247), namely:

a. Satisfied with the product
b. Satisfied with product choice
c. Recommend products to others
d. Have the desire not to switch to another product
e. Make a repeat purchase

2.4 Loyalty

Loyalty is a condition where someone is loyal to something. Loyalty referred to in this case is customer loyalty to the company by purchasing products or services offered by the company. According to Kotler & Keller 2016 (in Rahayu and Syafe'i 2022:2196) loyalty is persistence in obtaining or using a product or service in the future that remains strong despite the influence of situations and marketing efforts that can influence behavior. Meanwhile, according to Surya and Setyaningrum 2009 (in Hose 2013:75), a customer's loyalty can be measured in the following way:

a. Repeat purchase
b. Recommendation
c. Feelings after purchasing

2.5 Hypothesis Development

Promotion is an activity of communicating a product to customers. According to Farisi and Siregar (2020:152) promotion is one-way communication which aims to inform, persuade or remind people about a product to create an exchange in marketing. Promotional activities can be an indicator of customers increasing their loyalty to the Company. Companies can provide promotions that are varied, easy to access, and provide satisfaction for their customers. In the research of Farisi and Siregar (2020), it was proven that increasing promotions will increase customer loyalty, as well as the research results of Rahayu and Syafe'I (2022) stating that increasing promotions will also increase customer loyalty.

H1: The Effect of Promotions on Loyalty

According to Raharjo 2017 (in Fadilah 2022:11) *user experience* is learning that comes from a person's experience of interacting with an object which then becomes a person's self-reflection on that object. Meanwhile, according to Garrett 2011:6 (in Melina 2017:25) *user experience* is a person's experience in using a product or service in the real world. In research by Wang et al 2006 (in Wongso 2020:4) it shows that there is a positive relationship between *user experience* and customer loyalty. A customer's experience with a product and service can increase customer loyalty.

H2: Influence User Experience towards Loyalty

According to Nainggolan 2018:52 (in Siboro 2020:10) customer satisfaction is the final assessment after purchase or the result of this assessment after combining what the customer feels plus his expectations. Usually a customer who feels satisfied after consuming a product or service will make a repeat purchase, so this pattern can be an indicator of loyalty. According to research conducted by Rafiah (2019), customer satisfaction influences customer loyalty. This is also supported by research conducted by Wahyuni & Widodo (2018) which states that there is a significant influence of customer satisfaction on loyalty.

H3: The Influence of Customer Satisfaction on Loyalty

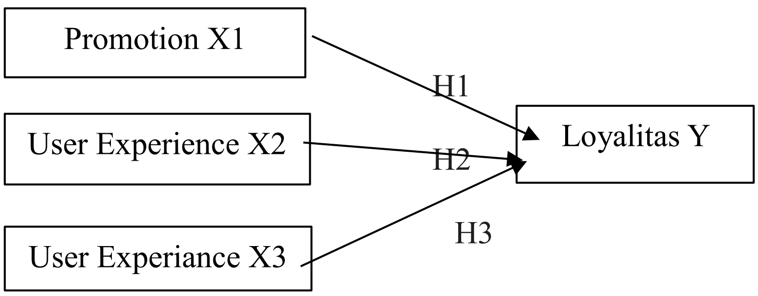

Figure 1. Research Model

3. Research Methods

3.1 Research design

Design or research design according to Karim & Hartati, 2022 (in Maharani et al. 2023: 520) is a research structure that is arranged in such a way that the researcher will then get answers to the research questions. This research uses a quantitative research design with a survey method.

Table 2. Operational definition

Variable	Variable Definition	Indicator	Questionnaire Statement
PROMOTION	**Theoretical Definition:** According to Handoko (2017: 62-72) states that promotion is a field of activity *marketing* and is communication carried out by the company to buyers or consumers containing news (*information*), persuade (*persuasion*) and influence (*influence*). **Operational definition:** Promotion is a method used by ShopeePay to inform, persuade and influence consumers which includes frequency of promotions, quality of promotions, quantity of promotions, timing of promotions, and accuracy or suitability of promotional targets.	Promotion frequency	1. I often see ShopeePay advertisements on social media
		Promotional quality	2. In my opinion, the information provided by ShopeePay is clear
		Promotion Quantity	3. I use ShopeePay because there are lots of promos given
		Promotion time	4. ShopeePay promos are only given at certain times, for example on twin dates (Promo 3.3)
		Accuracy or suitability of promotional targets (Oktavenia & Ardani 2018:3 in Sari 2021:16)	5. I feel confident about making transactions after seeing the ShopeePay advertisement
USER EXPERIENCE	**Theoretical Definition:** User Experience or user experience according to Raharjo 2017 (in Fadilah 2022:11) is a learning from a person's experience of an object which then becomes a person's reflection of that object. **Operational definition:**	Attractiveness (*Attractiveness)*	6. I find using ShopeePay easy because you can make transactions without cash
		Clarity (*Perspicuity*)	7. I feel that the features provided by ShopeePay are easy to understand
		Consumer Efficiency (*Efficiency*)	8. I feel that the transaction flow at ShopeePay is structured

	User Experience is the experience and learning after using ShopeePay which then becomes a reflection for the user from this experience.	Consumer Dependency (*Dependency*)	9. I always use ShopeePay because of its convenience for transactions such as inter-bank transfers, top ups, and merchant promos
		Consumer Stimulation (*Stimulation*)	10. The appearance of the ShopeePay features is attractive
		Novelty (*Novelty*) (Schrepp, M., Hinderks, A., & Thomaschewski, J 2017 dalam Fadilah 2022:13)	11. The features provided by ShopeePay follow trends
CUSTOMER SATISFACTION	**Theoretical Definition:** Idris, Sari et al 2019 (in Apriliani, Dwi et al 2020:22) say that customer satisfaction will occur if the customer is satisfied with the service that is in line with expectations, and in accordance with the price and service. **Operational definition:** Customer satisfaction is the customer's attitude of satisfaction with the services provided by ShopeePay in accordance with customer expectations.	Satisfied with the product	12. I feel satisfied using ShopeePay
		Satisfied with product choice	13. I am satisfied with the features provided by ShopeePay such as inter-bank transfers, top ups, payments at merchants, as well as a payment method at *e-commerce* Shopee
		Recommend products to others	14. I would recommend ShopeePay to others
		Have the desire not to switch to another product	15. I feel that only ShopeePay will be used in the long term
		Make a repeat purchase (Philip Kotler 2007:206 in Kusumawati 2015:247)	16. I always use ShopeePay as a tool for transactions
LOYALTY	**Theoretical Definition:** According to Kotler & Keller 2016 (in Rahayu and Syafe'i 2022:2196) loyalty is persistence in obtaining or using a	Repeat purchase	17. I always use ShopeePay, even though it is available *e-wallet* others are better

	product or service in the future that remains strong despite the influence of situations and marketing efforts that can influence behavior. **Operational definition:** Loyalty is the user's determination to continue using ShopeePay despite the influence of situations and marketing efforts that can influence user behavior.	Recommendation	18. I am not easily influenced by people who recommend *e-wallet* another
		Feelings after purchasing (Surya and Setyaningrum 2009 in Hose 2013:75)	19. I feel happy after making a transaction via ShopeePay

3.2 Population and Sample

According to Arikunto (in Kusnawan, Agus, Andy, Eso Hernawan, Diana Silaswara, 2020) states that: "Population is the entire object of research". The population in this study are all active ShopeePay users who have had a registered account for at least 1 year. According to Sugiyono 2016:118, the sample is part of the number and characteristics of the population. The sample in this study consisted of 100 respondents who were chosen randomly. The sampling technique was carried out by *purposive sampling*.

3.3 Research data

This research uses a questionnaire as a primary data collection instrument. The questionnaire contains questions asked to respondents using a Likert scale. According to Sugiyono 2012 (in Sumartini, Harahap, Sumartini 2020:30) the Likert scale is a method of measuring a person's opinion using a questionnaire to determine the scale of attitudes towards a particular object. On this scale, each answer is scored 1 to 5, with 1 being "strongly disagree" and 5 being "strongly agree."

3.4 Data analysis technique

3.4.1 Validity test

According to Janna and Herianto (2021), validity testing is an important step in developing a questionnaire to ensure that the questions asked really measure what you want to measure. Validity refers to the accuracy and suitability of the questions in a questionnaire to the concept or variable you want to measure. Test criteria are as follows.

1. When $r_{count} > r_{table}$ then the statement is declared valid.
2. When $r_{count} \leq r_{table}$ then the statement is declared invalid.

3.4.2 Reliability Test

Sugiyono 2017: 130 (in Cesaria 2020) states that a reliability test is the extent to which measurement results using the same object will produce the same data. Variables are declared reliable with the following criteria.

a. If r-alpha is positive and greater than r-table then the statement is reliable.
b. If r-alpha is negative and smaller than r-table then the statement is not reliable.
    1) If the Cronbach's Alpha value is > 0.6 then it is reliable.
    2) If the Cronbach's Alpha value is <0.6 then it is not reliable.

According to Priyatno 2013:30 (in Sesaria 2020) states that a variable is said to be good if it has a Cronbach's Alpha value > 0.6.

3.4.3 Classic assumption test

According to Wahyuni (2020), the classical assumption test is an important step in multiple linear regression analysis using the method *Ordinary Least Square* (OLS). OLS is a method used to estimate regression parameters in a model with one dependent variable and more than one independent variable. The classical assumption test is needed to ensure that the OLS regression results are valid and can be interpreted correctly. Here are some classic assumption tests.

3.4.4 Normality test

According to Ghozali 2018 (in Wahyuni 2020:39) states that the normality test is used to test whether the regression model has residuals that are normally distributed or not. An indicator of a good regression model is having normally distributed data. The method for detecting whether the residuals are normally distributed or not can be done using non-parametric statistical tests *Kolmogorov-Smirnov* (K-S) *test*. Data distribution can be said to be normal if the significance value is > 0.05.

3.4.5 Multicollinearity Test

According to Ghozali 2018 (in Wahyuni 2020:40) says that the multicollinearity test detects whether there is a linear correlation between the independent variables in the regression model. A good regression model is free, that is, there is no multicollinearity.
To find out whether there are symptoms of multicollinearity or not, that is by looking at the magnitude of the VIF (*Variance Inflation Factor*) and value *Tolerance*.

1. VIF measures how much the variability of an independent variable is influenced by other independent variables. A VIF value < 10.00 indicates multicollinearity.
2. *Tolerance* measures the variability of selected variables that is not explained by other independent variables. Mark *Tolerance* > 0.10 indicates multicollinearity.

3.4.6 Heteroscedasticity Test

According to Sujarweni 2016 (in Triani 2020:32), the heteroscedasticity test aims to determine whether there are differences in residual variance between observation periods. How to predict the presence of heteroscedasticity in a model can be done by looking at the pattern in the image *Scatterplot*, regression where heteroscedasticity does not occur is known by:

1. The data points spread above and below or around the number 0.
2. Data points do not collect only at the top or bottom.
3. The distribution of data points should not form a wavy pattern that widens then narrows and widens again.
4. The distribution of data points is not patterned.

3.4.7 Multiple linear regression

According to Arifin 2017 (in Sari 2019:58) says that multiple linear regression has two or more independent variables and one dependent variable which shows the relationship between the independent variables and the dependent variable. The equations in this research model are as follows.

$$\boxed{Y = a + b1X1 + b2X2 + b3X3 + e}$$

Information:
The equation Y is loyalty, X1 is promotion, X2 is *user experience*, X3 is customer satisfaction, a is a constant, b1, b2, and b3 are regression coefficients, and e is error.

3.5 Hypothesis testing

3.5.1 F Test (Simultaneous Test)

According to Ghozali 2016 (in Sha 2018: 166) says that all independent variables included in the model have a joint influence on the dependent variable. The F test criterion is the F test result sig < 0.05, meaning that there is a significant influence of all independent variables simultaneously on the dependent variable.

3.5.2 t Test (Partial Test)

According to Ghozali 2016 (in Sha 2018: 166) says that the t test aims to determine the influence of each independent variable on the dependent variable. The t test criteria, if sig t < 0.05 then there is a significant relationship between the independent variable and the dependent variable partially.

3.5.3 Coefficient of Determination (adjusted R^2)

According to Ghozali 2016 (in Sha 2018:165) says that the coefficient of determination is used to test *goodness-fit* from the regression model. The coefficient of determination value = 0, meaning that the variation in the dependent variable cannot be explained by the independent variable at all. However, if the coefficient of determination = 1 then the variation in the dependent variable as a whole can be explained by the independent variable. Adjusted R^2 has a value between zero and one.

4. Research Findings and Discussion

This research collected 100 respondents. There were 13 respondents who did not meet the criteria, so the data that could be processed was 87 respondents. The characteristics of respondents based on age level in this study were dominated by ShopeePay users with the age range 19-24 years having a percentage of 90%, ages 25-30 years having a percentage of 6%, and ages 13-18 years having a percentage of 4%. Respondents to this study consisted of 69 respondents who were female and 31 respondents who were male. The majority of respondents' occupations are students with a percentage of 88%, private employees with a percentage of 7%, entrepreneurs with a percentage of 3%, and students with a percentage of 2%. In one month the majority of respondents make transactions 1-2 times with a percentage of 39%, 3-4 times with a percentage of 26%, more than 6 transactions with a percentage of 18%, and 5-6 transactions with a percentage of 17%. Judging from the length of time they have used ShopeePay, most respondents have used ShopeePay for 3-4 years with a percentage of 42%, 1-2 years with a percentage of 38%, less than 1 year with a percentage of 13%, and more than 5 years with a percentage of 7%.

Validity tests have been carried out for each question item in the questionnaire and the results are that the calculated r value is greater than the r table so that all statement items are declared valid. In the reliability test, the Cronbach's Alpha value for the promotion variable was 0.649, the user experience variable was 0.697, the customer satisfaction variable was 0.842, and the loyalty variable was 0.734. So, it can be seen that the Cronbach's Alpha value for each of these variables is greater than 0.6, so it can be concluded that all of these variables are said to be reliable.

The normality test result of the significance asymp (2-tailed) is 0.200. Data distribution can be said to be normal if the significance value is > 0.05. So it can be said that the data is normally distributed. The multicollinearity test results of the VIF value for the promotion variable are 1.181, the user experience variable is 2.955, and customer satisfaction is 2.787, so each of these three variables shows a VIF value < 10 so it can be said that there are no symptoms of multicollinearity. From the scatter plot results above, it can be seen that the data points do not form a particular pattern and the data is spread above and below the number 0 on the Y axis, therefore it can be concluded that this research data does not have heteroscedasticity.

Table 3. Multiple Linear Analysis

Model	**B**	**Std. Error**	**Beta**	**t**	**Say.**
Constant	-0,203	1,385		-1,46	0,884
Promotion (X1)	0,194	0,053	0,299	3,627	0,000
User Experience (X2)	-0,033	0,091	-0,048	-0,369	0,713
Customer Satisfaction (X3)	0,406	0,084	0,611	4,834	0,000

From table 3, multiple linear analysis is obtained as follows:

$$\mathbf{Y = -0.203 + 0.194X1 - 0.033X2 + 0.406X3}$$

The Adjusted R Square value is 0.506 (50.5%), which means that the ability of the promotion, user experience and customer satisfaction variables in explaining the variance of the customer loyalty variable is 50.6%, while the remaining 49.4% is influenced by other independent variables. not tested in this study. The F test value shows that the calculated F value is 30.418 > 2.71, which means that promotion, user experience and customer satisfaction simultaneously influence customer loyalty.

The results of the t test in this research show that the calculated t value of the promotion variable is 3.627, which is a higher value than the t table of 1.98896, meaning that the promotion variable partially has a significant effect on customer loyalty. T test on variables *user experience* The calculated t value is -0.369, which is smaller than the t table value of 1.98896, meaning that the variable *user experience* partially has no effect on customer loyalty. The t test on the customer satisfaction variable has a calculated t value of 4.834, which is greater than the t table of 1.98896, which means that the customer satisfaction variable partially has a significant effect on customer loyalty.

5. Conclusion

This research found that promotions, user experience, and customer satisfaction simultaneously influence the loyalty of ShopeePay e-wallet users. Promotions partially influence the loyalty of ShopeePay e-wallet users. Partial user experience has no effect on the loyalty of ShopeePay e-wallet users. Customer satisfaction partially influences the loyalty of ShopeePay e-wallet users.

Based on the research results, suggestions for ShopeePay regarding promotions are to utilize various promotional channels so that they can reach a wider market. Promotions can be carried out in collaboration with merchants to offer attractive promos for ShopeePay users. ShopeePay's suggestion regarding customer satisfaction is to innovate in developing new features and services to increase the satisfaction of ShopeePay e-wallet users. Apart from that, it is necessary to strengthen the security system to protect user data and transactions from cyber crime such as phishing links.

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ANALYZING ELECTRIC VEHICLE CONSUMER PURCHASE INTENTION USING PERCEIVED VALUE THEORY

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ABSTRACT
Excessive energy use in various countries has caused global environmental problems, one of the main causes is the use of energy from transportation so it is necessary to change the use of oil-fueled vehicles to electric This study examined the influence of perceived value theory in the form of functional value, price value, emotional value, social value and environmental value on consumer intention to buy electric vehicles. This study used quantitative descriptive methodology with survey method, data was collected from 100 respondents through an online questionnaire using google form which was analyzed using SEM PLS 3.2.9. The results showed that consumer intention to buy an electric vehicle is positively and significantly influenced by emotional value, social value and environmental value. Meanwhile, functional value and price value do not affect consumer intention to buy electric vehicles. This research also provides theoretical implications in the form of empirical evidence, decision making by electric vehicle marketers and the government from the influence of consumer intentions to buy electric vehicles in the Indonesian context.
***Keywords**: Perceived value theory, electric vehicle, functional value, price value, environmental value*

1. Introduction

Currently, the excessive use of energy in various countries has caused various global environmental problems such as climate change that is too extreme and difficult to predict. Excessive energy consumption has caused a lot of carbon emissions and other toxic gases, which can harm the environment and health. One of the main causes of excessive energy use is the heavy use of transportation as it is completely dependent on petroleum fuels and produces carbon dioxide (CO2) gas. Excessive energy use wasalso caused by high population growth because the more the population, the more energy use is required.

With climate change becoming the focus of world attention, many people are beginning to realize the importance of the environment and the impact of energy consumption on the environment (Strielkowski et al., 2019). Indonesia is one of the countries with the fourth highest population density in the world with a population of 278.7 million people so that the required energy use is also getting higher (Annur, 2023). The transportation sector, especially petroleum-fueled motorized vehicles, is the second largest contributor to pollution and energy in Indonesia, so it needs to get more attention to the current significant increase in the number of motorized vehicles (Maghfiroh et al., 2021). Over the past few decades there has been an increase of 8.6% per year in the fossil fuel transportation use sector (Zhong et al., 2019).

An alternative method that can be done to overcome this problem is to educate users of oil-fueled motorized vehicles to switch to using electric motorized vehicles that can use lower energy and are pollution-free because they do not emit CO2 gas (Narasipuram & Mopidevi, 2021). The Indonesian government has issued presidential regulation number 55 of 2019 which contains the acceleration of the battery-based electric motor vehicle program for road transportation, the regulation states that buyers of electric motor vehicles such as cars and motorbikes will get an intensive tax on motor vehicle registration fees (BBN-KB) this is done by the Indonesian government in order to stimulate the willingness of the public to switch, buy and use electric vehicles (Presidential Regulation (PERPRES) Number 55 of 2019, 2019).

The use of electric vehicles in Indonesia has become very important after the emergence of various environmental issues caused by the high number of oil-fueled motor vehicles that cause pollution that is harmful to health, extreme climate change, global warming, and scarcity of petroleum resources in Indonesia. Various initiatives have been carried out by the government such as providing subsidies when buying electric vehicles, this is done in order to stimulate users of oil-fueled vehicles to switch to buying and using electric vehicles. However, it is important to know people's preferences or expectations of electric vehicles, considering that this electric vehicle is a new product in Indonesia know what consumers want from electric vehicles more electric vehicle users. Consumers consider the theory of perceived value to assess electric vehicles, namely functional value, price value, emotional value, social value and environmental value.

Three studies have studied consumer purchasing behavior for a product that is influenced by the perceived value of a product, namely in the form of functional value, price value, emotional value, social value and environmental value. When using the perceived value theory, it is also influenced by consumer characteristics such as experience in purchasing environmentally, friendly products, gender, monthly income and domicile of residence because consumer behavior will change according to the product purchase experience they get (Sun et al., 2021). The use of a product can change consumer perceptions and attitudes so that consumer perceptions about purchasing a product that they have bought and used are different from consumers who have never used and bought the product.

Luo et al., (2022) stateed that functional value, emotional value, conditional value and environmental value have the positive influence on customer satisfaction to increase the intention to purchase energy-efficient products while social value is not significant to consumer satisfaction. Lin and Dong (2023) stated that functional value, price value and environmental value significantly and positively affect attitudes towards purchasing energy-efficient household appliances while social and emotional values do not significantly affect attitudes. Arifin et al. (2023) stated that social value, functional value, and price value have an effect on consumer satisfaction that affects micro-purchase intention in Valoran while emotional value has no effect on consumer satisfaction.

This study provided a model to better understand consumer intention to purchase electric vehicles using the theory of perceived value in the form of functional value, price value, emotional value, social value and environmental value. The perceived value of electric vehicles affected customer satisfaction which led to consumer behavior on whether to buy or not. The purpose of this study was to analyze the perceived value of electric vehicles and what factors influence consumer intention to buy electric vehicles in Indonesia.

This research contributed to the literature to deepen understanding of consumer intention to purchase electric vehicles in Indonesia which was influenced by perceived value theory. This research also provided theoretical implications in the form of decision making by electric vehicle marketers and the government from the influence of consumer intention to purchase electric vehicles in the Indonesian context.

2. Literature Review

2.1. Theory of perceived value

Perceived value theory is the consumer's overall assessment of the advantages and disadvantages obtained from a product or service on the grounds that the assessment provided by consumers is the consumer's evaluation of product components and their usefulness that can help or hinder the purpose of the product (Woodruff, 1997). Sheth et al. (1991) stated that perceived value theory can be classified into five values, namely functional value, emotional value, social value, price value, and environmental value. Therefore, this research used the perceived value theory and focused on five values namely functional value, emotional value, social value, price value, and environmental value.

2.1.1. Functional Value

Functional value is an important factor in consumer perceptions of usefulness, performance, reliability, durability, and quality in the consumption decision-making process because it is the basic value that consumers seek from a product when they want to use and buy a particular product (Woo & Kim, 2019). Consumers prefered products that have more functional uses than those with fewer functional uses. Therefore, it can be said that consumer intention to buy an Electric vehicle is influenced by functional value, so it is hypothesized that:
H1. Functional value positively influences consumer intention to buy an Electric vehicle

2.1.2. Price Value

Price value is the least visible value of a product but refers more to the benefits perceived by consumers in a product based on its short-term and long-term costs whether it is in accordance with the price given (Tsay, 2009). Consumers will be more willing to pay for a product at a higher price if it is in accordance with the benefits provided by the product. Therefore, it can be said that consumer intention to buy an Electric vehicle is influenced by functional value, so it is hypothesized that :
H2. Price value positively influences consumer intention to buy an Electric vehicle

2.1.3. Emotional Value

Emotional value is the perception that consumers feel from a product that evokes certain feelings or emotional states when using and buying a particular product (Hur et al., 2013). Consumers will prefer to use and choose a product that makes them happier when using and buying it than a product that does not give them a sense of pleasure and happiness. Therefore, it can be said that consumer intention to buy an Electric vehicle is influenced by emotional value, so it is hypothesized that:
H3. Emotional value positively influences consumer intention to buy an Electric vehicle

2.1.4. Social Values

Social value is the perception that consumers feel and get from social groups, family and friends when using and buying a particular product (Biswas & Roy, 2015). Consumers will prefer to use and buy a certain product that can give them recognition from others rather than products that do not provide recognition from others. Therefore, it can be said that consumer intention to buy an Electric vehicle is influenced by social value, so it is hypothesized that:
H4. Social value positively influences consumer intention to buy an Electric vehicle

2.1.5. Environmental Value

Environmental value is the perception felt and obtained by consumers related to environmental friendliness when using and buying a particular product (Ding et al., 2022). Consumers will prefer to use and buy products that provide more benefits to the environment than those that do not provide benefits to the environmental. Therefore, it can be said that consumer intention to buy an Electric vehicle is influenced by environmental values, so it is hypothesized that:
H5. Environmental values positively influence consumer intention to purchase electric vehicles

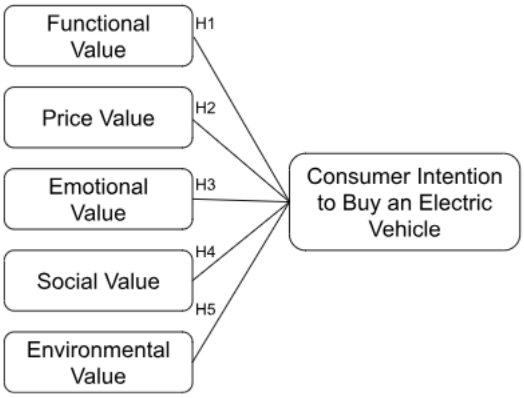

Figure 1. Conceptual Framework

3. Research Methods

3.1. Research Design

This research is designed with a quantitative approach that uses descriptive research to collect information about something and then describe it (Abd.Mukhid, 2021). The research uses a survey method which will be carried out by distributing questionnaires and verifying the validity of their contents to collect information directly from the sample which is carried out online through a questionnaire in the form of a google form distributed via social media in the form of whatsapp, Instagram, facebook and tiktok with the aim of knowing the sample's opinion about the subject being investigated in the study.

3.2. Population and sample

Data was collected with the condition that the respondent must have an age above 17 years and a monthly expenditure of 2,000,000. This questionnaire used a Likert scale consisting of 5 points from strongly disagree (1) to strongly agree (5). From the questionnaire that has been distributed online, there were 100 respondents who met the conditions that had been made.

3.3. Data Analysis

In this study, the data was processed using the data analysis technique SmartPLS version 3.2.9. The stages in SmartPLS used several processes ranging from outer model evaluation, inner model evaluation, and hypothesis testing.

4. Research Findings and Discussion

4.1. Characteristics of Respondents

This study has several characteristics of respondents which are divided into 4 (four) groups, namely gender, domicile, age, and monthly expenses which are contained in the following table:

Table 1. Demographic Profile

Responden Profile		Total	Percentage
Gender	Female	56	56%
	Male	44	44%
Domicile	Borneo Island	44	44%
	Java Island	47	47%
	Sulawesi Island	2	2%

Responden Profile		Total	Percentage
	Sumatera Island	1	1%
	Papua Island	1	1%
	Bali Island	5	5%
Age	17 - 30	71	71%
	31 - 51	23	23%
	51 - 70	6	6%
Monthly Expenditure	2.000.000 - 3.000.000	65	65%
	3.100.000 - 4.000.000	21	21%
	4.100.000 - 5.000.000	8	8%
	5.100.000 - 6.000.000	6	6%

Source: Data processed by researchers, 2024

4.2. Outer Model Evaluation

The results of the outer model evaluation, inner model evaluation can be seen by performing calculations in smartpls through the Partial Least Squares Algorithm which contains the following results:

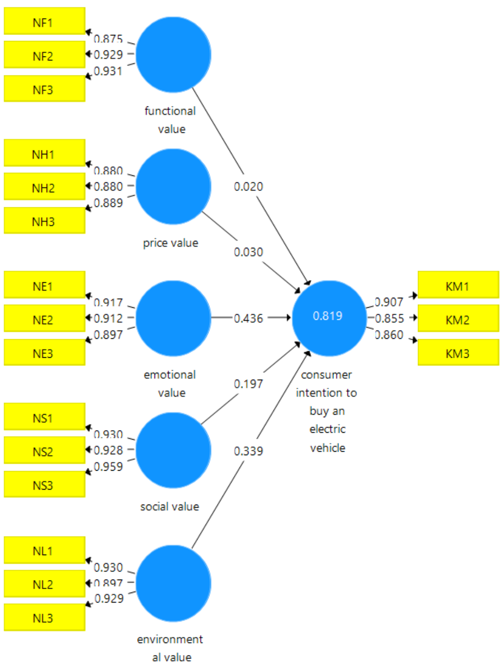

Figure 2. Partial Least Square Model Algorithm
Source: Data processed by researchers, 2024

At this first stage, namely by evaluating the outer model by looking at the outer loading value of each indicator on each construct. According to Hair et al., (2019) an indicator can be said to meet the validity criteria if the outer loading value is > 0.7.

Table 2. Confirmation of Factor Analysis

Variabel	Indikator	Loading Factor
Consumer intention to buy an electric vehicle	KM1	0,907

Variabel	Indikator	Loading Factor
	KM2	0,855
	KM3	0,860
Emotional value	NE1	0,917
	NE2	0,912
	NE3	0,897
Environmental value	NL1	0,930
	NL2	0,897
	NL3	0,929
Functional value	NF1	0,875
	NF2	0,929
	NF3	0,931
Price value	NH1	0,880
	NH2	0,880
	NH3	0,889
Social value	NS1	0,930
	NS2	0,928
	NS3	0,959

Source: Data processed by researchers, 2024

Based on the results of data processing using SmartPLS 3.2.9 displayed in table.2 which shows that all indicators have an outer loading value > 0.7, which means that all indicators are said to be valid.

4.3. Inner Model Evaluation

At the next stage, evaluate the inner model by looking at the Composite Reliability value, Cronbach's Alpha value, and AVE value for each indicator. According to Hair et al., (2019) an indicator can be said to be valid if it meets the criteria used, namely the Composite Reliability value> 0.70, the Cronbach's Alpha value> 0.70 and the AVE value ≥ 0.50.

Table 3. Reliability and Validity Model

Variabel	Cronbach's Alpha	rho_A	AVE
Consumer intention to buy an electric vehicle	0,845	0,847	0,764
Emotional value	0,894	0,896	0,825
Environmental value	0,908	0,914	0,845
Functional value	0,899	0,906	0,832
Price value	0,859	0,864	0,780
Social value	0,933	0,935	0,882

Source: Data processed by researchers, 2024

Based on the results of the Reliability and Validity Model value, it can be stated that all indicators are reliable and valid because they have met the criteria for use, namely the Composite Reliability value> 0.70, the Cronbach's Alpha value> 0.70 and the AVE value ≥ 0.50.

4.4. Hypothesis Testing

The results of hypothesis testing can be seen by doing calculations in smartpls through Partial Least Squares Bootstrapping which contains the following results:

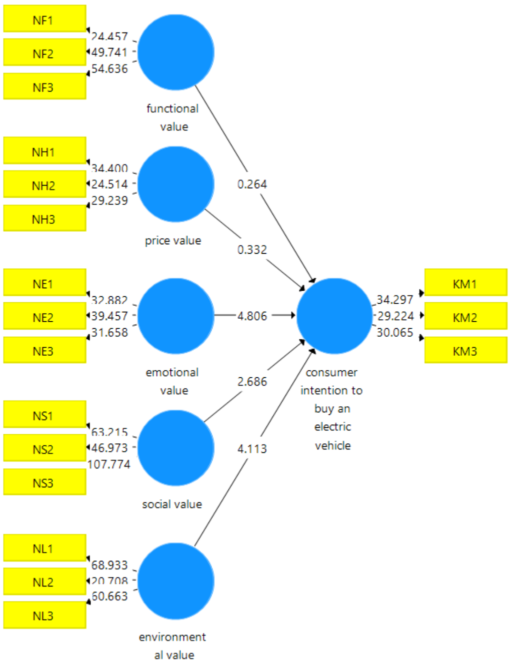

Figure 3. Partial Least Square Model Bootstrapping
Source: Data processed by researchers, 2024

The significance of the research hypothesis can be known through the results of hypothesis testing conducted using the criteria, namely the hypothesis will be supported if the p value <0.05 and the t statistical value> 1.96, then the hypothesis is accepted.

Table 4. Hypothesis Testing

Hypothesis	Description	T Statistic	P Values	Information
H1	functional value -> consumer intention to buy an electric vehicle	0,264	0,792	Not Supported
H2	price value -> consumer intention to buy an electric vehicle	0,332	0,740	Not Supported
H3	emotional value -> consumer intention to buy an electric vehicle	4,806	0,000	Supported
H4	social value -> consumer intention to buy an electric vehicle	2,686	0,008	Supported
H5	environmental value -> consumer intention to buy an electric vehicle	4,113	0,000	Supported

Source: Data processed by researchers, 2024

In testing the hypothesis that functional value positively influences consumer intention to buy an Electric vehicle, the p-value is not in accordance with the criteria, so H1 is declared unsuccessful and rejected. So, it can be said that functional value does not significantly affect consumer intention to buy an electric vehicle. In testing the hypothesis that price value positively influences consumer intention to buy an electric vehicle, the p-value is not in accordance with the criteria, so H2 is declared unsuccessful and rejected. So, it can be said that price value does not significantly affect consumer intention to buy an electric vehicle. In testing the hypothesis that emotional value positively influences consumer intention to buy an electric vehicle, the p-value is obtained in accordance with the criteria, so H3 is declared successful and accepted. So, it can be said that emotional value positively and significantly influences consumer intention to buy an electric vehicle. In testing the hypothesis that social value positively influences consumer intention to buy an electric vehicle, the p-value is obtained in accordance with the criteria, so H4 is declared successful and accepted. So, it can be said that social value positively and significantly influences consumer intention to buy an electric vehicle. In testing the hypothesis that environmental values positively influence consumer intention to buy electric vehicles, the p-value is obtained in accordance with the criteria, so H5 is declared successful and accepted. So, it can be said that social value positively and significantly influences consumer intention to buy an electric vehicle.

5. Conclusion

Electric vehicle products in Indonesia are still a new product so that there are still many people who do not understand, use and buy electric vehicles so that currently it still requires the introduction of electric vehicle products to the public in Indonesia. In this study, it was found that emotional value has the highest value that affects consumer intention to buy electric vehicles so it can be concluded that if consumers feel happy and like electric vehicle products, consumer intention to buy electric vehicles will be higher. Emotional value positively and significantly influences consumer intention to buy electric vehicles. Electric vehicle marketers must be able to make electric vehicles that consumers like. Environmental value positively and significantly influences consumer intention to buy electric vehicles so that it can be said that when consumers will buy and use electric vehicles they see the environmental value of the vehicle if the environmental value is high then the consumer's intention to buy an electric vehicle is also high and vice versa. Social value positively and significantly affects consumer intention to buy Electric vehicles so that it can be said that when consumers will buy and use Electric vehicles they see the social value it brings whether using Electric vehicles can make them recognized by others or not so that if social value is high then consumer intention to buy Electric vehicles is also high and vice versa. Price value positively at an insignificant level affects consumer intention to buy an electric vehicle so that it can be said that consumer intention to buy an electric vehicle is not influenced by price value. Functional value positively at an insignificant level affects consumer intention to buy an electric vehicle so that it can be said that consumer intention to buy an electric vehicle is not influenced by price value.

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THE IMPACT OF VOUCHERS, FREE SHIPPING, AND FLASH SALES ON PURCHASE INTEREST IN THE SHOPEE FOOD APP: A CASE STUDY OF SANATA DHARMA UNIVERSITY STUDENTS

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ABSTRACT
This study examines the impact of vouchers, free shipping, and flash sales on consumer purchase interest in Shopee Food, focusing on students at Sanata Dharma University. The research aims to analyze the effectiveness of these marketing strategies in enhancing customer satisfaction and increasing sales. The study employed a survey method, distributing questionnaires to 100 students who use Shopee Food. The results indicate that vouchers, free shipping, and flash sales significantly influence consumer purchase interest. The findings suggest that Shopee Food should maintain these promotional strategies to optimize customer satisfaction and expand its market share. The study contributes to the understanding of consumer behavior in the e-commerce industry, particularly in the context of online food delivery applications.
Keywords *: Vouchers, Free shipping, Flash sales, Customer Purchase Interst, Shopee Food.*

1. Introduction

In this day and age, digital technology has developed rapidly, evident from the emergence of e-commerce. According to (Haryanti & Irianto, 2011) , e-commerce is a method for consumers to obtain desired goods through online purchases. This definition encompasses the direct sale of goods over the internet, including both business-to-consumer (B2C) and business-to-business (B2B) transactions. A popular and rapidly growing type of e-commerce in Indonesia is the consumer-to-consumer (C2C) marketplace, as noted by (Fitrothul Khusna , 2023). A marketplace is a digital platform that provides space for sellers to offer their products or services to consumers online. Marketplace is a digital platform that provides space for sellers to offer their products or services to consumers online. A marketplace, by definition, is a platform for buying and selling where goods or services are sold to buyers. Generally, Marketplaces come in the form of electronic or online marketplaces(Putra Dewa & Setyohadi, 2017).

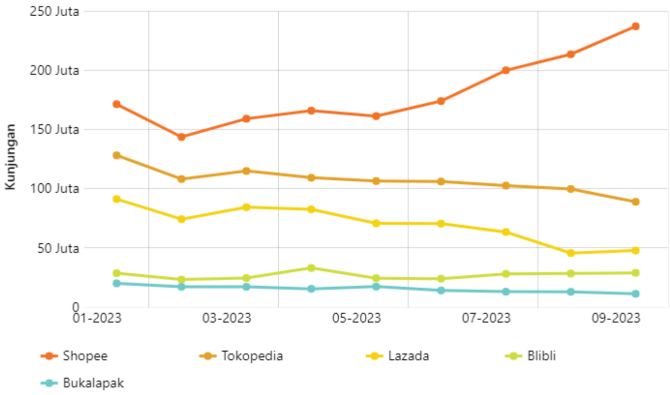


Figure 1. Number of Visits to 5 Largest E-Commerce Sites in Indonesia (January-September) (adi ahdiat, 2023)

In the data above shows that Shopee occupies the first position as the marketplace with the most visitors in Indonesia. The increase in the number of Shopee visits every year reflects the high enthusiasm of the public in online shopping. As visits increased, shopee expanded its business into the food sector through a service called "Shopee Food". Shopee Food services are made to make it easier for customers to fulfill their needs to order food and drink, and customers do not need to come directly to the desired place to eat. Thus, Shopee Food has succeeded in becoming a popular Shopee feature and is used by various groups of people from parents, students, and especially students because Shopee Food is considered a fast and right choice (Ichsanuddin Akmal & Setianingrum, 2024).

In addition to fast shopee food also For Shopee Food, they offer discount vouchers, free shipping, and flash sales. According to (Rumambi , 2022), discount vouchers are promotions given as appreciation for certain actions, such as paying bills faster or shopping in bulk. (Ekonomi et al., 2015) state that the offer of free shipping is another promotional strategy that reduces shipping costs for consumers. In addition, Shopee Food uses flash sales as promotions with price reductions or special offers in a short time to attract purchases (Beli et al., 2022). The offer provided by Shopee food is certainly very attractive to consumers, especially for students. From a previous study entitled "THE EFFECT OF PRICE, FLASH SALE, AND FREE SHIPPING ON REPURCHASE INTEREST IN SHOPEE Study on Sanata Dharma University Students" (Bella Monica, 2023) written by showing the results that flash sale and free shipping have a positive influence on the repurchase interest of Shopee user students, while price does not have a significant influence. But in this study This study only focused on three variables: price, flash sale, and free shipping. This limitation may reduce the ability of research to determine the influence of other factors that may have an effect on repurchase interest. So the author took the initiative to conduct this research which aims to determine the influence of various promotions on buying interest in the Shopee Food application among Sanata Dharma University students. First, examine whether vouchers have a significant influence on the buying interest of students of Sanata Dharma University. Second, examining the impact of free shipping on shopeefood buying interest in Sanata Dharma University students. Third, this study explored the effect of flash sales on buying interest among students of sanata dhrama university. The results of this research are expected to provide several benefits, both theoretical and practical. Theoretically, this research can add insight and knowledge about the influence of technology and factors that affect the efficiency and effectiveness of internal audits. Practically, the benefits of this research can be felt by several parties. For the author, this research can increase knowledge about consumer behavior in the e-commerce industry. For readers, this study provides insight into effective promotional strategies in online food delivery applications, especially Shopee Food. For Shopee, the results of this research are expected to help optimize promotional strategies to increase buying interest and sales of Shopee Food, as well as provide a deeper understanding of consumers to increase their satisfaction. Based on the various problems previously described, researchers took the initiative to carry out research entitled "THE EFFECT OF VOUCHERS, FREE SHIPPING, AND FLASH SALES ON BUYING INTEREST IN THE SHOPEE FOOD APPLICATION (STUDY ON SANATA DHARMA UNIVERSITY STUDENTS)"

2. Literature Review

2.1 Voucher

Voucher or discount is a reduction in the price of the product from the normal price in a certain period, which includes the amount of the discount, the discount period, and the type of product that gets the discount. Vouchers can be interpreted as an intensive form used for price reduction that lies in a product to buy a particular product. The purpose of vouchers is for consumers to come back and make a transaction and consumers feel that prices will be cheaper, so that it will increase consumer desire to buy products. Giving vouchers regularly will also form customers who have good loyalty as well The Shopee application has a promotional strategy to attract the attention of its customers, namely with various (Anisa Jayanti et al., 2020) vouchers, including free shipping vouchers, cashback vouchers, and Shopee Food vouchers. Each voucher has a category to get it, and we can also choose to determine what voucher we will use.

2.2 Free Shipping

Free shipping is a direct way to influence customers to buy more products and also provide special intensive. Shipping cost vouchers are part of sales promotion, which is an activity to stimulate purchases in the form of special selling efforts such as display exhibitions, exhibitions, demonstrations / demonstrations and other sales activities that can be carried out at any time. (Unisma et al., 2021) Shipping vouchers can help to make it easier for consumers who object to the total price charged through discounted shipping costs when purchasing products. Shipping vouchers are also another form of sales promotion that uses various offers to stimulate the purchase of products as soon as possible and increase the quantity of products purchased by consumers. Free shipping services can attract the attention of new consumers, arouse the desire of buyers, and have special provisions that are clear and can change at any time.

2.3 *Flash Sale*

(Loisa & Matius, 2021)Defines a flash sale as the sale of a product with a large discount limited by time by the owner of the company. Flash sale is a quick sale at a special price and in a short time, the goal is to increase sales on the product and also attract the attention of consumers. With the flash sale , it can make consumers interested in buying products, and has its own power in the process of bargaining for a product and creating price fairness. Flash sales will certainly cut prices to a minimum, even flash sales are also called "warehouse washes", limited quantities are often higher or exceed significant discounts than usual promotions. This strategy can increase sales so that it can sell more (Ah et al., 2019)Flash sales include the amount of discounts, frequency of promotions and suitability of promotional targets as critical success factors in achieving sales targets.

2.4 Buying Interest

Repurchase interest is the tendency of a consumer who arises after using or feeling a good or service. Buying interest itself is the purpose of carrying out marketing activities and can be defined as expectations in the ownership of a product that will arise if the buyer is affected by the quality of goods / services. Repurchase interest is the desire to buy back a product or service that has been purchased. Factors that influence repurchase interest include cultural, psychological, personal, and social factors. Measurement of buying interest can be done through surveys, questionnaires, behavioral observations, and analysis of purchase data.(Management and Dinamika Business & Nurkhasanah , 2022)

2.5 Hypothesis Development

Concept framework according to (Abdurrahman Hamam, 2024) is a description and visualization of the relationship or relationship between concepts or variables that will be observed or measured through the research to be carried out. The concept framework in research can be seen as follows:

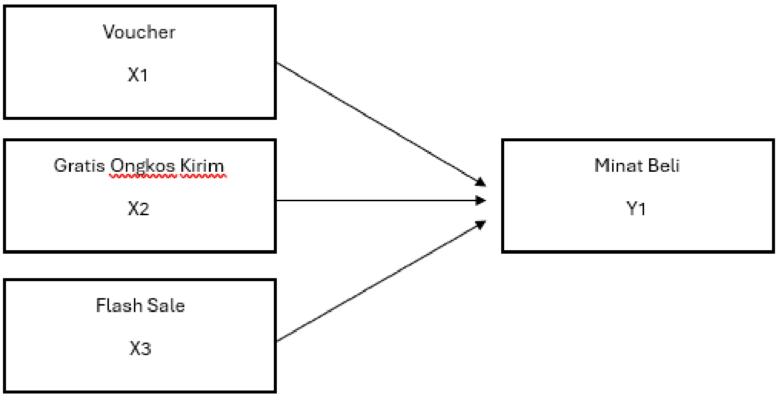


Figure 2. Research Model.

(Devotion et al., 2021) Hypothesis is a question that becomes the basis for someone to conduct research. When conducting research, it is important for researchers to have the right hypothesis, so that they can choose the appropriate technique to test the hypothesis.

H1: There is a positive and significant influence between *vouchers* on buying interest in the Shopee Food application.

The utilization of vouchers has been found to significantly enhance consumer interest in utilizing the Shopee Food service. Vouchers offer enticing discounts, thereby augmenting consumers' perception of value and fostering loyalty (Febrians & Cahya, 2022). With the receipt of vouchers, consumers tend to perceive a higher purchasing value, thus amplifying their purchasing interest. This observation is supported by the notion that vouchers can increase consumer buying interest in the services provided by the Shopee Food application. The availability of vouchers on Shopee Food is highly appealing to consumers as it not only offers discounted prices but also fosters loyalty by providing consumers with a sense of added value in their purchases. Furthermore, the ability for consumers to select and redeem vouchers of their choice further enhances their interest in utilizing the service. Sales promotions, such as vouchers, play a significant role in influencing consumer decisions regarding repeat purchases. Hence, understanding the impact of vouchers on consumer buying interest sheds light on the factors influencing the use of the Shopee Food application

H2: There is a positive and significant influence between free shipping on buying interest in the Shopee Food application.

Free shipping plays a pivotal role in influencing consumer purchase decisions, particularly in the realm of online food delivery services such as Shopee Food. This is because offering free shipping not only adds value but also reduces the overall cost for consumers, thereby increasing their inclination to buy from distant sellers (Fiona, 2020). It can significantly impact consumer interest in purchasing products through the Shopee Food application, especially for those seeking items from remote sellers. By eliminating shipping costs, free shipping enhances the perceived value of products or services, making them more appealing to consumers. Additionally, research has shown that consumer satisfaction can mediate the impact of price and promotion on repurchase interest, indicating that satisfied consumers are more likely to make repeat purchases

H3: There is a positive and significant influence between *flash sales* on buying interest in the Shopee Food application.

Flash sales, also known as time-limited promotions, create a sense of urgency among consumers, prompting immediate purchases. These sales provide significant discounts and special offers for a limited period, making them a powerful tool to boost consumer interest (Business et al., 2021). Flash sales can significantly impact consumer perceptions of value and encourage quick purchasing decisions, as seen in Shopee Food's targeted flash sales at various restaurants during specific hours.

3. Research Method

3.1 Types of Research

This study employs a quantitative approach to investigate the impact of vouchers, free shipping, and flash sales on buying interest in the Shopee Food application. Quantitative research methods are chosen for their ability to examine relationships within a specific group, with data collected through research tools and analyzed using quantitative/statistical approaches to test hypotheses.(Subagio et al., 2013;Tan et al., 2019)

3.2 Unit Analysis

The unit analyzed in this study was students from Sanata Dharma University who used the Shopee application and had made food purchases through Shopee Food at least twice in the span of one month.

3.3 Time and Location of Research

a. Time

The time used to distribute the questionnaire is in April 2024.

b. Research Location

The location used to conduct research is Sanata Dharma University, Yogyakarta Online through Google Forms.

3.4 Population and Sample

a. Populasi

The population is a general area that includes objects or subjects that have certain characteristics and attributes that the researcher has established to study, and from which conclusions can be drawn . The population in this study is Sanata Dharma University students who use Shopee Food services through the Shopee application (Rahayu, 2018).

b. Sample

According to the sample is a portion of the total number and characteristics possessed by the population. in the sample in this study were 100 students of Sanata Dharma University who used the Shopee Application (Yolanda, 2023).

3.5 Sampling Techniques

In this study, Purposive sampling was used, a nonprobability method where researchers select samples based on specific considerations (Retnawati, 2017)(Sri Maharani1, 2018)

3.6 Research Variables

According to Research Variables are characteristics, values, or properties of objects, individuals, or activities that have different variations, which have been determined by researchers to be studied and conclusions drawn (Ridha, 2017). Various variables:

3.6.1 Independent Variables

Independent variables are variables that explain or affect other variables. Independent variables are also known as variables that are assumed to be causation. The independent variables in this study were vouchers, free shipping, and flash sales (Lie Liana, 2009).

a. Voucher

Shopping coupons in the form of vouchers are discounts offered by Shopee Food to buyers in an effort to attract buying interest. According to (When it'sawatid et al., 2024)the vouchers offered by each application, there can be various types, such as providing discounts or free shipping. In some e-commerce applications, usually this voucher can be obtained if it meets the existing terms and conditions. The existence of this provision makes people / consumers will choose e-commerce applications that are considered more profitable and cheaper. Global Web Index conducted a survey and obtained results that made people order food online were free shipping by 51%, discounts (discounts) by 43%, fast delivery by 48%, and product completeness by 36% and ease of ordering process by 30%. Then this variable can be measured by collecting data on the level of consumer participation in enthusiasm in using vouchers offered by Shopeefood, such as: consumers using vouchers, price comparisons, levels of consumer satisfaction, dependence on vouchers, access to using vouchers.

b. Free shipping

The Shopeefood free shipping program offered has various forms and of course has terms and conditions for using the free shipping voucher. The offer of free shipping can increase the number of consumer orders. By waiving shipping costs charged to consumers, it can be concluded that the free shipping promo strategy is very effective because consumers only pay the price of the goods they buy. Free shipping promo is to boost purchase numbers. In addition to boosting the number of purchases, free shipping promos can also reduce the costs charged to consumers in making purchases. To measure how interested consumers are in buying products on Shope food by utilizing the free shipping that has been offered, it can be done by analyzing indicators, such as: utilizing free shipping features, order quantity or value, the impact of free shipping, loyal users (Widjanarko & Saputra, 2023).

c. Flash sale

Flash sale is a method used in the online industry to sell products exclusively at a price that is much cheaper than the normal price, and generally only lasts for a very short period of time (Darwipat & Sham, 2020). In implementing this strategy, several indicators that need to be considered include the frequency of promotion, quality of promotion, time of implementation of promotion, and accuracy or suitability of promotional targets. By considering these factors, Shopee Food can design and execute flash sales more effectively to attract consumers and increase product sales significantly (Devica, 2020).

3.6.2 Dependent Variables

These variables are known as output, criterion, or consequence variables. In Indonesian, this variable is referred to as a dependent variable. A dependent variable is a variable that is affected or becomes the result of the presence of an independent variable. The dependent variable in this study is buying interest (Jackson R.S. Weenas, 2013).

a. Buying interest

Buying interest arises from the process of learning and thinking that shapes an individual's perception, which then generates constant motivation and becomes a strong desire in their mind (Aptaguna & Gambling, 2016). Ultimately, when the individual needs to meet their needs, they will manifest what they already have in mind Some important indicators of buying interest include: Interest in finding information about the product, Consideration for making a purchase, Desire to try the product, Desire to find out more about the product, and Desire to own the product (Irawati et al., 2022).

3.7 Measurement scale

A measurement scale is a reference used to define the range of long or short intervals in units of measuring instruments. With the application of this measurement scale, the measuring tool used will produce data in quantitative form The respondents in the study were asked to complete their answers on a questionnaire using a choice list format consisting of five options, where each option has a different assessment. Respondents used a five-point Likert scale in the questionnaire, ranging from "strongly agree" (5) to "strongly disagree" (1)..(Miftahul Janna, 2020).

3.8 Data Sources

In this study, the data source used was primary data obtained through the distribution of questionnaires. According to (Trixie Jane & Maria Tri Anggraini, 2022), Primary data refers to information obtained directly from the object of research or from the original source. The data referenced in this study are responses or answers obtained from questionnaires. The data collection technique in this study used questionnaires with the help of Google Forms. According to (Gunawan, 2022), The questionnaire technique is a data collection method in which respondents are given a series of written statements to answer. This questionnaire was distributed online to a predetermined sample, namely all Sanata Dharma University students who have a Shopee account and have made online food purchases through Shopee Food services at least once or twice a month.

3.9 Classical Assumption Test

3.9.1 Normality Test

This test aims to find out whether the residual value is normally distributed or not, because a good regression model is one that has a normally distributed residual value. One way to detect it is to look at the spread of data on diagonal sources on the Normal P-P Plot of regression standardized graph as a basis for decision making. Thus, observation of the pattern of data distribution on the graph is key in evaluating the quality of the regression model. If it spreads around the line and follows the diagonal line, then the regression model is normal and feasible to use to predict independent variables and vice versa. Another method of testing normality is by test method (Mardiatmoko , 2020b)*One Sample* Kolmogorov Smirnov. It has two test criteria, namely:

1. If the Significance value (Asym Sig 2 tailed) is greater than 0.05, then it can be concluded that the data has a normal distribution.
2. If the Significance value (Asym Sig 2 tailed) is less than 0.05, then it can be concluded that the data has no normal distribution.

3.9.2 Multicollinearity Test

Multicollinearity refers to the condition that there is a strong linear relationship between two or more independent variables in a regression model. This occurs when independent variables are significantly correlated with each other and can cause problems when interpreting the results of regression analysis. A regression model is said to be multicolinear if there are perfect or near-perfect linear functions for some or all of the independent variables in the model. In this context, it is important to note and identify the degree of multicollinearity that may occur in the regression model to guarantee the validity of the interpretation of the analysis results. Symptoms of multicollinearity include looking at the value of Variance Inflation Factor (VIF) and Tolerance.If the value of VIF< 10 and Tolerance> 0.1 then it is stated that multicollinearity does not occur (Mardiatmoko, 2020a)

3.9.3 Heteroscedasticity Test

Heteroscedasticity is a condition in which the residual variance of each observation in a regression model is not equal. This indicates inconsistent residual variation and can affect the validity and interpretation of regression analysis results. One way to test for heteroscedasticity is to use the Glejser test. The test procedure is carried out by regressing the independent variables against the absolute residual value. In this way, you can see if there is a certain pattern between the variation of the independent variable and the residue, which allows you to better assess the presence of heteroscedasticity in the regression model. Residual is the difference between the value of variable Y and the predicted value of variable Y, and absolute is its absolute value (all positive values). If the significance value between the independent variable and the absolute residual > 0.05 then hetero scedasticity does not occur (Mardiatmoko , 2020b).

3.10 Data Analysis Techniques

3.10.1 Descriptive Analysis of Respondents

Descriptive analysis is used in describing and describing the characteristics of respondents and variables in the study. In this study, researchers used descriptive analysis of independent and dependent variables and divided them into total respondent scores and aimed to determine the influence of service quality, price, and promotion on the purchasing decisions of Shopee Food consumers. Therefore, the profile of respondents surveyed is Shopee Food consumers who have purchased food products online at least once in the past month.

3.10.2 Descriptive Analysis of Variables

This study uses descriptive analysis of variables to provide a comprehensive picture of the average value of the observed variables. The descriptive analysis stage of variables involves several important steps, namely:

a. Calculates the average of each existing data sample.
b. Specifies the minimum measurement of the variable, in this context, its value is set to a value of 1.
c. Determines the maximum score for measuring a variable, in this case, its value is defined as 5.
d. Specifies a category range by using class intervals, which are calculated by using the appropriate formula.

$$C = \frac{----}{K}$$

Information:

C : Interval.
Range : The difference between maximum and minimum scores.
K : The number of classes.

3.11 Uji Hipotesis

Multiple linear regression analysis is a study of the relationship between one variable, with one or more variables. If there is only one independent variable, then the regression test/analysis is known as simple linear regression. If there is more than one independent variable, then the regression test/analysis is known as multiple linear regression. It is said to be multiple linear because there are two or more independent variables that affect non-free variables. The multiple regression equation is as follows:

Y = A + + + + e$b_1X_1b_2X_2b_3X_3$
Y : Purchase Decision
X_1 : Quality of Service
X_2 :Price
X_3 :Promotion
a : Constant Value
b_1,, : Regression coefficientb_2b_3
e : *Error*

3.12 Test F

Test F aims to determine whether the independent variables (X1 and X2) significantly together affect the non-free variable Y.

a) Test Criteria :
H0 rejected *Hα* is accepted if F *counts* ≥ F *table*
H0 is accepted and *Hα* is rejected if F *counts* < F *table*
b) Significant Level :
Using α =5% (significant 5% or 0.05).
Perform an F *count calculation* by using SPSS or the F calculate formula *:*

$$F_{hitung} = \frac{R^2 K}{(1-R^2)(n-k-1)}$$

Information:
R2 : Coefficient of Determination
n : Number of Data or Cases
k : Number of Independent Variables

3.13 T Test

Partial regression coefficient testing aims to test whether the independent variables (X1 and X2) in the regression model have a significant effect on the dependent variable (Y) separately. The steps to perform this t-test are similar to those performed in simple linear regression.

a) Test Criteria
H0 rejected *Hα* is accepted if *tcount* ≥ *ttable.*
H0 is accepted and *Hα* is rejected if *tcount* < *ttable*
b) Significant Level
Using *α* = 5% (significant 5% or 0.05).
c) Perform tcalculate calculations using SPSS or *tcalculate formula:*

3.14 Coefficient of Determination ()R^2

To measure how closely related the independent variable is and the dependent variable, correlation analysis is performed. It aims to assess the strength and direction of the relationship between the independent variable and the dependent variable from the beginning, whether the relationship is strong or weak, and whether the relationship is unidirectional or not. The R value ranges from -1 to 1 (-1 ≤ R ≤ 1). If R = -1 or close to -1, it means that the relationship between the independent variable (X) as a whole and the dependent variable (Y) is perfectly negative or in the opposite direction. If R = 0 or close to 0, it means that there is no relationship between the independent variable (X) together with the bound variable (Y). If R = 1 or close to 1, it shows the relationship between the independent variable (X) and the bound variable (Y) perfectly and in the positive direction. The weakness of the coefficient of determination lies in the potential bias towards the number of independent variables fed into the model. Each time an independent variable is added, the value of R tends to increase even though that variable has no significant effect on the dependent variable. Therefore, an adjusted R model is used to overcome this. The adjusted R^2 model can go up or down when new independent variables are added to the model.

4. Discussion

4.1 Description of Data Collection

The data used in this study came from questionnaires compiled by researchers specifically for ShopeeFood consumers. Researchers collected data through the Google Forms platform and distributed questionnaires starting from April 29, 2024 to May 9, 2024 through various social media and private messages. The number of targeted respondents is as many as 100 people. After the data was collected, researchers compiled the data using MS Excel 2019 software, then analyzed it using SPSS. A total of 19 statements have been compiled by researchers to be given to Sanata Dharma University Students who use ShopeeFood. After tabulating the data, there were 103 filling respondents. Respondents filled out a questionnaire by selecting one of the options provided in each statement prepared by the researcher. In the questionnaire, there are five response options, namely: Strongly Agree (SS), Agree (S), Disagree (TS), and Strongly Disagree (STS).

4.2 Descriptive Analysis of Variables

Data analysis was conducted to determine the average score of respondents' answers in each variable Vouche, Free shipping, Flash sale, and buying interest. There are 19 questions consisting of 5 variable voucher questions, 5 free shipping variable questions, 4 variable Flash sale questions, and 5 variable buying interest questions. The average testing method was carried out with MS. Excel 2019 and SPSS and the answer results were divided into 4 categories that had been calculated into score interval groups, namely:

Table V.1
Research Variable Data Scale

Skala	Class	Voucher	Free shipping	Flash sale	Buying interest
1	0,00-1,74	Very Not Good	Very Not Good	Very Low	Very Low
2	1,75-2,49	Bad	Bad	Low	Low
3	2,50-3,24	Good	Good	High	High
4	3,25-4,00	Excellent	Excellent	Very High	Very High

***)** *Voucher Capability, Free Shipping, Flash sale, Buying interest*

Table V.2
Table of Results of Descriptive Analysis of Voucher Variables

Item	Pernyataan	Mean	Keterangan
1	I often use vouchers at Shopee Food.	3.03	Good
2	I often compare prices after and before using vouchers on Shopee Food.	3.08	Good
3	I am satisfied with the voucher at Shopee Food.	3.17	Good
4	I feel helped by the voucher on Shopee Food in buying products.	3.09	Good
5	I tend to continue using vouchers on Shopee Food.	3.07	Good
	Total	3.09	Good

Source: Primary Data processed in 2024

Table V.2 shows that the average total voucher variable is 3.09. This shows that respondents have a good response to vouchers at ShopeeFood.

Table V.3
Table of Descriptive Analysis Results of Free Shipping Variables

Item	Pernyataan	Mean	Keterangan
1	I often take advantage of the free shipping feature on Shopee Food.	3.07	Good
2	I feel that the free shipping feature increases the number and value of messages in buying products on Shopee Food.	2.79	Good
3	I feel that the free shipping feature has an impact on purchasing decisions.	2.99	Good
4	I feel that the free shipping feature encourages me to buy products more often and in greater quantities.	2.75	Good
5	I buy products more often because of the free shipping feature.	2.69	Good
	Total	2.86	Good

Source: Primary Data processed in 2024

Table V.3 shows that the average total in the Free shipping variable is 2.86. This shows that respondents have a good response to Free shipping on ShopeeFood.

Table V.4
Table of Results of Descriptive Analysis of Flash Sale Variables

Item	Pernyataan	Mean	Keterangan
1	I feel enthusiastic to buy food at Shopee food during the flash sale because of the discount given.	2.54	High
2	I feel that the quality of the food sold during the flash sale is of good quality.	2.55	High
3	I feel that the flash sale on shopee food took place at the right time.	2.52	High
4	I feel that flash sales can encourage you to buy a food product at Shopee food.	2.58	High
	Total	2.55	High

Source: Primary Data processed in 2024

Table V.4 shows that the average total voucher variable is 2.55. This shows that respondents have a high response to Flash sales on shopeefood.

Table V.5
Table of Results of Descriptive Analysis of Buying Interest Variables

Item	Pernyataan	Mean	Keterangan
1	I feel interested in finding information about food products before I decide to buy them.	2.79	High
2	I consider the purchase seriously before making a transaction.	2.94	High
3	I have a strong desire to try the product before buying it.	2.72	High
4	I felt very eager to know more about the product before I decided to buy it.	2.65	High
5	I feel so anxious to buy food that I have seen or heard about.	2.45	High
Total		2.71	High

Source: Primary Data processed in 2024

Table V.5 shows that the average total voucher variable is 2.55. This shows that respondents have a high response to Flash sales on shopeefood.

4.3 Analysis and Discussion

4.3.1 Validity Test

In the validity test, it is known that n = 103 and sig = 0.05 then rtable 0.1937. Each statement is said to be valid if the rcount > 0.1937. The following are the results of the researcher validity test

Table V.6
Validity Test Results Table

Variable	Butir	r_{count}	r_{table}	Information	Sig (2 tailed)	Sig	Information
Voucher	X1.1	0.678	>0.1937	Valid	.000	0,05	Valid
	X1.2	0.724	0.1937	Valid	.000	0,05	Valid
	X1.3	0.699	0.1937	Valid	.000	0,05	Valid
	X1.4	0.766	0.1937	Valid	.000	0,05	Valid
	X1.5	0.729	0.1937	Valid	.000	0,05	Valid
Free shipping	X2.1	0.702	0.1937	Valid	.000	0,05	Valid
	X2.2	0.670	0.1937	Valid	.000	0,05	Valid
	X2.3	0.751	0.1937	Valid	.000	0,05	Valid
	X2.4	0.736	0.1937	Valid	.000	0,05	Valid
	X2.5	0.662	0.1937	Valid	.000	0,05	Valid
Flash sale	X3.1	0.638	0.1937	Valid	.000	0,05	Valid
	X3.2	0.749	0.1937	Valid	.000	0,05	Valid
	X3.3	0.757	0.1937	Valid	.000	0,05	Valid
	X3.4	0.761	0.1937	Valid	.000	0,05	Valid
Buying interest	Y.1	0.713	0.1937	Valid	.000	0,05	Valid
	Y.2	0.682	0.1937	Valid	.000	0,05	Valid
	Y.3	0.718	0.1937	Valid	.000	0,05	Valid
	Y.4	0.723	0.1937	Valid	.000	0,05	Valid
	Y.5	0.662	0.1937	Valid	.000	0,05	Valid

Source : primary data results processed, 2024

Based on table V.6, it can be concluded that all variable questions Voucher, Free shipping, Flash sale, and Buying interest are declared valid because the calculation is > table and can be used as a data collection tool in the research conducted.

4.3.2 Reliability Test

The basis for decision making in the reliability test is said to be reliable, if the value of Cronbach's Alpha > 0.60, then the data can be declared reliable or consistent. Vice versa, if Cronbach's Alpha score < 0.60 then the questionnaire is declared unreliable or inconsistent.

Table V.7
Reliability Test Results Table

Variable	Cronbach's Alpha	r-Table	Information
Voucher	0.767	0,1937	Reliable
Free shipping	0.746	0,1937	Reliable
Flash sale	0.702	0,1937	Reliable
Buying interest	0.739	0,1937	Reliable

Source: Primary Data processed 2024

Based on table V.7, it can be seen that Cronbach's alpha value in the voucher variable with 5 questions is 0.767, in the Free Shipping 5 questions variable is 0.746, in the Flash sale variable with 4 questions is 0.702, and the buying interest variable with 5 questions is 0.709.

4.3.3 Classical Assumption Test

Tabel V.8
Normality Test Results Table

		Unstandardized Residual
N		103
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.80614428
Most Extreme Differences	Absolute	.073
	Positive	.063
	Negative	-.073
Test Statistic		.073
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on the table above, it can be concluded that the significance value is 0.200 (>0.05) so that the data above is normally distributed.

Tabel V.9
Multicollinearity Test Table

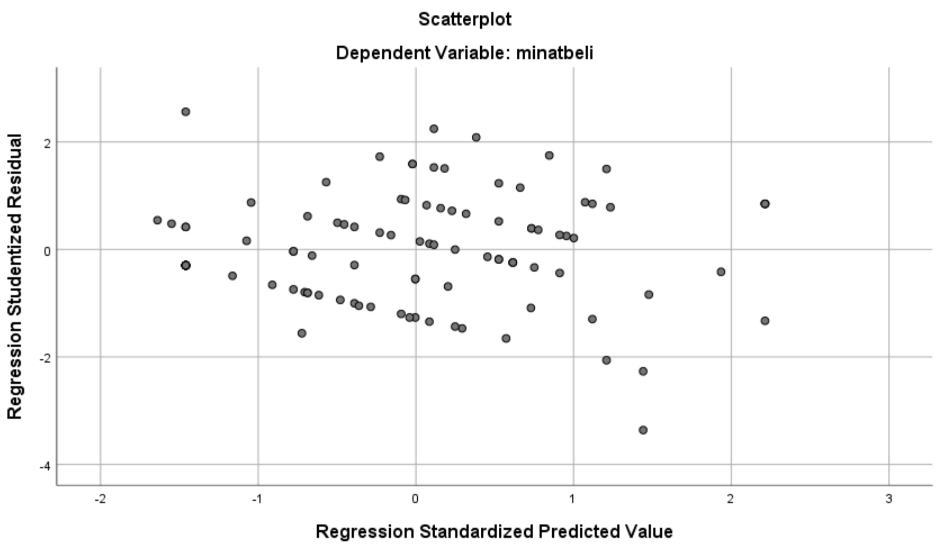
Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	4.002	1.504		2.660	.009		
	voucher	.359	.105	.385	3.427	.001	.557	1.796
	gratisongkir	-.083	.120	-.086	-.694	.490	.453	2.207
	flashsale	.509	.124	.396	4.117	.000	.759	1.318

a. Dependent Variable: Buyinginterest

Based on the results of the multicollinearity test, it can be seen that the VIF value in the Voucher variable gets an output of VIF 1.796, Free shipping gets an output of VIF 2.207, and the flash sale variable gets an output of 1.318, all three are greater than 0.10, so the data above does not occur multicollenierity. Then the tolerance value on the voucher variable gets an output of 0.557, Free shipping gets an output of 0.453, and the variable flash sale gets an output of 0.759 all three are worth less than < 10, so the data in this study Multicollenierity does not occur.

4.3.4 Heterokedasticity Test

Table V.10
Heteroscedasticity Test Table



From the data image above, it can be seen from the Scatter plot displayed, it can be seen that the data points do not show a clear pattern and are scattered randomly on both sides of the number 0 on the Y axis. Therefore, it can be concluded that there is no tendency to heteroscedasticity in this research data.

4.4 Multiple Linear Regression Analysis

4.4.1 Determination Coefficient Test

Table V.11
Coefficient of Determination Test

Variable[b]

Butir	rcalculate	Tableable	Information	Sig (2 tailed)
Sig	Information	Voucher	X1.1	0.678

>0.1937

Valid

Based on the results of the table above, the R squere value of 0.305 or equal to 30.5 percent means that the variables Voucher (X1), Free shipping (X2), and Flash sale (X3) simultaneously affect the variable buying interest (Y1) by 30.5 percent, while the rest (100% - 30.5% = 69.5%) is influenced by other variables that are not studied.

4.4.2 Test F

Table V.12
Test F

Valid		Sum of Squares	X1.2	0.724	0.1937	Valid
.000	0,05	Valid	3	X1.3	0.699	0.1937
	.000	0,05	Valid	8.113		
	Valid	.000	0,05			

0.729

0.1937

The Significant value of the table above is 0.00 which means below 0.05 so it is concluded that all independent variables studied have a simultaneous effect (together) on the dependent variable. F value count 14.477 > F table 2.70, then the independent variables studied affect simultaneously (together) the dependent variable.

4.4.3 T Test

Table V.13
Test T

		Valid		Free shipping		
0,05		Valid	.000	0,05	X2.1	0.702
X2.2	0.670	0.1937	Valid		0,05	Valid
	X2.3	0.751	0.1937	Valid	.000	0,05
	gratisongkir	X2.4	0.736	0.1937	Valid	.000
	Valid	.509	X2.5	0.662	0.1937	Valid

.000

The influence of Voucher (X1) on Purchase Intention (Y) indicates that the calculated t-value of 3.427 exceeds the tabulated t-value of 0.67698, and the significance value of 0.001 is less than 0.05, indicating that X1 significantly affects Y. The influence of Free Shipping (X2) on Purchase Intention (Y) shows that the calculated t-value of 0.694 is lower than the tabulated t-value of 0.67698, and the significance value of 0.490 is greater than 0.05, suggesting that X2 does not significantly affect Y. Meanwhile, the impact of Flash Sale (X3) on Purchase Intention (Y) reveals that the calculated t-value of 4.117 exceeds the tabulated t-value of 0.67698, and the significance value of 0.000 is less than 0.05, indicating that X3 significantly influences Y.

Regression Equation

$$Y = a + b1X1 + b2X2 + b3X3$$
$$= 4.002 + 0.359X1 + 0.083X2 + 0.509X3$$

5. Conclusion

In this study, researchers aimed to find out whether Vouchers (X1), Free shipping (X2), and Flash sales (X3) affect buying interest (Y). The results obtained from this study are as follows:

a. Vouchers partially affect buying interest in the shopee food application for Sanata Dharma University students.
b. Free partial shipping does not affect buying interest in the shopee food application for Sanata Dharma University students
c. Flash sale partially influenced the buying interest in the shopee food application for Sanata Dharma University students

During this study, researchers realized that there were still many shortcomings and difficulties in distributing questionnaires carried out by researchers, therefore researchers conducted research in various ways ranging from distributing questionnaires through social media and personal messages.

To enhance the effectiveness of Shopee Food's marketing strategy, this study recommends that Shopee maintain the flash sale service that has received a positive response from consumers. Additionally, Shopee should maintain this service based on the positive perception. To improve the quality and specificity of the results, future research should continue this study by incorporating additional independent variables (X) into the analysis. This will enhance the quality and specificity of the results, potentially achieving an R2 value closer to 1, which will benefit stakeholders. Furthermore, researchers are encouraged to explore new variables, such as service quality and user-friendliness, to provide a more comprehensive understanding of factors affecting service. By doing so, Shopee can improve customer satisfaction and expand its market share through more effective marketing strategies.

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THE INFLUENCE OF PROMOTION, PRICE AND PRODUCT QUALITY ON PURCHASING DECISIONS FOR SKINCARE SKINTIFIC IN E-COMMERCE SHOPEE

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ABSTRACT

Skintific products have gained high popularity among young consumers, especially through online sales on e-commerce platforms like Shopee. This research aims to determine the influence of promotion, product price, and product quality on consumer purchasing decisions on the Shopee e-commerce platform. The study uses a quantitative approach, with a descriptive associative design, to examine the relationship between the independent variables (promotion, price, and product quality) and the dependent variable (purchasing decisions). The research population consists of all Skintific consumers, and the sample size is 91. The study hypothesizes that promotional activities, product pricing, and product quality have a significant influence on purchasing decisions. The study also examines the specific effects of each variable on purchasing decisions, including the impact of promotional activities on increasing consumer interest and desire to purchase a product, the influence of product pricing on consumer purchasing decisions, and the effect of product quality on consumer purchasing decisions. The study's methodology includes a survey of consumers who have purchased skincare products on Shopee, with a focus on the relationship between the independent variables and the dependent variable This research is expected to provide insights into the factors that influence consumer purchasing decisions on the Shopee e-commerce platform.
***Keywords**: Promotion; price; product quality; purchase decision*

1. Introduction

The rapid development of online business now makes competition between businesses vying for business opportunities. One of the online business developments in society is the availability of e-commerce services. E-commerce has become one of the most popular online platforms in Indonesia, with the number of visitors growing rapidly. The existence of e-commerce services makes it easy for people to shop for the products they want without having to come to the store. According to Armstrong and Kotler (2004: 74) in (Yulia & Setianingsih, 2020) state that online marketing is part of e-commerce and is also a form of company performance. Where the company's performance is in the form of promotion, selling goods or services, and communicating them via the internet. Indonesia.id data in January 2024 shows that Indonesians are among the most frequent online shoppers through e-commerce.

E-commerce, which has become one of the popular or frequently visited online platforms is Shopee. Shopee is an online shopping platform that is customized in each region and provides an easy, safe, and fast online shopping experience for customers through strong payments and logistics. The company was founded by Forrest Li and first launched in Singapore. In 2015 Shopee was launched in 7 regions namely Malaysia, Indonesia, Thailand, Taiwan, Vietnam, and the Philippines (Shopee History, n.d.). Shopee always presents various products to meet the needs of its consumers such as electronics, clothing, food, household needs, skincare, cosmetics and many more.

In the digital era, e-commerce platforms such as Shopee have become one of the main means of purchasing skincare. The skincare industry in Indonesia has experienced rapid growth in recent years. This is driven by the increasing public awareness of the importance of using skincare. Where skincare is a facial treatment that is used every day by women and men because it is to maintain the health and appearance of facial skin and solutions to various problems on facial skin. Euromonitor International predicts that the value of the skincare market in Indonesia will reach Rp 32 trillion by 2023. Various local and international skincare brands are competing to attract consumers. One of the rising local skincare brands is Skintific. Skintific is a Canadian brand that is newly present in Indonesia, which was launched in 2021 and has succeeded in attracting the attention of consumers with its excellence in offering a variety of high-quality skincare products that are characterized by pure active ingredients and the concept of "smart skincare" at relatively affordable prices and specially formulated for Indonesian skin. Skintific's product claims focus on enhanced skin protection and the use of natural ingredients, which is also its main attraction. Skintific's products have gained high popularity among young consumers, especially through online sales on e-commerce sites such as shopee. Skintific, which focuses on producing skincare, conducts or sets one of its incentive marketing strategies, namely through live or live broadcasts on social media, such as on tiktok by offering various products. In this live broadcast, Skintific interacts directly with its followers, presenting informative and interesting content about products and skincare. Not only that, but this is also applied to attract more consumers from various circles. The number of positive user reviews and aggressive strategy have made Skintific a trend-setting brand. In a business context, it is important for industry players to understand the factors that influence consumer purchasing decisions, especially when implementing effective marketing strategies. With this, the influence of three important factors: promotion, price, and product quality on purchasing decisions for Skintific brand skincare products on the Shopee e-commerce platform can be determined. Promotion, price, and product quality are considered the main factors that influence consumer behavior in making purchasing decisions. There are many competitors in similar fields, companies are required to be able to develop to survive market competition, one of which is that promotions must be carried out. According to (Kotler and Armstrong, 2014) in (Sukmawati et al., 2022), promotion is an activity that communicates product advantages and persuades customers to buy that product. Promotions attract many consumers by offering incentives, attractive discounts, and various other special offers, while price affects consumers' perceptions of product value. On the other hand, product quality plays an important role in shaping consumer satisfaction and strengthening brand loyalty. Apart from promotional activities, a review of prices also has a direct impact on sales and profits for the company, so that the amount of sales volume and profits earned by the company can be known. According to experts Kotler and Armstrong (2013: 151) in (Alapján-, 2016) price is the amount of money charged for goods or services or the amount of money value that consumers exchange for the benefits of owning or using these products or services The price offered by Skintific is relatively affordable compared to similar products. Apart from promotion and price, product quality is also an important aspect and must be fought for by all companies, especially considering that the products produced are able to compete in the market. According to (Kotler and Armstrong, 2008) in (Sukmawati *et al*., 2022), product quality is the ability to perform its functions. This means that it includes durability, reliability, and other properties throughout the product. Skintific always ensures that the quality of the raw materials used in all Skintific products has high standards and quality in its class, despite the relatively affordable price.

Consumer product purchase decisions essentially depend on their behavior. Consumer behavior is the most important business element that companies need to understand. Companies do not know what is on the minds of consumers before, during, or after buying a product. This is done to achieve company goals. When new consumers buy a product for the first time, the underlying considerations are different from repeated considerations. Kotler and Armstrong (2016) in (Efendi & Aminah, 2023), explain that purchasing decisions are a component of buyer behavior in which studies related to individuals, groups, or organizations that include the selection, purchase, use, and what a commodity, idea or experience looks like which aims to meet the needs and expectations of buyers. Promotion and price can influence purchasing decisions because the more affordable the price and the more attractive the company provides discounts on a product or item, the greater the desire of consumers to buy the goods or products. The same applies to product quality, the higher the quality of a product that is sold or offered, the more interested consumers will be in buying the product. Therefore, promotion, price and product quality have a significant and simultaneous influence on purchasing decisions for Skintific skin care products on users of these products in general. Research problems does promotion have a significant effect on purchasing decisions for skintific products at Shopee? Does price have a significant effect on purchasing decisions for skintific products at Shopee? Does product quality have a significant effect on purchasing decisions for skintific products at Shopee? Can promotion, price, and product quality simultaneously influence purchasing decisions for skintific products at Shopee? And research objectives to determine the effect of promotion on purchasing decisions for skintific products at Shopee. To determine the effect of price on purchasing decisions for skintific products at Shopee. To determine the effect of product quality on purchasing decisions for skintific products at Shopee. To determine the simultaneous promotion, price, and product quality on purchasing decisions for skintific products at Shopee.

2. Literature Review

2.1 Marketing

According to (Kotler and Keller, 2016) in (Elliyana, 2022) marketing is an activity, organizing institutions, and processes for creating, communicating, delivering, and exchanging offers of value to customers, Klein, partners, and society in general. AMA (1960) in (Elliyana, 2022) marketing is the performance of business activities that direct the flow of goods and services from producers to consumers or users. According to Eldridge (1970) in (Elliyana, 2022) marketing is a combination of activities designed to generate profits through ensuring, creating, stimulating, and satisfying the needs and / or desires of selected market segments.

So based on the above definition, it can be concluded that Marketing is not only about selling products and services, but also about creating value for customers and building strong relationships with them. This is done through a planned and structured process by paying attention to the marketing mix.

2.2 Promotion

According to (Tjiptono, 2015: 387) in (Bawono et al., 2018), promotion is a marketing mix that focuses on efforts to inform, persuade, and remind consumers of their company's brands and products. Promotion is a company activity that aims to disseminate information, influence, or remind the target market so that the company and its goods accept, buy, and be loyal to the goods provided by the company concerned (Tjiptono, "2008) in (Sani *et al*., 2022). According to Kotler in (Poespa *et al.*, 2021), promotional activities are marketing efforts that provide various short intensive efforts to encourage the desire to try or buy a product or service.

The above statement can be concluded that promotion is an important tool to achieve the company's marketing goals. With the right promotional strategy, companies can attract and inform consumers to buy these products and can increase sales.

2.3 Price

(Kusumodewi, 2016) defines that price is one of the elements of the marketing mix that generates revenue, other elements generate costs. Kotler and Armstrong (2007: 430) in (Kusumadewi, 2016) define that price is the sum of all values that consumers exchange to benefit from owning or using goods or services. This price can be a consideration for consumers to buy the desired item.

Price is a monetary unit or other measure (including other commodities and services) that is exchanged for the right to ownership or use of a good or service from a marketing perspective (Sani et al., 2022). All price-related decisions have a strong impact on certain aspects of our operations, sales activities, or aspects related to our profit motive. In other words, price describes the monetary value of a good or service.

According to Kotler and Armstrong (2017: 308) in (Permata Sari, 2021), the indicators of price are:

1. Price affordability, Affordable prices are what consumers expect before they make a purchase. Consumers will look for products whose prices they can afford.
2. Price matches product quality, Usually for certain products, consumers do not mind if they have to buy at a relatively expensive price as long as the product quality is good. However, consumers prefer products with low prices and good quality.
3. Price competitiveness, the company sets the selling price of a product by considering the selling price of a product sold by its competitors so that its products can compete in the market.
4. Price matches with benefits, Consumers sometimes ignore the price of a product but are more concerned with the benefits of the product.

From the above statement, it can be concluded that it is an important element in the marketing mix and has a significant influence on the success of a company. Setting the right price helps businesses achieve their goals and compete in the market.

2.4 Product Quality

Philip Kotler (2009: 143) in (Poespa et al., 2021) considers that product quality is a characteristic of a product or service that is in accordance with its ability to meet stated or implied customer needs. According to Kotler & Keller (2012: 283) in (Poespa et al., 2021) product quality can be included in 9 dimensions, namely shape, product characteristics, performance, accuracy or suitability, durability, reliability, ease of repair, style, and design. Kotler and Armstrong (2007: 347) in (Kusumodewi, 2016) define that product quality is the ability of a product to perform its functions, these capabilities include durability, reliability, accuracy produced, ease of operation and repair, and other attributes that are valuable to the product.

Product quality is understood as the general properties and characteristics of a product, both goods and services, which determine its ability to meet consumer needs and desires. Product quality includes not only reliability and durability, but also other aspects such as performance, functionality, design, ease of use, and aesthetics.

So, from the above statement it can be concluded that quality is a multidimensional concept that focuses on the needs and desires of consumers. The quality of a product can be measured by its ability to perform its functions and characteristics in meeting consumer expectations. The existence of product quality can be a consideration for consumers to choose or buy the product they want.

2.5 Purchase Decision

Kotler and Keller (2007: 201) in (Kusumodewi, 2016) explain that "purchasing decisions are the way individuals, groups, organizations choose, buy, use, and utilize goods, services, ideas, experiences in order to satisfy desire needs". Kotler, (2011: 206) in (Bawono et al., 2018), reveals that the decision to buy taken by consumers is a collection of a few decisions.

According to Kotler and Armstrong, (2011: 149) in (Poespa et al., 2021) purchasing decisions are the stage of the process where consumers make purchases, always the producer's attention. According to Schiffman and Kanuk (2004), this is a choice between two or more possible alternative purchasing decisions, implying that several other possibilities must be available for a person to make a choice.

From the above statement, it can be concluded that consumer purchasing decisions are a complex and dynamic process involving many factors, from problem identification to information search, from evaluating alternatives to selecting the most preferred brand. So, consumer purchasing decisions are also not just product selection, but also about how consumers seek information, evaluate alternatives, and make the best decisions for themselves.

2.6 Hypothesis Development

The conceptual framework in this study will show the relationship between the three independents variables consisting of promotion (X1), price (X2), and product quality (X3), these variables will affect the dependent variable, namely purchasing decisions (Y), the conceptual framework can be described as follows:

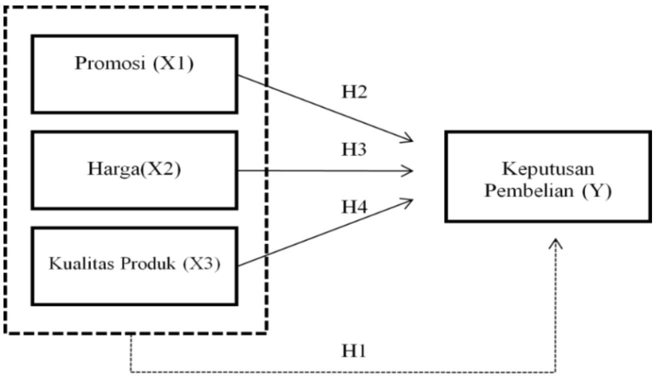


Figure I.1 Conceptual Framework

Description:

: Variable X has a significant effect on Y.

: Variable X simultaneously affects Y.

2.6.1 The Effect of Promotion, Price and Product Quality on Purchasing Decisions Promotion, price and product quality.

Promotion, price, and product quality are one of the most important factors in marketing a company. Promotion is an attempt to attract consumers by offering goods or services for sale to potential buyers, with the aim of arousing interest and desire to buy these goods or services. Sellers can expect to increase sales by doing promotions. Price is an important factor for potential buyers in deciding whether to buy or not, therefore price is one of the factors determining market share. Currently, product quality is the dream of every consumer who wants to buy a product. The effect of quality itself is very influential on the decision to purchase this product. Whether consumers buy a product depends on advertising, price, and product quality. This is called a purchase decision. One person's decision making is different from another person's decision making due to the many choices, conditions, and fundamental considerations that exist. When a new consumer buys a product for the first time, the underlying considerations are different from purchasing several times. Based on this description, we can make the following hypothesis:

H1: Promotion, price, and product quality simultaneously influence purchasing decisions for skintific products in Shopee e-commerce.

2.6.2 The Effect of Promotion on Purchasing Decisions

According to (Tjiptono, 2015: 387) in (Bawono et al., 2018), promotion is a marketing mix that focuses on efforts to inform, persuade, and remind consumers of their company's brands and products. Promotion is a company activity that aims to disseminate information, influence, or remind the target market so that the company and its goods accept, buy, and be loyal to the goods provided by the company concerned (Tjiptono, "2008) in (Sani et al., 2022). According to Kotler in (Poespa et al., 2021), promotional activities are marketing efforts that provide various short intensive efforts to encourage the desire to try or buy a product or service. So, the better the promotion, the more it will influence purchasing decisions and increase the desire of individuals and consumers to buy these products. Based on this description, we can make the following hypothesis:

H2: Promotion has a significant effect on purchasing decisions for skintific products in Shopee e-commerce.

2.6.3 The Effect of Price on Purchasing Decisions

(Kusumodewi, 2016) defines that price is one of the elements of the marketing mix that generates revenue, other elements generate costs. Kotler and Armstrong (2007: 430) in (Kusumodewi, 2016) define that price is the sum of all values that consumers exchange to benefit from owning or using goods or services. The price of the product given to consumers must be affordable in all circles and some are only affordable in some circles. This price can be a consideration for consumers to buy the desired item.

Price is a monetary unit or other measure (including other commodities and services) that is exchanged for the right to ownership or use of a good or service from a marketing perspective (Sani et al., 2022). All price-related decisions have a strong impact on certain aspects of operations, sales activities, or aspects related to profit motives. The more affordable the price of a product is in the eyes of consumers, the greater the desire of consumers to buy the product. Based on this statement, we can formulate the hypothesis, as follows:

H3: Price has a significant effect on purchasing decisions for skintific products in Shopee e-commerce.

2.6.4 Effect of Product Quality on Purchasing Decisions

Philip Kotler (2009: 143) in (Poespa et al., 2021) considers that product quality is a characteristic of a product or service that is in accordance with its ability to meet stated or implied customer needs. According to Kotler & Keller (2012: 283) in (Poespa et al., 2021) product quality can be included in 9 dimensions, namely shape, product characteristics, performance, accuracy or suitability, durability, reliability, ease of repair, style, and design. Kotler and Armstrong (2007: 347) in (Kusumodewi, 2016) define that product quality is the ability of a product to perform its functions, these capabilities include durability, reliability, accuracy produced, ease of operation and repair, and other attributes that are valuable to the product.

The better the quality of the product being sold, the greater the desire of individuals or consumers to buy the product. Based on this statement, we can formulate the hypothesis, as follows:

H4: Product quality has a significant effect on purchasing decisions for skintific products in Shopee e-commerce.

3. Research Methods

3.1 Research Design

In this study, the type of research we used was quantitative research. Quantitative research uses an associative descriptive approach. This aims to provide a factual explanation of the object of research and to test the extent to which the relationship between the independent variables of promotion (X1), price (X2), and product quality (X3) has an effect. As well as the dependent variable, namely the simultaneous purchase decision (Y).

Time and Location of Research

1. Time**,** the time we conducted this research was in February - May 2024.
2. Location, the research was conducted in the Yogyakarta area by distributing online questionnaires.

3.2 Population and Sample

According to Sugiyono (2018) in (Oktavia et al., 2022) population is a generalization area consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. In this study, the population is all consumers who use Skintific skincare products.

Is a portion of the total population owned and will be taken a small portion so that it can be used as a sample in this study. In this study using the Slovin formula:

Formula = n = N/1 + N (e)^2 = 1000/1 + 1000 (0.1) ^2 = 90.9 rounded to 91

Description:
n = Sample size
N = Population size
e = Percentage of allowance for the accuracy of sampling errors that can still be tolerated 0.1 (10%)

In this study obtained a minimum result of 91 samples, so to get more valid results in this study will take 100 samples.

In this sampling technique using nonprobability sampling in the form of purposive sampling. The purpose of using purposive sampling is to make the results more valid because the sample used must meet the criteria of at least 2 times having purchased Skintific skincare in Shopee e-commerce. This technique will use the consumer survey method by distributing questionnaires.

3.3 Research Data

In the research conducted, there are independent variables and dependent variables including: There are 3 independent variables including: promotion (X1), price (X2), and product quality (X3); The dependent variable in this study is the purchase decision (Y); In testing this research variable using a Likert scale with a value of 1-5, namely Strongly Disagree (STS), Disagree (TS), Neutral (N), Agree (S), Strongly Agree (SS).

Data sources are anything that can provide information about related research. In this study, the type of primary data will be used. According to Sugiyono (2018: 456) in (Taufiq et al., 2023), primary data is a data source that directly provides data to data collectors. Therefore, the data source of the research conducted was obtained based on the answers of the respondents who had filled in the questions on the questionnaire distributed. In the technique used in data collection using respondent data from the questionnaire results. Using a questionnaire means that respondents do not need the presence of researchers, but are simply represented with a list of questions related to the research variables and can be filled in by the respondents. And instrument testing techniques in this study are used to obtain valid and reliable data results, therefore using validity and reliability tests.

3.4 Data Analysis Technique

In this research, data analysis techniques using validity and reliability tests, descriptive analysis of respondents and variables, classical assumption tests (normality, multicollinearity, and heteroscedasticity tests), multiple linear regression analysis, and hypothesis testing (F test / simultaneous test, and T test / partial test), so in the data processing process in this study using statistical application tools, namely SPSS.

3.5 Validity Test

The validity test is used in research to measure whether a research questionnaire is valid or not. The validity test is carried out with assessment criteria if the correlation is ≥ 0.3 then it is valid and if the correlation is <0.3 then it is invalid.

3.6 Reliability Test

Reliability test is a test conducted to measure the reliability of variable indicators as measuring instruments in a research questionnaire. For the reliability test, the research construct is said to be good if the Cronbach's alpha value is> 0.6. So, if r alpha is positive and r 0.6, it is reliable and if r alpha is negative and r 0.6, it is not reliable.

3.7 Descriptive Analysis

According to Sugiyono (2014) in (Afif & Aswati, 2022) descriptive analysis is an analysis used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or genealization. Descriptive analysis is carried out to obtain a complete picture of respondents' responses regarding product quality, price, and promotion in purchasing decisions by identifying the characteristics of each variable, indicator, and statement item.

3.8 Descriptive Analysis of Respondents

This research was conducted to determine the influence of advertising, price, and product quality on purchasing decisions for Skintific skincare products in Shopee e-commerce. The purpose of descriptive respondents in this study is to analyze respondent identity data. Descriptions of respondents in this study describe name, gender, age, occupation, and income per month. This research has the aim of getting a clear picture of who the respondents were surveyed.

3.9 Descriptive Analysis of Variables

The purpose of the descriptive variables in this study is to determine whether respondents' perceptions of promotion, price, product quality, and purchasing decisions strongly agree or strongly disagree. Purchasing decisions strongly agree or strongly disagree.

3.10 Normality Test

Testing the normality assumption tests the independent variable data (X) and the dependent variable data (Y) in the resulting regression equation. Testing the assumption of classical normality is done using the Kolmogorov-Smirnov normality test. The following criteria will be the basis for decision making:

a. If the probability> 0.05 or 5%, then the data is normally distributed.
b. If the probability <0.05 or 5%, then the data is not normally distributed.

3.11 Multicollinearity Test

Multicollinearity test is a test conducted to determine whether there is intercorrelation or collinearity between independent or free variables in a regression model. Multicollinearity occurs when the correlation coefficient between independent variables is greater than 0.60. Multicollinearity is said not to occur if the correlation coefficient between independent variables is smaller or equal to 0.60 ($r \leq 0.60$).

3.12 Heteroscedasticity Test

The heteroscedasticity test is a test that assesses whether the residuals of all observations in the regression model have unequal variances. According to Imam Ghozali (2011) in (Afif & Aswati, 2022) there is no heteroscedasticity if there is no clear pattern (wavy, widening then narrowing) in the scatterplots image and the points spread above and below zero on the Y axis.

3.13 Multiple Linear Regression Test

Multiple regression analysis is a regression model that includes several independent variables. Multiple linear regression tests are performed to measure the effect of several independent variables on the dependent variable. This test has a formula that can be used for analysis:

$Y = a + b1X1 + b2X2 + b3X3$

Description:

Y = purchase decision

a = regression constant

b1 = Promotion regression coefficient

b2 = price regression coefficient

b3 = product quality regression coefficient

X1 = promotion

X2 = price

X3 = product quality

3.14 Simultaneous Test (F Test)

The simultaneous test (F test) aims to determine whether the regression model analyzed adequately explains the relationship (simultaneously) between the independent variable and the dependent variable. If the significance value (sig) <0.05 means that there is a simultaneous influence simultaneously, if the significance value (sig)> 0.05 means that there is no simultaneous influence simultaneously. However, if F count> F table, it means there is a simultaneous influence; if F count < F table, it means there is no simultaneous influence**.**

3.15 Partial Test (T Test)

Partial test (T test) aims to determine whether an independent or independent variable (X) partially affects the dependent or bound variable (Y). If the sig value <0.05 then there is an influence of the independent variable (X) on the dependent variable (Y); If the sig value> 0.05 then there is no influence of the independent variable (X) on the dependent variable (Y). Based on the comparison of the t value with the t table. If the value of t count> t table, then there is an influence of the independent variable (X) on the dependent variable (Y); If the value of t count < t table then there is no influence of the independent variable (X) on the dependent variable (Y).

4. Research Findings and Discussion

4.1 Validity Test

The research validity test was carried out by determining the product moment (Pearson) correlation value between each item and the total score at a significance level of 5% or 0.05. Statement items are said to be invalid if rcount < rtable. So, in this validity test it is known that n = 115 and a total score of 5% or 0.05, in the formula for finding rtabel, namely df = n-2.

Table 4.1 Validity Test Results

Variable	Item	r_{hitung}	r_{tabel}	Description	Sig (2 tailed)	Sig	Description
Promotion	X1.1	0,767	0,1832	Valid	0,00	0,05	Valid
	X1.2	0,728	0,1832	Valid	0,00	0,05	Valid
	X1.3	0,724	0,1832	Valid	0,00	0,05	Valid
Price	X2.1	0,761	0,1832	Valid	0,00	0,05	Valid
	X2.2	0,727	0,1832	Valid	0,00	0,05	Valid
	X2.3	0,699	0,1832	Valid	0,00	0,05	Valid
	X2.4	0,588	0,1832	Valid	0,00	0,05	Valid
Product Quality	X3.1	0,776	0,1832	Valid	0,00	0,05	Valid
	X3.2	0,826	0,1832	Valid	0,00	0,05	Valid
	X3.3	0,782	0,1832	Valid	0,00	0,05	Valid
Purchase Decision	Y.1	0,844	0,1832	Valid	0,00	0,05	Valid
	Y.2	0,817	0,1832	Valid	0,00	0,05	Valid
	Y.3	0,824	0,1832	Valid	0,00	0,05	Valid

Based on table 4.1, it can be concluded that all statement items rcount > rtable. Thus all statement items contained in the questionnaire are valid, therefore they are suitable for use as data collection tools.

4.2 Reliability Test

The purpose of this reliability test is to see the extent to which it can measure the reliability of consistent variable indicators. Reliability test in this study using Cronbach's alpha. A variable is said to be reliable if the Cronbach alpha coefficient value is> 0.6. The following is a reliable test on each variable:

Table 4.2 Reliability Test Result

Variable	*Cronbach's Alpha*	r-Tabel	Description
Promotion	600	0,600	Reliabel
Price	644	0,600	Reliabel

Product Quality	708	0,600	Reliabel
Variable Y	769	0,600	Reliabel

Table 4.3 Normality Test Result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		115
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	1,85424631
Most Extreme Differences	Absolute	,163
	Positive	,090
	Negative	-,163
Test Statistic		,163
Asymp. Sig. (2-tailed)		,200[c]

Test distribution is Normal.
Calculated from data.
Lilliefors Significance Correction

From the results in table 4.8 above, the significance value is 0.200 and the value is greater than 0.05. Then the data has a normal distribution.

4.3 Multicollinearity Test

Multicollinearity test is conducted to determine whether in a regression model there is a correlation between independent and independent variables. A good model should not have a correlation between variables. It is said that multicollinearity occurs if the correlation coefficient between independent variables is greater than 0, 60. It is said that there is no multicollinearity if the correlation coefficient between independent variables is smaller or equal to 0.60.

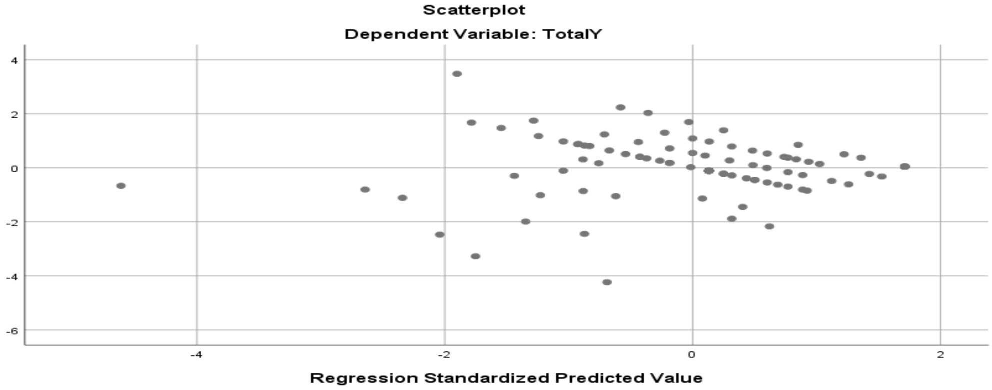
Table 4.4 Multicollinearity Test Results Table

Model	Tolerance	VIF	Description
Promosition	0,843	1,187	No Multicolinearitas
Price	0,565	1,769	No Multicolinearitas
Product Quality	0,583	1,716	No Multicolinearitas

Based on the table above, it is known that the tolerance value on the Promotion variable (X1) is 0.843; Price variable (X2) is 0.565; and Product Quality variable (X3) is 0.583. All three are greater than 0.10, which indicates that the data in this study do not occur multicollinearity. The VIF value on the Promotion variable (X1) is 1.187; Price (X2) is 1.769); and Product Quality (X3) is 1.716. Then the three variables are smaller than 10, which means it shows that the data in this study does not occur multicollinearity.

4.4 Heterosedasticity Test

Table 4.5 Heteroscedasticity Test Result



Based on the results of heteroscedasticity testing in the figure above, it shows that the data points do not form a certain pattern and the data does not gather, but spreads above and below the number 0. Therefore, the research data conducted does not occur heteroscedasticity.

4.5 Multiple Linear Regression Test

Table 4.6 Multiple Test Result

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,678[a]	,460	,445	1,879

a. Predictors: (Constant), TotalX3, TotalX1, TotalX2

b. Dependent Variable: TotalY

Based on the data results in the table above, the R square value is 0.460 or equal to 46 percent. This means that the Promotion variable (X1); Price (X2); and Product Quality (X3) simultaneously affect the Purchasing Decision variable (Y) by 46 percent. While the rest (100% - 46% = 54%) is influenced by other variables not examined.

4.7 F Test

Table 4.7 F Test Result

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	334,007	3	111,336	31,530	,000[b]
	Residual	391,958	111	3,531		
	Total	725,965	114			

a. Dependent Variable: TotalY

b. Predictors: (Constant), TotalX3, TotalX1, TotalX2

Based on table 4.7, it is known that all variables of promotion, price, product quality and purchasing decisions have a Cronbach's alpha value > 0.6 so it can be concluded that the reliability test on this data is declared reliable.

4.8 Normality Test

Testing the normality assumption tests the independent variable data (X) and the dependent variable data (Y) in the resulting regression equation. A regression equation is said to be good if it contains data on independent and dependent variables that are distributed close to normal or perfectly normal.

The Significant value of the ANOVA table is 0.00 which means below 0.05 so it is concluded that all the independent variables studied have a simultaneous effect (together) on the dependent variable.

4.9 T Test

Table 4.8 T Test Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1,087	,932		1,166	,246
	TotalX1	,317	,098	,245	3,225	,002
	TotalX2	,286	,070	,379	4,086	,000
	TotalX3	,203	,086	,216	2,365	,020

a. Dependent Variable: TotalY

The t test is used to determine whether an independent or independent variable (X) partially affects the dependent variable (Y).

The following is a table of t test results.

1) Promotion Variable: Based on the results of the table above that the t-count value is 3.225> t-table 1.981. And the significance value is 0.002 <0.05. So it can be concluded that the Promotion variable partially affects the Purchasing Decision (Y).
2) Price Variable: Based on the results of the table above, the t-count value is 4.086> t-table 1.981. And the significance value is 0.000 <0.05. So it can be concluded that the Price variable partially affects the Purchasing Decision (Y).
3) Product Quality Variable: Based on the results above, the t-count value is 2.365> t-table 1.981. And the significance value is 0.020 <0.05. So it can be concluded that the Product Quality variable partially affects the Purchasing Decision (Y)

5. Conclusions

The research results obtained in the discussion section above, aim to determine whether promotion, price, and product quality have a significant effect or to determine the simultaneous promotion, price, and quality on purchasing decisions for Skintific skincare products in Shopee e-commerce. Based on the results of data analysis, the conclusions that can be drawn are as follows:

1) Promotion has a significant effect on purchasing decisions for skintific products at Shopee.
2) Price has a significant effect on purchasing decisions for skintific products at Shopee.
3) Product quality has a significant effect on purchasing decisions for skintific products at Shopee.
4) Promotion, price, and product quality have a simultaneous effect on purchasing decisions for skintific products at Shopee.

In conducting this research, the author has limitations such as this research questionnaire distributed online using google form so that when the respondent fills out the questionnaire there are some that are not correct in filling it in and making the researcher have to make a new questionnaire again because it does not match the criteria needed.

Company to continue to maintain the quality of its products and continue to pay attention to developments in the quality of its products and Shopee e-commerce. Skintific products will be used for a long period of time by consumers, so they make repeated purchases on Shopee e-commerce. If product quality continues to be improved, it can benefit the company. And for future researchers, it is best to use lots of references to increase their knowledge in order to develop research methods.

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THE INFLUENCE OF EXPORTS, IMPORTS, MONEY SUPPLY AND INTEREST RATES ON THE RUPIAH EXCHANGE RATE IN INDONESIA (1994-2023)

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ABSTRACT

This research aims to analyze the influence of exports, imports, money supply and interest rates on the Rupiah exchange rate in Indonesia. Using the multiple linear regression method and time series data for the period 1994 to 2023. The research results show that the export variables and interest rates have a significant positive influence on the Rupiah exchange rate. On the other hand, the import variables and money supply have a significant negative influence on the Rupiah exchange rate. This finding is in accordance with macroeconomic theory which states that increases in exports and interest rates encourage exchange rate appreciation, while increases in imports cause exchange rate depreciation. This research provides a link that government policy in increasing exports and stable interest rates is very important in supporting the stability and strengthening of the Rupiah exchange rate. On the other hand, policies related to imports and the money supply must be reviewed to reduce their negative impact on the exchange rate. It is hoped that the results of this research can be used as consideration for policy makers in designing more effective macroeconomic strategies to strengthen the national currency.

Keywords: *Rupiah Exchange Rate, Exports, Imports, Money Supply, Interest Rates*

1. Introduction

International trade is an important aspect of the economy of every country in the world. With international trade, economies will be intertwined and economic relations will be created that mutually influence the traffic of goods and services, which will shape trade between countries (Raspita, 2021). The Indonesian economy refers to an open economy (Adhista, 2022). Which includes output trading activities (goods or services) and capital with other countries (Rostiana *et al* ., 2022; Suparmoko, 2014). In carrying out trade activities between countries, currency is very important because each country uses a different currency. The exchange rate (exchange rate) with other countries' currencies is the main component in an open economy (Manihuruk *et al,* 2023). International trade certainly requires an agreed currency to be used in trade transactions, namely the US dollar (United States). The use of US dollars causes the exchange rate of the rupiah against the dollar to fluctuate from time to time. This can lead to the risk of changes in currency exchange rates which arise due to uncertainty in the exchange rate itself (Muzaky, 2015).

Each value of a particular currency has the same purchasing power as that currency when used (Adhista, 2022; Silitonga *et al* , 2017). This means that the price of similar goods in two different countries will be valued the same in their currencies. A country's central bank has the role of maintaining the stability of the national currency exchange rate in international money. Success in maintaining exchange rate stability can be considered as an indication that the country's economy is running well (Mutiara & Puspitasari , 2024). The exchange rate describes the comparison of the purchasing power of each country's currency, which basically reflects the level of inflation (Djulius *et al* ., 2022; Setiawan *et al* ., 2021). Exchange rates play an important role in determining profits and losses in foreign trade transactions. Changes in exchange rates can influence economic decisions and business strategies at the international level (Manihuruk *et al* , 2023). Exchange rates are key in understanding global economic dynamics and economic relations between countries (Fordatkosu *et al* ., 2021).

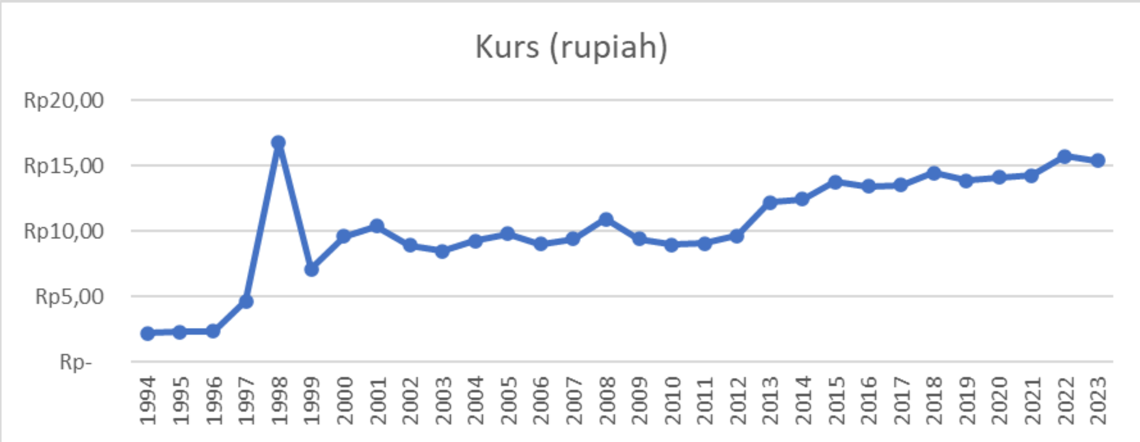

Figure 1. Development of the Rupiah Exchange Rate per US Dollar
Source: Central Statistics Agency, One Trade Data

In Figure 1 you can see data on the rate of movement of the rupiah exchange rate against the US dollar from 1994 to 2023. In 1998 the exchange rate movement appeared to be very weak. This is because Indonesia is experiencing a monetary crisis, so the value of the rupiah reaches IDR 16,650. After experiencing a monetary crisis, the Indonesian economy began to recover from its downturn. In 2000-2012 the rupiah exchange rate experienced a fluctuating trend every year. In 2020 – 2022 the rupiah exchange rate against the US dollar continues to weaken. The weakening of the rupiah exchange rate due to the spread of the Covid-19 pandemic throughout the world,

Changes in the exchange rate have a direct effect on developments in the prices of goods and services in the country. Changes in currency exchange rates also have an impact on currency appreciation and depreciation (Wilya, 2014). The exchange of goods and services (exports and imports) requires money as a means of payment, where the distribution of money in one country greatly influences that country's economic activities (Silitonga *et al* , 2017).

Table 1 shows the development of Indonesia's exports in 1990-2018. The value of Indonesia's exports experienced fluctuations, seen from 1990 the export value was 25675.3, experiencing an increase in 1991 of 29142.4. In 1992 it was 33967.0 in 1993 to

Exports are the sending and selling of goods and services produced abroad to foreign countries. The increasing number of exports will cause demand for domestic currency to rise and the Rupiah exchange rate to strengthen (Adhista, 2022) . Export is also a trading activity by removing goods from within Indonesian territory to outside Indonesian customs territory (Sabtiadi & Kartikasari, 2018). Exports also contribute to strengthening the national economy, increasing employment opportunities and overall economic growth. Therefore, exports are an integral element in strengthening a nation's competitiveness and economic position on the global stage (Che Arshad & Irijanto, 2023; Djulius *et al* ., 2022; Nurhayati *et al.,* 2023).

Study (Uktufia & Septiani, 2022), Regarding the relationship between exports and the exchange rate, found that high total exports in a country can increase the demand for domestic currency. Thus, the country's exchange rate can experience appreciation or strengthen against the currencies of other countries. This indicates that the stability of the rupiah exchange rate per US dollar is positively influenced by exports.

Another factor that can influence the exchange rate is imports (Adhista, 2022). Imports are one component of international buying and selling activities which are carried out by importing products from other countries into the country (Sunardiyaningsih & Pradiptha, 2022). Countries that import goods and services are countries that cannot produce goods and services by domestic industry, and can afford them at low prices as cheap as exporting countries (Triyawan *et al* 2023).

Apart from that, the money supply is a factor that influences the exchange rate. An increase in the money supply (JUB) can trigger public consumption, both for domestic and imported goods (Anggarini, 2016). The amount of money in circulation will have an impact on the movement of the rupiah exchange rate against the US dollar. Where the money supply depends on the supply of money, if the supply of the rupiah increases then its value will depreciate, whereas if the supply of the rupiah decreases then the value of the rupiah currency will appreciate (Fordatkosu *et al.,* 2021).

According to (Diana & Dewi, 2019) the interest rate in this case greatly influences the exchange rate of one currency against another currency. The interest rate determines the added value of a country's currency. Interest rates are regulated by the central bank, and if in the long term the central bank always raises interest rates, the trend in the country's currency exchange rate against other countries will tend to rise. This will continue until there are other influencing factors or the central bank reduces interest rates again. The interest rate is the fee that the borrower must pay for the loan received and is the lender's reward for the funds (Yudiarti, 2018). With higher interest rates it will be possible increasing demand for currency, the opposite relationship is that lower interest rates tend to reduce the exchange rate (Mirchandani, 2013). Interest rates and exchange rates are closely related, each of which has driven progress in investor behavior and macroeconomic relations. Both are important for understanding the role of openness in financial markets (Engel, 2016).

In previous research, many have used exports, imports, money supply and interest rates as independent variables and focused on their influence in the long term, for example (Fordatkosu *et al.,* 2021) Indonesian exports have a significant positive effect on the rupiah/US dollar exchange rate. in Indonesia, Indonesian imports have a significant effect on the rupiah/us dollar exchange rate because import activities affect the amount of demand for a country's currency, and . The money supply has a positive and significant effect on the rupiah/us dollar exchange rate. This indicates that the exchange rate in Indonesia is determined by changes in the money supply in the same direction. If the money supply increases, the exchange rate will also increase and vice versa, if the money supply decreases, the exchange rate will weaken, Research (Mutiara & Puspitasari, 2022) The export variable has a coefficient value of 0.095 and a significance value of 0.007 <0.05, so it can be concluded that the export variable has a positive and significant influence on the stability of the value of the rupiah against the US dollar. Meanwhile, the import variable has a coefficient value of 0.004 and a significance value of 0.919 > 0.05, which means that imports have a positive but not significant influence on the stability of the value of the rupiah against the US dollar. . In a study researched by (Diana & Dewi, 2019) which explains the influence of interest rates on the exchange rate, it is said that interest rates have a positive effect on the exchange rate. In research (Fordatkosu *et al.,* 2021), (Adhista, 2022) & (Manihuruk et al. 2023) discuss the same variables as this research. It is interesting to examine the factors that influence exports, imports and Indonesia's money supply on the exchange rate of the rupiah against the United States dollar which fluctuates every year. This study is different from previous studies such as research conducted by (Adhista, 2022), (Silitonga *et al,* 2017) because this study uses the latest data from previous research, namely using data from 1994 - 2023. This study provides a deeper analysis. details about the implications of monetary policy related to the money supply and exchange rate stability.

This research aims to analyze the causal relationship and impact between the volume of exports, imports and money supply on fluctuations in the rupiah exchange rate against the US$ currency. In this research, we examine the relationship between independent variables and the exchange rate and can determine the relative influence of each variable on the rupiah exchange rate. This objective can provide useful information for policy makers in formulating appropriate policies to maintain the stability of the rupiah exchange rate and assist economic actors in making investment and international trade decisions.

2. Literature Review

Purchasing power parity theory was put forward by Gustav Basel, who stated that the comparison of the value of a currency to another is determined by the purchasing power of that money in each country (Adhista, 2022; Silitonga *et al,* 2017). The basic theory is that the comparison of the value of one currency with another currency is determined by the purchasing power of that money (for goods and factors that influence the demand for foreign currency and the supply of foreign currency. The demand and supply of foreign currency is what determines the high and low foreign exchange rates that country (Wulandari, 2014). The demand for foreign currency describes the amount of certain foreign currency that residents of a country want to make payment transactions abroad, while the supply of foreign currency describes the amount of certain foreign currency offered by residents of a country. country, the supply of foreign exchange comes from exports, in the market for a good, the price is determined in a situation where supply and demand for goods reach balance (Silitonga et al, 2017).

International trade activities provide stimulation for domestic demand which causes the growth of large factory industries, along with a stable political structure and flexible social institutions. Based on the description above, it can be seen that exports reflect international trade activities which can provide encouragement in the dynamics of international trade growth, so that developing countries are likely to achieve economic progress on a par with more developed countries (Benny, 2014). Exports are the activity of selling products from one country to another across the outer borders of a country's customs territory, with the aim of obtaining much-needed foreign exchange for the country, creating jobs for the domestic labor market, obtaining income from export duties and other taxes, and maintaining a balance between flows. goods and money flows circulating within the country (Fordatkosu *et al,* 2021). Exports were initially only carried out by companies in the form of legal entities that had obtained permission from the Ministry of Trade. Exporters are entrepreneurs who can export, who already have a SIUP or business permit from the Technical Department/Non-Departmental Government Agency based on applicable regulations. Export is the activity of removing goods from the customs area (Law No.17 of 2006) (Sabtiadi & Kartikasari, 2018).

Imports are the process of purchasing foreign goods or services from one country to another. Import levels are influenced by trade regulatory barriers (Adhista, 2022). The government imposes tariffs (taxes) on imported products, these taxes are usually paid directly by the importer, who will then pass on to consumers in the form of higher prices for their products. When foreign governments impose tariffs, the ability of foreign companies to compete in those countries is limited. The government can also apply quotas on imported products, which limit the number of products that can be imported (Silitonga *et al,* 2017). The amount of import value is influenced by the level of national income of a country, where the higher the national income, the lower the level of production of domestic goods, so that imports tend to increase as a result of a significant decrease in domestic income (Siti Hodijah, 2021). High import growth will worsen the current account balance and usually give rise to indications of an impending exchange rate crisis. A large increase in demand for foreign commodities (increased imports) will tend to depreciate the value of the rupiah currency. This increase in imports will tend to increase the chance of an exchange rate crisis (Yuliyanti, 2014). Based on the trade approach (*Trade Approch*) or the elasticity approach to exchange rate formation (*Elasticity to Exchange Rate Determination*) explains that the difference in exchange rates between two countries is influenced by the volume of trade between the two countries. If a country has imports that are greater than exports or experiences a trade balance deficit, the exchange rate will weaken and vice versa. Through this theory, it can be concluded that this relationship is not significant because in several periods Indonesia still experienced a trade balance surplus, which means that Indonesia's exports were still greater than its imports as well as the influence of other factors not discussed in this research (Adhista, 2022).

The money supply is money held in the hands of the public, which is often called *the money supply* (supply of money) (Fordatkosu *et al.,* 2021) . There are several definitions of money, each of which differs according to the level of liquidity. Types of money are divided into 3, namely M1, M2 and M3. M1 is paper money and metal plus savings in the form of a checking account (*demand deposit*). M2 is M1 + savings + *time deposits* at commercial banks. M3 is M2 + savings + time deposits at non-bank savings institutions (Yuliyanti, 2014).

According to (Zakiyah & Usman, 2019) the money supply theory is that the stock of money circulating in a country's economy will determine the rate of prices of goods. There is a relationship between changes in the money supply and changes in national income. Economic fluctuations are caused by changes in the money supply, which is an important factor that causes changes in national income receipts. It can be concluded that if the money supply increases, national income increases with a positive correlation. In research conducted (Yuliyanti, 2014) it shows that in the short term the money supply is not significant to the rupiah/US dollar exchange rate. In the long term, the Money Supply (M2) has a positive and significant influence on the rupiah/US dollar exchange rate.

Interest rates are one of the fundamental concepts in economics and finance which have been the object of extensive and in-depth research. A number of previous studies have examined the influence of interest rates on various economic and financial aspects, such as investment, consumption, economic growth and financial stability. In his study, Mishkin (2019) revealed that interest rates are the price that borrowers must pay to obtain funds from lenders. Interest rates not only influence individual decisions in terms of consumption and investment, but also have a significant impact on the economy as a whole. Research conducted by Blanchard (2017) shows that interest rate policies carried out by central banks can be used as a tool to control the demand and supply of money in society, as well as influencing economic growth.

Furthermore, Mankiw (2018) explained that high interest rates tend to encourage people to save more than consume, while low interest rates encourage consumption and investment. This is in line with the findings of Samuelson and Nordhaus (2010) who state that interest rates play an important role in the allocation of economic resources, where high interest rates can divert resources from less productive sectors to more productive sectors. Apart from that, research conducted by Dornbusch, Fischer, and Startz (2018) revealed that interest rates also influence a country's currency exchange rate. High interest rates can attract foreign capital flows and increase demand for domestic currency, while low interest rates can cause a weakening of the domestic currency exchange rate.

According to (Munthe & Hamdi, 2015) the exchange rate is the price of local currency against foreign currency. So, the exchange rate is the value of a Rupiah currency translated into another country's currency. The exchange rate of a currency is determined by the supply-demand relationship *for* that currency. If the demand for a currency increases, while the supply remains constant or decreases, then the exchange rate of that currency will rise. If the supply of a currency increases, while demand remains constant or decreases, then the currency's exchange rate will weaken. The rupiah exchange rate weakened because supply was high, while demand was low (Silitonga *et al,* 2017). The existence of economic openness has an impact on a country's balance of payments regarding trade flows and capital traffic. Trade flows can be influenced by exchange rate policies in an effort to maintain export competitiveness and suppress imports to reduce the current account deficit. The influence of exchange rate policy on the economy can be seen from two sides, namely demand and supply (Adhista, 2022) .

Exchange rate fluctuations can also be affected by the level of exports and imports that occur in a country. This is caused by exports and imports as a form of international trade which requires supply and demand for the currency of the country concerned. Previous research regarding the impact of exports and imports on the rupiah exchange rate found by (Uktufia & Septiani, 2022) concluded that exchange rate stability can be influenced by the large volume of imports & exports of a country. High volumes of imports and exports can result in an increase in the value of the local currency, because demand for the domestic currency increases. In response to high levels of imports, demand for foreign currency will also increase, which in turn could trigger a depreciation of the value of the domestic currency in foreign currencies. Research (Manihuruk *et al,* 2023) shows that exports have a negative and significant effect on the rupiah exchange rate, while imports do not have a significant effect. Research (Manihuruk *et al,* 2023) also confirms that there is a significant positive influence of the money supply (M2) on the Rupiah exchange rate in Indonesia. This phenomenon indicates that policies related to managing the money supply can have a positive impact on the stability and movement of the Rupiah exchange rate. This is in accordance with previous research which shows that M2 is a statistically variable variable that has a significant positive impact on the Rupiah/USD exchange rate (Fordatkosu *et al.,* 2021). In this context, the implementation of monetary policy that considers and wisely manages the money supply can be a determining factor in supporting the strengthening of the Rupiah exchange rate.

3. Research Methods

This research was conducted using a quantitative approach and using descriptive analysis. A quantitative approach is taken to test the validity of a theory or hypothesis so that it can be used to strengthen or reject a previous theory and hypothesis. Meanwhile, the descriptive approach aims to explain an indication of the current problem. The type of data used is secondary data obtained from the Central Statistics Agency and trade data. Quantitative research is used to identify and analyze the relationship between independent variables and dependent variables over a certain period of time (1994-2023).

Data were analyzed using multiple linear regression analysis to measure the extent to which exports, imports and money supply influence the rupiah exchange rate. Furthermore, classical assumptions were tested, including using multiple regression, this research made it possible to control other factors that might influence the rupiah exchange rate. The formula for the multiple linear regression analysis equation in this research is written as follows:

$$\boldsymbol{Kurs}_t = \boldsymbol{\beta 0} + \boldsymbol{\beta 1 X}1_t + \boldsymbol{\beta 2}X2_t + \boldsymbol{\beta 3}X3_t + \boldsymbol{\beta 3}X4_t$$

Where:

$Kurs$	: Rupiah exchange rate
$\beta\,0$	: Constant
$\beta\,1, \beta\,2, \beta\,3$	: Regression coefficient of variable X
X_1	: Export
X_2	: Import
X_3	: Amount of money in circulation
X_4	: Interest rate
t	: Time series (1994 – 2023)

Table 1. Definition and Operational Variables

Variables	Variable Definition	Unit	Measurement
Exchange Rate of IDR to USD	the price of one country's currency relative to another country's currency.	Rupiah	*US* $ 1 x Rp
Export	delivery and sale of goods and services produced domestically to foreign countries.	Million USD	Total Exports
Import	Expenditures from the activity of bringing goods, services or products from abroad into a country.	Million USD	Total Imports
The amount of money in circulation	The total amount of money held by society and used in a country's economic activities at a given time.	Billion Rp	Total currency, demand deposits and quasi
Interest rate	the percentage of the loan or savings amount that must be paid or received by the borrower or depositor within a certain period.	Percent %	Reference interest rate

4. Research Findings and Discussion

Statistical descriptions and regression test results are the basis for describing the results of this research. This description is illustrated in the following table:

Table 2. Statistical Description of Research Data

Variables	**Obs**	**Average**	**Std. Deviation**	**Min**	**Max**
Export	30	126933.7	69007.57	40053.40	293250.2
Import	30	102529.0	69360.67	19055.70	237447.0
The amount of money in circulation	30	1707.270	2746,741	45.37000	8573.610
Interest rate	30	11.77900	11.22999	3.500000	63.98000

Source: Central Statistics Agency

Table 2 above shows that the number of variables used in this research is 30. Meanwhile, the average export used in this research is 126933.7 thousand and the maximum reaches 293250.2 4 million. The average import used in this study was 102529.0 million rupiah and the maximum reached 237447.0 million rupiah. Apart from that, the average JUB in this study reached 1707,270 billion rupiah and the maximum reached 8573,610 billion rupiah. On the other hand, the interest rate reached 11.8% and the maximum reached 63,98,000%.

The next step The classical assumption test is a prerequisite test that is attempted before carrying out further analysis of the information that has been collected. This classic assumption test is intended to create a regression model that meets the BLUE (Best Linear Unbiased Estimation) criteria which assumes that the estimation results do not have biased parameters Adam et al, (2022). The results of the classical assumptions in this research are explained in table 1 below:

Table 3. Results of Classical Assumption Test

Test summaries		
Normality Test	Prob>Chi2	0.287952
Multicollinearity Test		
• **Export**	VIF Value	6.656749
• **Import**		5.178769
• **The amount of money in circulation**		2.140087
• **Suku Bunga**		1.482353
Heteroscedasticity Test	Prob>Chi2	0.0661
Autocorrelation Test	Prob>Chi2	0.0006

The first assumption is the normality test. The normality test in this research is used to see whether the research data is normally distributed or not (Ghozali, 2013). Based on table 3, the Prob>chi2 value is 0.287952 > 0.05, so based on this value it can be concluded that the regression model has met normality. Second, to detect whether there is a relationship between independent variables in the regression model. If the VIF value is <10.00 then it can be said that there are no symptoms of multicollinearity. Based on the results of the multicollinearity test, it shows that this research is free from symptoms of multicollinearity, this can be seen from the VIF value of each variable being less than 10.00. Third, the heteroscedasticity test is used to see whether there is an imbalance in the variance of the remaining observations from one observation to another in the regression equation (Ghozali 2013). There is no heteroscedasticity problem in the regression model if the significance value is more than 0.05. Heteroscedasticity test results. Based on these results, it shows a probability value of 0.0661 > 0.05, which indicates that the data is homogeneous/homosedastic. The fourth is the autocorrelation test which is used to see whether the regression model has an autocorrelation problem using the Breusch-Godfrey Serial Correlation LM test method. Table 3 shows the significance value, namely 0.0746 > 0.05, so it can be concluded that the regression model does not have an autocorrelation problem.

Table 4. Results of Multiple Regression Analysis

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	2293.179	1730.186	1.325394	0.1970
Export	0.058421	0.018326	3.187957	0.0038**
Import	-0.014718	0.016081	-0.915227	0.3688
Money Supply	0.236271	0.261049	0.905084	0.3741
Interest rate	152.0184	53.13979	2.860727	0.0084**
Value Test				
R-squered	0.611061			
Adjusted R-squared	0.548831			
F-statistic	9.819375			
Prob(F-statistic)	0.000065			

Notes: Significance Level: 1% (0.001)***; 5% (0.05)**; 10% (0.1)*. Dependent variable is Output of exchange rate

From the results of multiple linear analysis, the following equation is obtained:
Exchange rate $_{it}$ = $2293.179 + 0.058421 Export_t - 0.014718 Import_t + 0.236271 TotalCurrency_t + 152.0184\ Interest\ rate_t$

Where the constant coefficient value, namely 2293.179, is the value of the exchange rate variable which is estimated when all independent variables are zero, then the exchange rate value is estimated at IDR 2293.179 . The coefficient value of 0.058421 for the Export variable shows the expected change in the exchange rate if exports increase by one unit, ignoring the impact of other variables. These results also show that exports have a positive relationship with value, meaning that an increase in the value of exports tends to contribute to an increase in the exchange rate.

The Import variable has a coefficient value of -0.014718 indicating the expected change in the exchange rate if imports increase by one unit, ignoring the impact of other variables. These results also show that imports have a negative relationship with the exchange rate, meaning that an increase in the value of imports will contribute to a decrease in the exchange rate.

The coefficient value of 0.236271 on the variable Money supply shows the expected change in the exchange rate if the money supply increases by one unit, ignoring the impact of other variables. These results also show that JUB (M2) has a positive relationship with the exchange rate, meaning that an increase in the value of the money supply tends to contribute to an increase in the value of the exchange rate.

The coefficient value of 152.0184 on the variable Total interest rates shows the expected change in the exchange rate if the Total interest rate increases by one unit, ignoring the impact of other variables. These results also show that interest rates have a positive relationship with the exchange rate, meaning that an increase in the value of the money supply tends to contribute to an increase in the value of the exchange rate.

From the explanation above, where the absolute value of the coefficient increases, the influence of the independent variables on changes in the Rupiah exchange rate (exchange rate) against the US dollar will be greater.

In the t test, the results obtained for the export variable had a t-statistic value of 3.187957 with a value of Prob. equal to 0.0038 < 0.05, then exports affect the rupiah exchange rate significantly. The imported variable has a value of -0.915227 Prob. amounting to 0.3688 < 0.05, meaning that imports do not significantly affect the rupiah exchange rate. M2 or money supply in the t test has a value of 0.905084 with Prob. amounting to 0.3741 < 0.05, then the same as imports, the M2 variable does not have a significant effect on the rupiah exchange rate against the US dollar. The interest rate in the t test has a statistical test value of 2.860727 with a value of Prob. equal to 0.0084 < 0.05, then the interest rate influences the rupiah exchange rate significantly.

The R-squared value is 0.611061 , meaning that the significant variables exports, imports and money supply (M2) on the rupiah exchange rate are 61.1%, while the remaining 38.9% is influenced by other variables that do not contribute to this research. Next, the F test aims to show whether all the independent variables included in the model have a joint influence on the dependent variable or dependent variable. It is known in table 6 above that the probability value of F is 0.000065 <, it can be concluded that the variables in this research, namely exports, imports, money supply and interest rates together have an influence on the exchange rate variable.

The research results obtained indicate that in particular, in the long term, the export variable has a positive and significant impact on the rupiah exchange rate. This is different from research (Sabtiadi & Kartikasari, 2018) which states that exports do not have a significant effect on the rupiah exchange rate. This phenomenon provides a substantial basis for detailing and understanding more deeply how changes in export activity can directly affect the rupiah exchange rate.

Research indicates that there is a positive and insignificant influence from import activities on the Rupiah exchange rate in Indonesia. Nevertheless, the importance of controlling imports remains relevant, especially to maintain balance in the trade and production sectors of goods and services in Indonesia. Even though imports do not directly affect the Rupiah exchange rate, efforts to control import activities remain an important aspect in managing the country's economy. The results of this research are in accordance with previous similar research where imports have a positive influence on the Rupiah exchange rate against the USD, because import activities have an impact on the volume of demand for a country's currency because these activities can also cause an increase in demand for the currency of the importing country. This can cause a weakening of the value of the domestic currency (Silitonga & Ishak, 2017). This can help maintain economic stability, prevent excessive trade deficits, and support the growth of the national industrial sector. Thus, control of imports is still considered a vital element in designing holistic and sustainable economic policies in Indonesia (Diana & Dewi, 2019).

Research confirms that there is a significant negative influence of the money supply (M2) on the Rupiah exchange rate in Indonesia. This is the same as research conducted by Yuliyanti, 2014 where the money supply does not have a significant effect on the exchange rate. This phenomenon indicates that policies related to managing the money supply can have a positive impact on the stability and movement of the Rupiah exchange rate. This is in accordance with previous research which shows that M2 is a statistically variable variable that has a significant positive impact on the Rupiah/USD exchange rate (Fordatkosu et al., 2021). In this context, the implementation of monetary policy that considers and manages wisely the money supply can be a determining factor in supporting the strengthening of the Rupiah exchange rate. Therefore, these findings carry the implication that actions and policies that influence the money supply can be a relevant instrument in efforts maintaining the stability of the national currency. As a result, awareness of the relationship between monetary policy, money supply and the Rupiah exchange rate is crucial for designing effective and sustainable economic policy strategies.

This research provides a more in-depth picture of the importance of export activities in influencing the Rupiah exchange rate. Apart from making a significant contribution to economic growth, exports also have an important role in maintaining exchange rate stability. As one of the main drivers of economic growth, exports can be a vital indicator of a country's economic health. The implication is that the government and economic actors need to consider strategies to increase the competitiveness of export products, maintain exchange rate stability in the long term, and respond quickly to global market dynamics.

According to (Adhista, 2022) imports do not have a significant influence on the Rupiah exchange rate. It should be noted that controls on imports still have significant relevance. These controls can help prevent excessive trade deficits, maintain economic balance, and support the domestic industrial sector. From a policy perspective, import control strategies need to be implemented wisely to optimize their benefits for national economic stability.

The finding that interest rates have a significant positive influence on the Rupiah exchange rate provides the basis for more targeted monetary policy. Interest rate policy is key in supporting exchange rate stability. The implication is that monetary policy needs to be implemented carefully, considering its impact on the Rupiah exchange rate. The balance between growth in the money supply and exchange rate stability is the main focus in supporting healthy economic growth.

5. Conclusions

Based on the results of the regression analysis, several economic factors have different influences on the Rupiah exchange rate against the US Dollar. This analysis includes the variables of exports, imports, money supply (JUB/M2), and interest rates, with the results:

Export Effect: The results of the analysis show that exports have a positive and significant influence on the Rupiah exchange rate. This means that an increase in exports tends to strengthen the value of the Rupiah against the US Dollar. This could be due to an increase in demand for the Rupiah due to higher international trade transactions, which in turn increases the value of the domestic currency.

Import Effect: In contrast, imports do not show a significant influence on the Rupiah exchange rate. Although imports also involve foreign currency transactions, the data shows that the volume is not strong enough to have a meaningful impact on the Rupiah exchange rate in the context of this analysis.

Effect of Money Supply (JUB/M2): The analysis shows that money supply has a positive but insignificant influence on the Rupiah exchange rate. This means that an increase in JUB does not directly cause a meaningful change in the Rupiah exchange rate. This may be due to the influence of other factors that are more dominant in determining the exchange rate.

Effect of Interest Rate: Interest rates are found to have a positive and significant influence on the Rupiah exchange rate. An increase in domestic interest rates tends to strengthen the value of the Rupiah. This is because higher interest rates attract foreign investment into the country, which increases the demand for Rupiah.

Strategies to strengthen the Rupiah exchange rate should focus on increasing exports and effective interest rate management, while keeping an eye on overall economic policies to create stability and sustainable growth.

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THE EFFECT OF TRANSFORMATIONAL LEADERSHIP DIMENSION ON EMPLOYEE PERFORMANCE AT PT. KALIMANTAN SAWIT KUSUMA

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ABSTRACT

A substantial corpus of research has examined the impact of transformational leadership, yet studies on each dimension of transformational leadership remain scarce. This research aims to address this gap by examining the influence of four dimensions of transformational leadership, with a particular focus on their impact on employee performance in palm oil companies in Indonesia. This research employs a descriptive quantitative methodology with a survey method. Furthermore, the data collected in the field was obtained through the distribution of questionnaires to 100 employees in hard copy form. Following this, the data will be analyzed using SEM PLS 3.2.9. The findings indicate that the three dimensions of transformational leadership have a significant positive effect on employee performance, with only idealistic influence exhibiting no significant effect. The survey was conducted exclusively on employees who were based in the office, with those working in the field being excluded. Nevertheless, this research provides theoretical implications in the form of empirical evidence of the influence of transformational leadership dimensions on employee performance in the context of human resources working in palm oil companies in Indonesia. Furthermore, the findings provide practical implications with recommendations for improving employee performance.

Keywords: *Intellectual Stimulation, Idealised Influence, Inspirational Motivation, Individualized Consideration, Employee Performance*

1. Introduction

Transformational leadership has been a topic that has been widely discussed in previous research. Transformational leadership is considered effective in improving employee performance by motivating and developing the full potential of employees (Rivai, 2020). Transformational leadership is a leadership style that encourages and motivates employees to innovate and create changes that have an impact on the company's future success (Choi et al., 2017). Transformational leadership is also able to influence employees to develop and contribute maximally to the company.

Previous research has shown that transformational leadership can improve performance in various sectors such as in education, hospitality, self-service, health, banking and many more. However, there is limited research that explores the impact of transformational leadership specifically in the palm oil industry. Because considering that the palm oil industry is one of the factors that contribute to supporting the economy of Central Kalimantan, by being able to provide employment for thousands of local people (Ayu, 2021). So it is also necessary to pay attention to the leadership system adopted in the oil palm plantation industry, so that companies are able to compete in the era of increasing growth in oil palm plantations like today. Especially so that Indonesia always maintains the performance of each company to be able to compete in order to have a positive impact on the nation's economy (Sulistiawati et al., 2023).

Because considering the oil palm plantation industry also has unique characteristics, especially having large land areas, large offices and factories, in this case a good compromise between leaders and employees is needed in order to be able to manage work according to company targets. So that the leadership theory chosen in this study is transformational leadership theory to determine what kind of leadership style is suitable to be applied at PT Kalimantan Sawit Kusuma, in order to improve employee performance. This study aims to determine the perceptions of employees who work in the office of PT Kalimantan Sawit Kusuma towards transformational leadership. Because considering in several previous industries that transformational leadership can improve employee performance such as research conducted by (Buil et al., 2019), this research was conducted with the intention of wanting to find out more if transformational leadership is applied to PT. Kalimantan Sawit Kusuma is also able to improve the performance of employees who work in offices in the oil palm plantation industry in Central Kalimantan or vice versa. In research conducted by (Teoh et al., 2022) transformational leadership is able to improve employee performance because this transformational leader can establish good relationships with his employees. Although many previous studies have found that transformative leadership can have a direct and indirect impact on employee performance, not many studies have explored the dimensions of transformational leadership on employee performance (Ferozi & Chang, 2021). In this case, transformational leadership has four dimensions that are no less important, which are the behaviours of a transformational leader. According to Teoh et al., (2022) These four transformational leader behaviours are interrelated with each other, namely: Idealistic influence, has a behaviour that focuses on ethics, morals and beliefs; Inspirational motivation, has a behaviour that is able to provide meaning and challenge to the work of its employees but still provides words that inspire in order to arouse emotions; Intellectual stimulation, where leaders are able to support new ways of thinking and question ideas, traditions, assumptions and emphasize the importance of skills in solving problems logically; Individualised consideration, is a leader who evaluates the abilities and needs of employees and provides assistance if employees need it.

The findings of this study are expected to help managers at PT Kalimantan Sawit Kusuma on how the description of transformational leadership can improve employee performance in the oil palm plantation industry through the dimensions of transformational leadership in order to more easily understand the figure of a transformational leader with each different characteristic. Therefore, this study is devoted to analysing the influence of transformational leadership dimensions on employee performance at PT Kalimantan Sawit Kusuma. This research will also examine the specific influence of each dimension of transformational leadership, because there are still not many who conduct research to examine this. In research conducted by (Teoh et al., 2022) who suggested for future researchers to conduct research on one of the dimensions of transformational leadership, namely individual consideration, so this study was also conducted to determine whether individual consideration affects employee performance, especially in the oil palm plantation industry, especially at PT Kalimantan Sawit Kusuma (KSK) Central Kalimantan.

2. Literature Review

2.1 Transformational Leadership

According to (Damayanti & Prasetya, n.d.; Kim, 2014) companies use transformational leadership to direct employees in understanding the targets that the company wants to achieve, and provide understanding to employees to do work according to predetermined targets. Transformational leadership is defined as a motivator who has a role to understand the needs of employees and as a form of motivation provided so that employees are able to do work for long-term goals according to the vision and mission set by the company. (Berraies & Bchini, 2019). Transformational leadership is an important aspect that is able to influence employee performance with its ability to have a commitment to responsibility as a leader. (Astuty & Udin, 2020). In this case, transformational leadership has four dimensions, each of which has different characteristics, namely: idealistic influence, inspirational motivation, intellectual stimulation and individualized consideration. (Bass & Bass Bernard, 1985; Teoh et al., 2022).

2.1.1 Idealist influence

Idealist influence is a leader who shows his authority by providing a vision and mission to employees, so that they gain respect and trust from subordinates.

2.1.2 Inspirational motivation

Inspirational motivation is a leader who encourages his employees by providing unique motivation with the aim of employees being able to achieve common goals.

2.1.3 Intellectual stimulation

Intellectual stimulation is a leader who is able to encourage employees to be more imaginative and innovative in solving problems faced in work, especially to find new ways and more creative ideas.

2.1.4 Individualized consideration

Individualized consideration is a leader who is able to approach employees individually by understanding their needs and difficulties in doing work.

2.3 Employee Performance

In carrying out work, an employee produces something that is referred to as performance, so performance is defined as the work of an employee during a predetermined period of time with work standards to be achieved together (Arianty, 2018). According to (Harahap & Tirtayasa, 2020; Moeheriono, 2014) performance is the level of achievement of the implementation of programs, activities and policies to achieve organisational goals in accordance with the vision and mission stated in the organisation's strategic planning. Meanwhile, according to (Tanjung et al., 2021) performance is the result of work that a person achieves in carrying out the tasks assigned to employees and is based on ability, experience and seriousness. So that (Hendra, 2020; Sutrisno et al., 2010) states that to measure performance you can use several indicators using several performance criteria, namely: quality, quantity, timeliness, cost efficiency and supervision.

Based on the above definition, it can be concluded that employee performance is everything that an employee or employee wants to achieve in doing the work that has become his responsibility as an employee. Then from several indicators contained in employee performance, employees have the opportunity to do work according to the provisions of an organisation. Previous research conducted by (Rivai, 2020) that transformational leadership has a significant effect on employee performance, this shows that the better a leader in an organisation, the better employee performance. Meanwhile, research conducted by (Teoh et al., 2022) by examining the influence of the dimensions of transformational leadership on employee performance found that there are two dimensions of transformational leadership that have a positive effect are Idealistic influence and Inspirational motivation. While the two dimensions of transformational leadership that have a negative effect are Intellectual stimulation and Individualised consideration. Meanwhile, research conducted by (Top et al., 2020) also states that there are two dimensions of transformational leadership that have no impact on employee performance including idealistic influence and intellectual stimulation. For this reason, the purpose of this study is to determine whether the dimensions of transformational leadership affect employee performance in other words that the dimensions of transformational leadership can also improve employee performance, especially in the context of oil palm plantations in Central Kalimantan. From the above research, the hypothesis of this study is stated as follows:

H1 : Idealistic influence has a positive effect on employee performance at PT.KSK
H2 : Inspirational motivation has a positive effect on employee performance at PT.KSK
H3 : Intellectual stimulation has a positive effect on employee performance at PT.KSK
H4 : Individualized consideration has a positive effect on employee performance on PT.KSK

Transformational Leadership

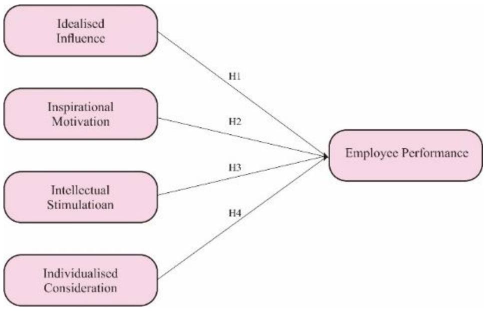

Figure 1 Conceptual Framework

3. Research Methods

3.1 Population and sample

This research uses a descriptive quantitative approach by describing or explaining information from an event or event as it is. In addition, descriptive research in this study uses a survey method conducted with several data collection techniques in the form of distributing questionnaires (primary data) and obtained from books and journals (secondary) as a reference for reference in this study. The sampling method in this study was non-probability sampling with purposive sampling. According to (Sugiyono, 2016) purposive sampling is a sampling technique that uses certain considerations or criteria that must be met by the sample and which will be used in research. The criteria used in this study are employees who work in the office of PT Kalimantan Sawit Kusuma who have a minimum service period of 1 year because in testing transformational leadership employees need to know or get to know how far the leadership is in the company where they work.

3.2 Data collection (measurement) instruments

The constructs used in the transformational leadership dimension variable were adopted from Bass & Bass Bernard, 1985 (in Nur et al., 2021), which contained 11 (eleven) statements and the constructs used in the employee performance variable were adopted from (Tugiyono & Kom, 2020), which contained (five) statement items. Analysis of statements on variables in this study is on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

3.3 Data Analysis

The analysis method in this study uses the Partial Least Square (PLS) approach with SmartPLS software version 3.2.9. Because PLS-SEM can be used to predict and maximise the explanation of the independent variable to the dependent variable (Hair Jr. et al., 2019, p. 766). All data generated in this study will be tested with instrument tests such as convergent validity test, reliability test, validity and hypothesis testing.

4. Research Findings and Discussion

4.1 Description of Respondent Characteristics

This study has several characteristics of respondents which are divided into 3 (three) groups as follows:

Table 1 Demographic Profile

Respondent Profile	Total	Percentage
Gender		
Women	40	40%
Man	60	60%
Age		
<25 Years	8	8%
25-30 Years	41	41%
>30 Years	51	51%
Length of Service		
<1 Years	4	4%
1-3 Years	28	28%
4-6 Years	34	34%
>6 Years	34	34%

Source: Data processed by researchers, 2024

4.2 Validity Testing

4.2.1 Convergent validity

At this first stage, namely by conducting a convergent validity test by looking at the outer loading value of each indicator on its construct. According to (Siagian *et al*., 2019) an indicator can be said to meet convergent validity if the value of outer loading> 0.7. Based on the results of data processing using SmartPLS 3.2.9, it is shown in the table below and shows the outer loading value> 0.7, which means that all indicators are said to be valid.

Table 2 Outer Loading Value of Questionnaire Instrument Indicators

Variables	Indicator	Outer Loading
Idealistic influence	**II1.1**	**0.823**
	II1.2	**0.868**
	II1.3	**0.896**
	II1.4	**0.850**
Inspirational motivation	**IM2.2**	**0.919**
	IM2.3	**0.897**
	IM2.4	**0.900**
Intellectual stimulation	**IS3.1**	**0.930**
	IS3.2	**0.872**
	IS3.3	**0.908**
Individualized consideration	**IC4.1**	**0.940**
	IC4.2	**0.934**
Employee Performance	**EP1.1**	**0.915**
	EP1.2	**0.877**
	EP1.3	**0.845**

Source: Data processed by researchers, 2024

4.2.2 Discriminant Validity

In testing discriminant validity using Heterotrait Monotrait (HTMT), where each variable meets the criteria with a HTMT value <0.90. The following will attach the results of data processing using SmartPLS 3.2.9 in the table below:

Table 3 HTMT Discriminant Validity Test Results

	Employee Performance	**Idealised Influence**	**Individualised Consideration**	**Inspirational Motivation**	**Intellectual Stimulation**
Employee Performance					
Idealised Influence	0,349				
Individualised Consideration	0,589	0,575			
Inspirational Motivation	0,624	0,539	0,773		
Intellectual Stimulation	0,486	0,698	0,501	0,618	

Source: Data processed by researchers, 2024

4.2.3 Reliability and Validity Testing

In testing the reliability and validity of each indicator can be said to be reliable and valid if it meets the criteria with a Composite Reliability value> 0.70, a Cronbach's Alpha value> 0.70 and an AVE value ≥ 0.50. Based on the results of data processing using SmartPLS 3.2.9, it is displayed in the table below and shows the Composite Reliability value> 0.70, Cronbach's Alpha value> 0.70 and AVE value ≥ 0.50, which means that it meets the criteria for reliability and validity.

Table 4 Reliability and Validity Test Results

	Cronbach's Alpha	**rho_A**	**Composite Reliability**
Employee Performance	0,854	0,865	0,911
Idealized Influence	0,883	0,895	0,919
Individualized Consideration	0,861	0,862	0,935
Inspirational Motivation	0,890	0,895	0,932
Intellectual Stimulation	0,888	0,897	0,930

Source: Data processed by researchers, 2024

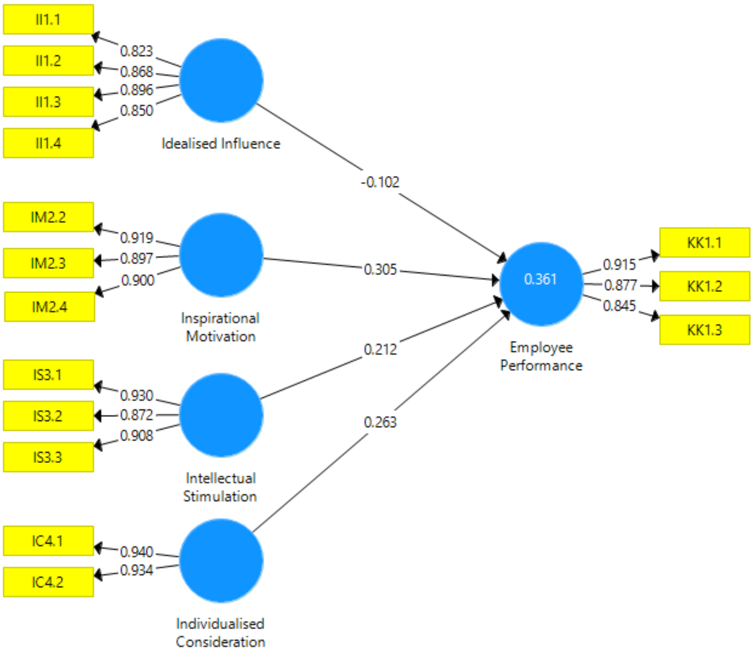

Figure 2. Partial Least Square Model Bootstrapping
Source: Data processed by researchers, 2024

4.3. Hypothesis Testing

The purpose of this study was to investigate the effect of transformational leadership dimensions (idealistic influence, inspirational motivation, intellectual stimulation, and individualised consideration) on employee performance at PT Kalimantan Sawit Kusuma. The results of the study can be seen from the hypothesis testing conducted to determine the effect of the independent and dependent variables by looking at the t-statistic and p-value values presented in the table below.

Table 5
Hypothesis Testing Results

Hipotesis	Description	T-Statistic	P-Value	Information
H1	Idealis influence → Employee Performance	0.994	0.321	Not Supported
H2	Inspirational motivation → Employee Performance	2.852	0.005	Supported
H3	Intellectual stimulation → Employee Performance	3.712	0.000	Supported
H4	Individualised Consideration → Employee Performance	2.736	0.006	Supported

Source: Data processed by researchers, 2024

The significance of the research hypothesis can be determined through the hypothesis test conducted. Hypothesis testing results can be done using t-statistic analysis of t-statistic values and p-values. In testing the hypothesis Idealis influence has a positive effect on employee performance at PT.KSK (H1), the p-value is obtained which does not match the criteria so that the second hypothesis is declared unsuccessful and rejected. It can be concluded that Idealis influence does not have a positive effect on employee performance at PT.KS. This is in line with research conducted by (Top et al., 2020) which states that Idealis influence leaders have no effect on employee performance. However, research conducted by (Teoh et al., 2022) states that idealistic leaders influence employee performance where idealistic leaders influence employees to provide good performance according to the company's vision and mission. According to (Nidadhavolu, 2018) transformational leaders are able to act as mentors in their team or department to focus on personal development, learning and achievement of their followers and are able to have a positive impact on employee performance. Because the nature of work at PT.KSK is generally repetitive and follows company procedures, idealistic influence is not relevant for employees working at PT.KSK.

In testing the hypothesis Inspirational motivation has a positive effect on employee performance at PT.KSK (H2), the p-value is obtained in accordance with the criteria so that the second hypothesis is accepted. It can be concluded that Inspirational motivation has a positive effect on employee performance at PT.KSK. So it is suggested that the Inspirational motivation leader at PT.KSK can be a leader who is able to inspire his employees by providing motivation that can build their performance to be better according to the standards given by the company.

In testing the Intellectual stimulation hypothesis has a positive effect on employee performance at PT.KSK (H3), the p-value is obtained in accordance with the criteria so that the third hypothesis is accepted. So, it can be said that the Intellectual stimulation hypothesis has a positive effect on employee performance at PT.KSK. So it is recommended for Intellectual stimulation leaders at PT.KSK to be able to influence employees by stimulating them and trying approaches to encourage the creativity of employees to become more creative and have new ideas in looking at obstacles to work with logic and being able to solve them in a new way.

In testing the hypothesis Individualised consideration has a positive effect on employee performance at PT.KSK (H4), the p-value is obtained in accordance with the criteria so that the fourth hypothesis is accepted. It can be concluded that Individualised consideration has a positive effect on employee performance at PT.KSK. So it is recommended that the leader of individualised consideration at PT.KSK, must be able to motivate his employees by providing individual attention to understand what is a need and what is an obstacle in doing work.

5. Conclusion

This study found that, transformational leadership can improve employee performance at PT Kalimantan Sawit Kusuma. The dimensions of inspirational motivation, intellectual stimulation, and individualised consideration are the dimensions of transformational leadership that have the most influence on employee performance. Leaders of PT Kalimantan Sawit Kusuma need to have the characteristics of each of these dimensions in their leadership in order to optimally improve employee performance. The findings of this study have several important implications for companies to improve employee performance. By applying transformational leadership consistently and purposefully, companies can achieve competitive advantage, improve business sustainability, and achieve their strategic goals. The results of this study also provide a theoretical contribution which uses dimensions from transformational leadership theory. In addition, it also helps managers to know what kind of leader is able to improve employee performance in their company.This study also provides several recommendations for future research. First, future research can further examine the dimensional mechanism of the influence of transformational leadership on employee performance. Second, comparing the effectiveness of transformational leadership with other leadership styles such as transactional and laissez-faire leadership.

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ANALYSIS OF THE IMPACT OF THE PRICE, PRODUCT QUALITY, AND WORD OF MOUTH ON PURCHASE INTENTION OF PKL MRICAN

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ABSTRACT

This research aimed to determine the impact of price, product quality, and word of mouth on purchase intention of Mrican Street Vendors Restaurant. This research used quantitative method research. The data collection technique used a questionnaire via Google Forms with a purposive sampling technique. The sample in this research were consumers of PKL Mrican who were active students at Sanata Dharma University, Yogyakarta. The analytical methods used were instrument testing, classical assumption testing, multiple linear regression analysis and hypothesis testing. The results of this research showed the variables price, product quality, and word of mouth have a positive and significant effect on customers' purchase intention of Mrican Street Vendors Restaurant.
Keywords: *price, product quality, word of mouth, purchase intention*

1. Introduction

The development of culinary trends during the 2020 – 2022 COVID-19 pandemic, even when PPKM (Implementation of Restrictions on Community Activities) was implemented, didn't prevent people from thinking creatively about creating innovations in the culinary field. People try to develop food creations ranging from snacks to heavy meals. Creativity based on innovation had value, provided benefits, created jobs, and produced new products that were useful for many people.

People found good opportunities from the culinary creations. Most entrepreneurs who started their businesses from the smallest prospective businesses with small capital according to their hobbies generated quite big profits. Therefore, people are starting to open small businesses, usually called Micro, Small, and Medium Enterprises (MSMEs). Generally, new business actors start a business from home because it is more flexible in managing their home and business work, also saving costs because they don't have to buy or rent land.

Micro, Small, and Medium Enterprises (MSMEs) are business activities that can increase employment opportunities and support broad economic services to the community (Hastuti et al., 2020: 158). MSMEs play a role in the process of equalization and increasing people's income, increasing economic growth, and realizing national stability. According to data from the Ministry of Cooperatives and SMEs, in 2023 there were 64.2 million MSMEs in Indonesia, and 4.8 million of them will be engaged in the culinary sector. That means 7.48 percent of all MSMEs in Indonesia are culinary businesses.

According to Singgih Raharjo, the mayor of Yogyakarta, MSMEs in Yogyakarta especially in the culinary field, are extraordinary with various types. In 2023, there were 32,917 MSMEs recorded in Yogyakarta City. Mrican Street Vendors Restaurant located on Pringgodani Street Number 2, RW.02, Mrican, Caturtunggal, Depok, Sleman Regency, contributes to the number of MSMEs in Yogyakarta City. This place is a meeting point for MSMEs in the culinary field. Around 26 MSME kiosks are selling various food and drink menus. The prices of food and drinks offered by MSME is quite affordable, especially for students. The food menu provided at Mrican Street Vendors Restaurant is very diverse, delicious, and familiar to culinary enthusiasts in Yogyakarta. Starting from traditional menus such as Lotek, Gado-Gado, Nasi Pecel, Soto, regional food menus such as Nasi Padang, Arsik Fish, Gomak Noodles, Manado Porridge, Roa Fish, to modern menus such as Steak, Katsu, and Cordon Bleu, available at Mrican Street Vendor Restaurant.

According to Tjiptono 2006 (in Milansari et al., 2021) says that price is a simple term that means the value of a quantity (monetary or non-monetary unit) that has a specific function to obtain a good/service. The prices set by traders at Mrican Street Vendors Restaurant tend to be competitive. They set similar prices between traders. When compared with food sold in public places, Mrican Street Vendors Restaurant is cheaper with the same food menu.

According to Sinaga 2019 (in Raga et al., 2021) product quality is the advantages of the product that consumers feel directly influence consumers' purchase intention, and in general consumers have several perceptions of quality and price before deciding to buy a product. The quality of the products offered at Mrican Street Vendors Restaurant is in accordance with the prices set. However, cheap prices do not mean low quality. The Sleman Regency Industry and Trade Service with the Sleman Health Service have carried out food hygiene tests and revealed that Mrican Street Vendors Restaurant has occupied a suitable place, and received training towards clean and healthy culinary delights. For consumers, this testing is a guarantee that the food they consume is safe and clean.

Mrican Street Vendors Restaurant currently does not have digital promotional media that able to cover all MSMEs who sell there, so it is difficult for them to reach a wider range of consumers. This has resulted in a Word-of-mouth phenomenon from buyers to other potential buyers so that the Mrican Street Vendors Restaurant remains busy every day. According to Ristiyanti (in Zakaria 2020) Word of Mouth is a process where information from someone about a product, either from interactions or from personal experience of consumption, is passed on to other people.

Several previous studies (Tania, Hemawan, Izzuddin 2022; Caniago and Rustanto 2022; Makarim & Haryati 2023) stated that price, product quality and Word of Mouth variables influence consumer purchase intention. On the other hand, there were inconsistencies in the results of previous research by (Rokhmawati, Kuncorowati, Supardin 2022; Melinda, Artina, Lestari 2021) which stated that price and Word of Mouth variables had no partial effect on purchase intention.

The results of this research are targeted to help MSMEs determine marketing strategies, especially in terms of price, product quality, and Word of Mouth in order to attract consumer purchase intention.

Based on these gaps and events, the problem formulation that emerges is:

- Does price influence the purchase intention of Mrican street vendor consumers?
- Does product quality influence the purchase intention of Mrican street vendor consumers?
- Does Word of Mouth influence the purchase intention of Mrican street vendor consumers?

Based on the problem formulation that has been found, the aim of this research is

- To determine the effect of price on Mrican street vendor consumer purchase intention
- To find out the effect of product quality on Mrican street vendor consumer purchase intention
- To determine the influence of Word of Mouth on Mrican PKL consumers purchase intention

2. Literature Review

2.1 Price

According to Kotler (2021:383) price is an element of marketing mix that communicates to the market about the desired value position of a product or brand by the company. Price is an exchange rate that can be equated with money to obtain goods or services for individuals or groups at a certain time and place (Kelvinia et al., 2021: 86). According to Kotler Philip & Armstrong (in Septyadi, Salamah, Nujiyatillah 2022:305) four indicators that characterize prices, namely:

- Affordability Price
- Price match with product quality
- Price competitiveness
- Matching price with benefits

2.2 Product Quality

According to Kotler (2021: 131) product quality is the overall features and characteristics of a product or service that influence its ability to satisfy stated or implied needs. According to Qin et al., 2009 (in Vinaya, Prasetyo, and Harisyana 2019) product quality in the food and beverage sector has four dimensions, namely:

- Freshness (food freshness)
- Presentation (serving food)
- Well Cooked (food that is cooked well/properly)
- Variety of Food (food diversity).

2.3 Word of Mouth

Kotler and Keller (in Zakaria 2020:42) formulate that Word of Mouth is a marketing activity using person-to-person intermediaries which is carried out verbally, written, or through electronic communication tools related to the history of purchasing or using goods and services. According to Lupiyoadi (in Zakaria 2020:43) Word of Mouth can be measured using the following indicators:

- Talking about positive things, a good and positive impression can be created from the willingness of marketers and consumers to talk about positive things about a product/service.
- Recommendations, increasing trust and desire to choose a product/service by giving recommendations to others.
- Encouragement, encouraging others to buy a product/service.

2.4 Purchase Intention

Schiffman and Kanuk (in Harli, Mutasowifin, Andrianto 2021:562) state that purchase intention is the emergence of psychic activity in the form of stimulation and thoughts about a product or services desired. According to Ferdinand (in Harli, Mutasowifin, Andrianto 2020:562), purchase intention is divided into several indicators, namely:

- Transactional interest, consumers tend to purchase the desired product.
- Referential interest, consumers tend to refer products they have purchased to other people.
- Preferential interest, consumer behavior that prioritizes the products they have consumed.
- Exploratory interest, the behavior of consumers who always want to find out information about products they are interested in.

2.5 Hypothesis

Price is an important consideration for consumers when making a purchase, as it represents the exchange rate they must pay for a specific product or service. Some consumers tend to prefer lower prices over relatively expensive ones. According to Sugiyanto, Wibowo, and Kartini (2022), research on food delivery apps in Jakarta found that price partially impacts consumer purchase intention positively This finding is supported by research from Asia, Ramli, and Siangka (2023), which indicates that price significantly influences our interest in purchasing premium rice at the Mamuju Branch of Perum Bulog Indonesia.

H1 : Price influences purchase intention.

In addition to the price factor, the product quality factor is also a consideration for consumers before purchasing a product. If the quality of a product is bad, consumers tend to choose other alternative products with similar functions. According to Awalya, Winarso, and Anas (2023) in their research on Azarine Sunscreen products, product quality partially has a positive and significant effect on purchasing interest. Moreover, according to Ermini, Suryati, Najib, and Nindiati (2023) in The Hangry Burer (THB) research, there is a significant and positive influence of product quality on consumer purchase intention.

H2 : Product quality influences purchasing interest

Positive and negative word of mouth can influence a person's purchase intention in a product. The more positive and frequent information received from others, the stronger the curiosity and desire to try the mentioned product. According to Alvian (2023), in research on the Cukli Creative Industry, he found that Word of Mouth had a positive and significant effect on purchase intention. The statement is supported by research on Wardah products by Rina, Pranata, and Lukita (2023), which states that Word of Mouth has a significant and positive influence on consumer purchase intention.

H3 : Word of Mouth influences purchase intention.

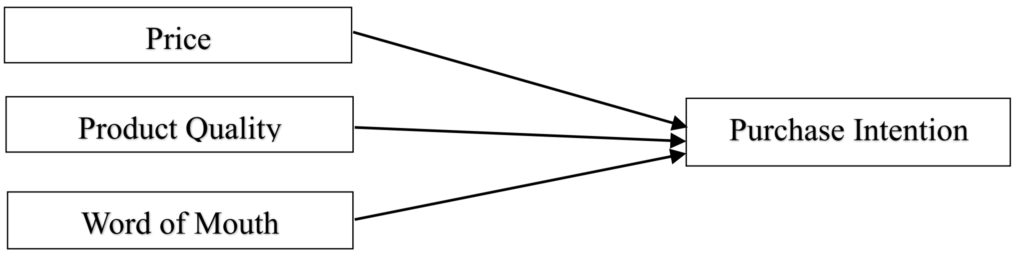


Figure 1. Conceptual Mapping

3. Research Methods

3.1 Research Design

The research design used in this research is causal research with a quantitative approach. According to Sugiyono 2018 (in Chasun, 2019) causal research aims to determine the cause-and-effect relationship between independent and dependent variables. The causal relationship from this research is price, product quality, and word of mouth on the purchasing interest of Mrican Street Vendors Restaurant consumers.

According to Sugiyono (2017) the quantitative approach is a research method that refers to the philosophy of positivism, used to study specific populations or samples. It involves collecting data through research instruments and analyzing quantitative or statistical data to test established hypotheses. In this study, a questionnaire was used as the research instrument.

3.2 Sample and Population

According to Indriantoro and Supomo (in Amin, Garancang, and Abunawas 2023) population is a group of people, events or anything that has certain characteristics. The population of this study were visitors to the Mrican Street Vendors Restaurant in Yogyakarta. The total population of visitors to Mrican Street Vendors Restaurant is unknown because there is no exact data on the number of visitors. The sampling technique used in this research was Purposive Sampling with a sample of 100 respondents who met the criteria. The criteria used for this research were active students at Sanata Dharma University, both those who had previously purchased and those who were about to purchase at Mrican Street Vendors Restaurant.

3.3 Research Data

To get accurate information, a type of Primary Data source is needed. According to Umar 2011:42 (in Satria et al., 2023) primary data is data obtained directly from individuals by means of interviews or filling out questionnaires. Primary data for this research comes from questionnaires distributed directly to Mrican PKL consumers.

3.4 Data Analysis Technique

3.4.1 Validity Test

According to Sugiyono 2015 (in Lestari, Yani 2023:35) instrument validity is a measure that indicates the degree of validity of an instrument. The validity test in this study aims to assess the accuracy of the instrument in measuring the variables Price (X1), Product Quality (X2), Word of Mouth (X3) and Purchase Interest (Y). A questionnaire is declared valid if the correlation value is > 0.3 and declared invalid if the correlation value is < 0.3 with a significance level of < 0.05.

3.4.2 Reliability Test

According to Sugiyono 2015 (in Lestari, Yani 2023:35) reliability is a sequence of measurements or a series of measuring instruments that have consistency if the measurements made with the measuring instrument are carried out repeatedly. To achieve this, a reliability test was carried out using the Alpha Cronbach method. The questionnaire is declared reliable if the Cronbach's Alpha (α) value is greater than 0.6.

3.4.3 Normality Test

According to Ghozali 2016 (in Kasih et al., 2023) the aim of the normality test is to check whether the mixed variables or residuals of the regression model have a normal distribution. One way to identify whether the residuals are normally distributed or not is through graphical analysis by looking at the P-Plot graph which compares the observed data with a distribution that is close to a normal distribution. Normality can be detected by looking at the distribution of data (points) on the diagonal axis of the graph or by looking at the residual histogram.

3.4.4 Multicollinearity test

According to Ragner Frisch (in Azizah et al, 2021) multicollinearity is a very high linear relationship in the regression model for each independent variable. The presence of multicollinearity can make the use of regression methods less appropriate because the regression variable coefficients are very large and cause the regression estimates to be unstable.

3.4.5 Heteroscedasticity Test

According to Sujarweni (in Handayani, 2020), a situation where heteroscedasticity does not occur in the regression model because the confounding variance and error are not constant for all independent variables.

3.4.6 Autocorrelation Test

According to Subianto (2021) autocorrelation is a test to see whether there is a relationship between existing errors. The existence of autocorrelation can be determined using the Durbin Watson test (DW-Test).

3.4.7 Linearity Test

According to Siregar (in Novriansya et al, 2022) the linearity test is a test to determine that the independent variable (X) and the dependent variable (Y) have a linear relationship.

3.4.8 Multiple Linear Regression Analysis

In this research, the data analysis technique used multiple linear regression analysis. This technique aimed to find out how influental independent variables have on the dependent variable. According to Sheikh 2011 (in Maharani and Musnaini, 2023) multiple regression of the dependent variable (Y) is caused or influenced by two or more independent variables (X), so that in this research the following formula is found:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + e$$

3.4.9 F Test and T Test

The F test was carried out to test the hypothesis in order to determine the simultaneous influence of the price, product quality and word of mouth variables on purchase intention, as well as the t test to determine the partial influence of the price, product quality and word of mouth variables on purchase intention.

3.4.10 Coefficient Test

The coefficient of determination test was carried out to determine how much influence the independent variables (price, product quality, and word of mouth) have on the dependent variable (purchase interest).

4. Research Findings and Discussion

4.1 Validity Test

Table 1. Validity Test Price Variable

Variable		R count	R table	Result
Price (X1)	X1.1	0,730	0,1946	Valid
	X1.2	0,737	0,1946	
	X1.3	0,812	0,1946	
	X1.4	0,780	0,1946	

Based on table 1, all items in the price variable have a greater r count than the table r which is 0.1946. Then the price variable is valid.

Table 2. Validity Test Product Quality Variable

Variable		R count	R table	Result
	X2.1	0,761	0,1946	Valid

Product Quality (X2)	**X2.2**	**0,713**	**0,1946**	
	X2.3	**0,760**	**0,1946**	
	X2.4	**0,677**	**0,1946**	

Based on table 2, all items in the product quality variable have a greater r count than the table r which is 0.1946. Then product quality variable is valid.

Table 3. Validity Test Word of Mouth Variable

Variable		**R count**	**R table**	**Result**
Word of Mouth (X3)	**X3.1**	**0,527**	**0,1946**	**Valid**
	X3.2	**0,769**	**0,1946**	
	X3.3	**0,654**	**0,1946**	
	X3.4	**0,849**	**0,1946**	
	X3.5	**0,786**	**0,1946**	
	X3.6	**0,789**	**0,1946**	

Based on table 3, all items in the word of mouth variable have a greater r count than the table r which is 0.1946. So the word of mouth variable is valid.

Table 4. Validity Test Purchase Intention

Variable		**R count**	**R table**	**Result**
Purchase Intention (Y)	**Y1.1**	**0,581**	**0,1946**	**Valid**
	Y2.2	**0,741**	**0,1946**	
	Y3.3	**0,849**	**0,1946**	
	Y4.4	**0,801**	**0,1946**	

Based on table 4, all items in the purchase interest variable have a greater r count than the table r which is 0.1946. So the purchase interest variable is valid.

4.2 Reliability Test

Table 5. Reliability Test Price Variable

Cronbach's Alpha	N of Items	Result
0,774	4	Reliable

Based on table 5, the price variable has a Cronbach's alpha of 0.774, which means it is greater than 0.60. So the price variable is reliable.

Table 6. Reliability Test Product Quality Variable

Cronbach's Alpha	N of Items	Result
0,704	4	Reliable

Based on table 6, the product quality variable has a Cronbach's alpha of 0.704, which means it is greater than 0.60. So the price variable is reliable

Table 7. Reliability Test Word of Mouth Variable

Cronbach's Alpha	N of Items	Result
0,829	6	Reliable

Based on table 7, the word of mouth variable has a Cronbach's alpha of 0.829, which means it is greater than 0.60. So the price variable is reliable

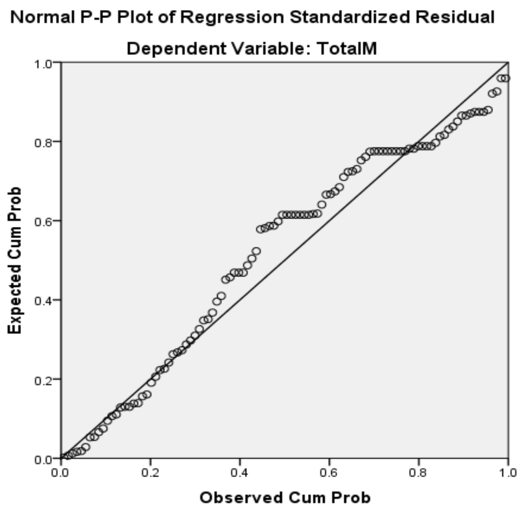
Table 8. Reliability Test Purchase Intention Variable

Cronbach's Alpha	N of Items	Result
0,738	4	Reliable

Based on table 8, the purchase intention variable has a Cronbach's alpha of 0.739, which means it is greater than 0.60. So the price variable is reliable

4.3 Normality Test

Figure 2. P-Plot



Based on Figure 2, shows that the points are on the diagonal line and follow the line, which means the data was normally distributed.

4.4 Multicollinearity Test

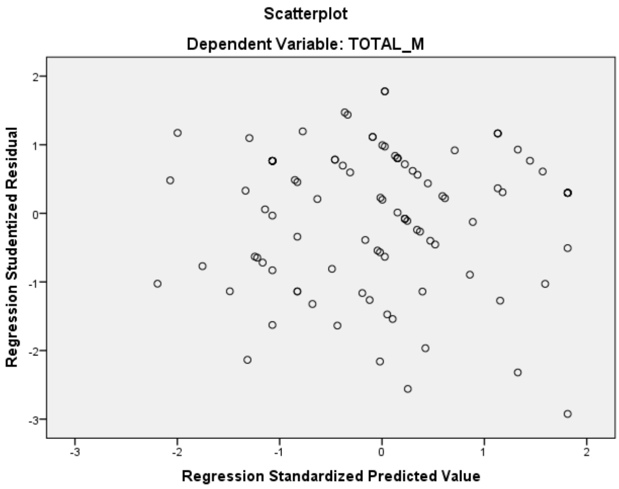
Table 9. Multicollinearity Test

Model		Collinearity Statistic	
1		Tolerance	VIF
	Price	0,558	1,791
	Product Quality	0,511	1,956
	Word of Mouth	0,634	1,578

Based on table 10, the tolerance value of all variables is > 0.10, and the VIF value of all variables is < 10, which means there is no multicollinearity.

4.5 Heteroskedasticity Test

Figure 3. Scatterplot



Based on Figure 3, shows that the data points are spread out, not gathered on one side, and do not form a particular pattern. It means heteroscedasticity does not occur.

4.6 Autocorrelation Test

Table 10. Autocorrelation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	0,786	0,618	0,607	1,269	1,905

The D (Durbin Watson) value of 1.905 is greater than DU, namely 1.383 and less than 2.167 (4 – DU = 4 – 1.383), or in the equation it is 1.905 > 1.383 < 2.167 so it can be concluded that there are no symptoms of autocorrelation.

4.7 Linearity Test

Tablel 11. Linearity Test

Variable	Deviation from Linearity		
	df	F	Sig
Price	6	1,444	0,206
Product	5	1,856	0,109
Word of Mouth	11	1,895	0,50

Based on table 13, shows that the deviation from linearity sig value for all variables is greater than 0.05, which means there is a significant linear correlation.

4.8 Multiple Linear Regression Analysis

Table 12. Multiple Linear Regression Analysis

Model		Unstandardized Coefficient		Standardized Coefficient	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,727	1,255		-2,173	0,032
	Price	0,236	0,101	0,195	2,331	0,22
	Product Quality	0,387	0,116	0,292	3,344	0,001
	Word of Mouth	0,350	0,063	0,436	5,557	0,000

$$Y = -2{,}727 + 0{,}236\ X1 + 0{,}387\ X2 + 0{,}350\ X3$$

Based on the regression equation above, then:

- If price, product quality, and word of mouth are constant, then purchase intention will decrease by -2.727.
- The regression coefficient value for the price variable is 0.236 which means for every one unit increase in the variable, the dependent variable will increase by 0.236.
- The regression coefficient value for the product quality variable is 0.387, which means for every one unit increase in the variable, the dependent variable will increase by 0.387.
- The regression coefficient value for the word of mouth variable is 0.350, which means for every one-unit increase in the variable, the dependent variable will increase by 0.350.

4.9 F Test

Table 13. F Test

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig**
1	Regression	255,654	3	85,218	52,951	0,000
	Residual	157,719	98	1,609		
	Total	413,373	101			

Based on a significance value of 0.000 < 0.05, there is a simultaneous influence of price, product quality and word of mouth variables on purchasing interest.

4.10 T Test

Table 14. T Test

Model		Unstandardized Coefficient		Standardized Coefficient	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2,727	1,255		-2,173	0,032
	Price	0,236	0,101	0,195	2,331	0,22
	Product Quality	0,387	0,116	0,292	3,344	0,001
	Word of Mouth	0,350	0,063	0,436	5,557	0,000

Determining t table: 0.05/2; n-k-1 = 0.025; 102-3-1 = 0.025; 99. The t table 99 value is 1.98422. Based on table 16, the calculated t value of the three variables is > t table 1.98422, so the three independent variables have a significant effect on the purchase interest variable.

4.11 Coefficient Test

Table 15. Coefficient Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,786	0,618	0,607	1,269

Based on the adjusted r square value of 0.607 or 60.7%, it shows that the regression model in this research is strong enough to explain Mrican Street Vendors Restaurant' purchase intention. Price, product quality, and word of mouth have a significant influence on purchasing interest.

5. Conclusion

Based on research that has been conducted regarding the influence of price, product quality and word of mouth on consumer purchase intention at Mrican street vendors, the following results were obtained:

a. The variables price, product quality and word of mouth simultaneously influence the purchase intention of Mrican PKL consumers.
b. The price variable has the result that it partially has a positive effect on the purchasing interest of Mrican street vendor consumers
c. The product quality variable has the result that it partially has a positive effect on the purchasing interest of Mrican street vendor consumers
d. The word of mouth variable has the result that it partially has a positive effect on the purchase intention of Mrican street vendor consumers

The results of this research are used as input for the relevant Mrican street vendors and the traders there to determine marketing strategies, especially in terms of price, product quality, and Word of Mouth to attract consumer purchase intention.

For further research:

a. Expand the research sample
b. Analyze other factors/variables that influence purchase intention, for example business location, menu offered, customer service, and promotions.
c. Research more about how word of mouth influences purchase intention

For Mrican street vendors:

a. Create a comfortable and pleasant atmosphere at Mrican street vendors to attract customers.
b. Offer friendly and professional service to customers.
c. Follow the latest culinary trends and offer a menu that suits market tastes.
d. Keep the business area clean and tidy

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THE EFFECT OF CONSUMER KNOWLEDGE SHARING BEHAVIOR ON CONSUMER PURCHASING BEHAVIOR IN THE CONTEXT OF E-COMMERCE IN INDONESIA

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ABSTRACT

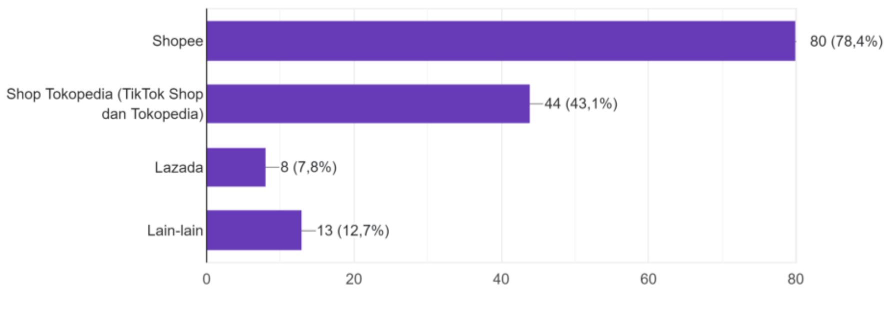
The development of information technology has revolutionized the way consumers shop. Electronic commerce (e-commerce) has become an important channel for consumers to purchase products and services. In the context of e-commerce, consumer knowledge sharing behavior, where consumers share information and experiences about products and services with others, plays an important role in influencing consumer purchasing decisions. The research design in this study is descriptive quantitative using purposive sampling technique. The research method uses surveys and data analysis to explore consumer knowledge sharing behavior on consumer purchasing behavior in Indonesia. Data was collected through an online survey of the online shopping consumer population in Indonesia with a sample size of 102 respondents. The research data was analyzed using SEM-PLS. The findings of this study are expected to provide insights for practitioners and academics in understanding the dynamics of electronic commerce, as well as provide a foundation for the development of more effective and sustainable marketing strategies in the future.

***Keywords**: E-commerce, consumer knowledge sharing behavior, consumer purchasing behavior.*

1. Introduction

The past few years have seen the development of information technology have a profound impact on the way people shop. One of the most striking changes is the development of the e-commerce industry. This is not surprising as electronic commerce brings good benefits to commerce and shortens the business-to-business sales cycle (Keenan, 2022).

Electronic commerce continues to grow because of the benefits it brings to consumers and businesses. Especially during the COVID-19 pandemic e-commerce can help in purchasing activities which encourage electronic commerce to grow significantly (Munshi et al., 2023). Based on data from Statistic Market Insights, the number of e-commerce users in Indonesia in 2023 reached 196.47 million people. The most frequently used e-commerce site in Indonesia is Shopee.



Source: Processed by researchers, 2024

Online shopping allows consumers to compare various products with the help of information related to product specifications and product reviews by other consumers. This can help consumers in determining brands that offer product quality (Bhagyasree, 2021). Promotional prices influence consumers' decision to buy online, as promotional campaigns offer lower prices and have a positive effect on sales growth. The second most important factor when shopping online is convenience, as online services are always available and goods are usually delivered to the destination, helping customers save time. The third important factor in online shopping is the ability to quickly compare goods (Svatosova, 2020).

The interaction between consumer behavior and e-commerce is of great importance in its development from simply an online commerce channel to a more sophisticated approach involving multiple electronic channels. For example, websites, mobile applications, social media, Internet TV (Rita & Ramos, 2022). People prefer to utilize the media in the process of selecting the products they will buy, this will affect consumer impressions and perceptions (Febiani et al., 2023). Customers are more likely to be influenced and motivated by the amount of information shared or information or knowledge shared through social media, including advertisements and other people's experiences (Ebrahimi et al., 2021).

Consumer knowledge sharing behavior is a key factor that can influence consumer purchasing decision behavior, where it verifies that more user involvement in online knowledge sharing will result in greater purchasing behavior (Tran, 2021 in Febiani et al., 2023). Thus consumer knowledge sharing behavior is an important factor in online purchasing, as it helps individuals or potential consumers to have ideas about available products and services, share feedback and experiences, and assist others in making decisions (Febiani et al., 2023).

Consumer decisions often involve many steps and are influenced by a number of factors including demographics, lifestyle, and cultural values (Mothersbaugh & Hawkins, 2016:6). Consumer behavior influences how marketers can communicate and deliver products that offer value to consumers and society and explains how individuals make decisions to spend available resources on products and services (Schiffman &Wisenblit, 2015:49). In the digital ecosystem, consumers are not only buyers but also producers and providers of information. What is important in any purchasing situation is to have a clear idea of the various roles that may have an impact on purchasing and consumption decisions (Hooley et al., 2020: 90). The role of consumers is necessary for companies for value co-creation. Value creation with customers is very important in helping companies achieve competitive advantage because of its effect on customer satisfaction and loyalty (Delpechitre et al., 2018).

Previous research examined consumer knowledge sharing behavior on consumer purchasing behavior in the Hungarian context. This study will examine consumer knowledge sharing behavior on consumer purchasing behavior in the Indonesian context.

2. Literature Review

2.1 Consumer Knowledge Sharing Behavior

Consumer knowledge sharing is an activity that includes sharing experiences, collecting product information, obtaining data about consumption activities, and establishing social relationships with others (Jalili, 2020). Customers are more likely to be influenced and motivated not only by the perceptions of family and friends but also by the amount of information shared or information or knowledge shared through social media, including advertisements and other people's experiences that greatly influence their purchasing behavior (Ebrahimi et al., 2021). Companies should leverage this knowledge to promote increased online shopping and online purchases given the importance of time and cost efficiency in shopping, which can also influence customer behavior (Nagy & Hajdú, 2021).

2.2 Citizenship behavior

Customer co-creation of value is defined as the process of building appropriate service experiences for customers by exchanging knowledge between service companies and consumers (Yen in Ebrahimi, 2021). One dimension of customer co-creation of value is customer citizenship behavior, which is a voluntary behavior (Yi & Gong, 2013). When customers sometimes switch roles within an organization by performing some tasks, they are considered to exhibit citizenship behavior within that organization which refers to "voluntary and discretionary behaviors that are not required for the successful production and or delivery of services but, in aggregate, help the service organization" (Delpechitre et al., 2018).

2.3 Consumer Purchase Behavior

According to Mothersbaugh & Hawkins (2016: 6) the field of consumer behavior is the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impact of these processes on consumers and society. Kotler & Keller (2016: 179) state that consumer behavior is the study of how individuals, groups, and organizations choose, buy, use, and dispose of goods, services, ideas, or experiences to satisfy their needs and desires. The conceptual model of Mothersbaugh & Hawkins (2016) developed consumer behavior can be divided into four interrelated parts, namely: External and internal influences affect consumers' self-concept and lifestyle, which in turn affect the decision process. An extended consumer decision process, consisting of a series of activities: problem recognition, information search, brand evaluation and selection, outlet selection and purchase, and post-purchase process.

2.4 Relationship Between Variables

The results of Febiani et al.'s research, (2023), suggest that sharing knowledge related to buying experiences on social media can increase trust and can influence other consumers to make purchases on social media. Research by Ebrahimi et al., (2021), also has the same results, namely sharing consumer knowledge has a positive effect on purchasing decision behavior. Customers who receive or feel high value from their buying experience will definitely share it with others, because it is in accordance with what is expected and felt. This shows that their level of citizenship behavior is very high. So that from several research results conducted by researchers, they get the same results. As the results of research conducted by Assiouras, et al., (2019) state that consumer knowledge sharing behavior has a positive effect on citizenship behavior. Likewise, the results of research conducted by according to Ebrahimi, et al., (2021) that citizenship behavior has a positive effect on consumer purchasing behavior. Because in this case the presence of individuals on a regular basis can contribute to the community in fostering brand identification. So the hypothesis below can be designed:

H1 : Consumer knowledge sharing behavior has a positive effect on consumer purchasing behavior.
H2 : Consumer knowledge sharing behavior has a positive effect on citizenship behavior
H3 : Citizenship behavior has a positive effect on consumer purchasing behavior
H4 : Consumer knowledge sharing behavior has a positive effect on consumer purchasing behavior mediated by citizenship behavior.

3. Research Methods

3.1 Type of Research

The type of research used in this research is quantitative research. According to Sugiyono (2017: 23) quantitative research is a research method based on positive philosophy with the aim of researching on certain populations or samples and using research instruments in data collection.

3.2 Population

Population is a generalization area consisting of objects or subjects whose quantity and characteristics are applied by researchers with the aim of studying and studying and then drawing conclusions (Sugiyono, 2017: 136). The population of this study is Indonesian people who know and have bought using ecommerce.

3.3 Sample

The sample is part of the number and characteristics of the population (Sugiyono, 2017: 137). This study uses a nonprobability sampling method with purposive sampling technique. The sample in this study were several people who had bought through ecommerce with a sample size of 100 people. Sample considerations in this study are respondents with a minimum age of 13 years with age groupings ranging from adolescents, young adults, adults, older adults who have made purchase transactions in e-commerce at least once.

Table 1. Demographic Profile

Respondent Profile	***Total***	***Percentage***
Gender		
Woman	66	64,7 %
Man	36	35,3 %
Age		
13-18	2	2 %
19-24	35	34,3 %
25-64	65	63,7 %
Income		
IDR 0 - IDR 1,500,000 per month	26	25,5 %
> IDR 1,500,000 - IDR 2,500,000 per month	21	20,6 %
> IDR 2,500,000 - IDR 3,500,000 per month	25	24,5 %
> IDR 3,500,000 per month	30	29,4 %

Source: Processed by researchers, 2024

3.4 Research Variables

According to Sugiyono (2017: 68), a variable in research is a value from people in the scientific field or activities that have certain variations set by researchers to study, and conclusions are drawn to obtain research results. The variables associated with this study are:

3.4.1 Independent Variables (Explanatory Variables)

The independent variable in this research is consumer knowledge sharing behavior.

3.4.2 Dependent Variable (Dependent Variable)

The dependent variable in this research is consumer purchasing behavior

3.4.3 Mediation Variables

The mediating variable in this research is citizenship behavior

Table 2. Confirmation of Factor Analysis

Variable	Indicator	Source
Consumer Knowledge Sharing Behavior	Share Experience and Knowledge Involvement	Ebrahimi et al., (2021)
Citizenship Behavior	Feedback Advocacy Help Tolerance	Yi & Gong., (2013)
Consumer Purchase Behavior	Perception Information shared or knowledge gained Other people's experiences	Ebrahimi et al., (2021)

3.5 Data Collection Technique

The data collection technique in this research was carried out using a questionnaire distributed online. The questionnaire was in the form of a Google Form and distributed to respondents who had shopped using e-commerce. The measurement scale used in this research is a Likert scale with 5 scales.

3.6 Instrument Testing Technique

3.6.1 Validity Test

Sugiyono (2019) states that the validity test is the similarity of data reported by researchers with data obtained directly that occurs with research subjects. The validity test is used to measure the validity or validity of a questionnaire. A questionnaire is said to be valid if the statements in the questionnaire are able to reveal something that the questionnaire will measure. Test the validity of each question if r count > r table at a significant level ($\alpha = 0.05$) then the instrument is considered valid and if r count < r table then the instrument is considered invalid.

3.6.2 Reliability Test

In this research, reliability is sought using the alpha or Cronbach's alpha (α) formula with the condition that the alpha value is > 0.60; Questionnaire data can be said to be reliable.

3.7 Data Analysis Technique

In this research, the analysis testing technique uses questionnaire analysis techniques which are loaded into the SmartPLS software. Apart from that, the PLS method will also be looked at. This method is carried out to find out that the resulting data will be checked again to determine its consistency in order to minimize errors and mistakes. According to Musyaffi et al., (2022) there are 2 (two) models in PLS:

3.7.1 Outer model (Measurement model)

A measurement model is a model that explains the relationship between latent variables in the form of exogenous (influencing) variables and endogenous (influenced) variables with indicators or measurement variables in research. Measurements are carried out to provide value in reliability and validity analysis.

3.7.2 Inner model (Structural Model)

The structural model is to identify and see the relationship between exogenous and endogenous variables in research. The relationships analyzed will answer the objectives of the research which will be presented through testing the hypotheses in the research.

4. Research Findings and Discussion

The behavior of sharing consumer knowledge which can be used to increase trust and be able to influence the perceptions of other consumers has led to many studies identifying several factors that can influence consumer behavior. So in this research the research results attached are the test results as follows:

Table 3. Confirmation of Factor Analysis

Variable	Indicator	Description of Factor Analysis
Customer Knowledge Sharing Behavior	CKSB 1.1 CKSB 1.2 CKSB 1.3	0,893 0,908 0,920
Citizenship Behavior	CB 1.1 CB 1.2 CB 1.3 CB 1.4 CB 1.6	0,752 0,755 0,853 0,853 0,743
Customer Purchase Behavior	CPB 1.1 CPB 1.2 CPB 1.3	0,907 0,952 0,921

Source: Processed by researchers, 2024

Table 4. Reliability and Validity Model

Variable	Cronbach's Alpha	rho_A	Average Variance Extracted	Composite Reliability	R-Square
Customer Knowledge Sharing Behavior	0,892	0,896	0,823	0,933	
Citizenship Behavior	0,852	0,867	0,629	0,894	0,407
Customer Purchase Behavior	0,918	0,927	0,859	0,948	0,309

Source: Processed by researchers, 2024

Table 5. Hypothesis Testing

Hypothesis	Description	T- Statistics	P-Value	Information
H1	*Customer Knowledge Sharing Behavior → Customer Purchase Behavior*	0,899	0,369	Not Supported

H2	*Customer Knowledge Sharing Behavior → Citizenship Behavior*	7,361	0,000	Supported
H3	*Citizenship Behavior → Customer Purchase Behavior*	3,436	0,001	Supported
H4	*Customer Knowledge Sharing Behavior → Citizenship Behavior → Customer Purchase Behavior*	2,103	0,004	Supported

Source: Processed by researchers, 2024

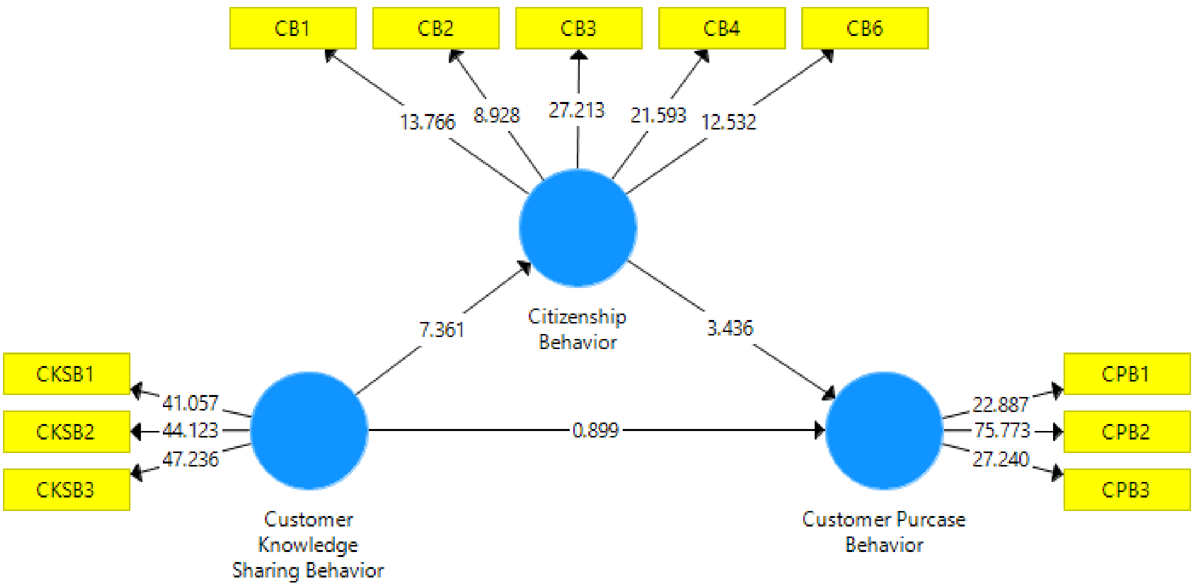


Figure 1. Partial Least Square Model
Source: Processed by researchers, 2024

The significance of the research hypothesis can be determined through the hypothesis test conducted. The results of hypothesis testing can be done using t-statistic analysis of t-statistic values and p-values. In testing the hypothesis that consumer knowledge sharing behavior has a positive effect on consumer purchasing behavior (H1), a p-value is obtained that does not meet the criteria so that H1 is declared unsuccessful and rejected. It can be concluded that consumer knowledge sharing behavior has no positive effect on consumer purchasing behavior.

In testing the hypothesis that consumer knowledge sharing behavior has a positive effect on citizenship behavior (H2), a p-value is obtained that matches the criteria, so the second hypothesis is declared accepted and influential. So, it can be said that consumer knowledge sharing behavior has a positive effect on citizenship behavior.

In testing the hypothesis Citizenship behavior has a positive effect on consumer purchasing behavior (H3), the p-value is obtained in accordance with the criteria, so the third hypothesis is declared accepted and influential. It can be concluded that testing the hypothesis Citizenship behavior has a positive effect on consumer purchasing behavior.

In testing the hypothesis Consumer knowledge sharing behavior has a positive effect on consumer purchasing behavior mediated by citizenship behavior (H4), the p-value is obtained in accordance with the criteria, so that the third hypothesis is declared accepted and influential. It can be concluded that testing the hypothesis that consumer knowledge sharing behavior has a positive effect on consumer purchasing behavior is mediated by citizenship behavior.

5. Conclusions

This study found that consumer knowledge sharing behavior does not directly affect consumer purchasing behavior. However, consumer knowledge sharing behavior can influence consumer purchasing behavior indirectly through the mediation of citizenship behavior. Consumers who actively share knowledge about products and services tend to have higher citizenship behavior, which in turn can encourage them to buy these products and services.

These findings have important implications for companies looking to increase their online sales. Companies need to encourage and facilitate consumers' knowledge sharing behavior on their online platforms. This can be done by providing online spaces for product discussions and reviews, and by encouraging consumers to share their experiences. In addition, companies need to build strong relationships with consumers who actively share knowledge, as they can be effective influencers for the company's products and services.

This study also provides some recommendations for future research. First, future research can further examine the mediating mechanism between consumer knowledge sharing behavior and consumer purchasing behavior. Second, future research can examine other factors that may influence consumer knowledge sharing behavior, such as culture and social values.

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THE INFLUENCE OF AMBASSADOR BRAND, PRODUCT QUALITY AND PROMOTION ON AZARINE SUNSCREEN PURCHASING DECISIONS (Case Study of Students at USD)

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ABSTRACT

Competition for skincare is increasing due to the increasing need for skincare among the public. One of them is sunscreen which is the basic and main choice for protecting the skin from exposure to UV rays. One of them is the Azarine sunscreen product which is very popular with the public, especially young people. This research aims to find out whether brand ambassadors, product quality and promotions have a positive and significant influence on the decision to purchase Azarine sunscreen. The independent variables used in this research are brand ambassador, product quality and promotion. Meanwhile the dependent variable used in this research is purchasing decisions. The sampling technique uses accidental samples, namely with the criteria of respondents aged 17 years and over. This research is quantitative. Data collection was carried out by collecting questionnaires from 90 respondents by partially testing brand ambassadors, product quality and promotions. The data analysis used in this research is multiple linear regression. The results of this research show that brand ambassadors have a significant influence on purchasing decisions, product quality has a positive and significant influence on purchasing decisions, while promotions do not significantly influence purchasing decisions.

Keywords: *Brand ambassador, promotion, product quality and purchasing decisions*

1. Introduction

The increasing need for skincare among the public has recently caused competition between skincare manufacturers to increase. This makes skincare manufacturers work hard to increase sales by using efficient and effective marketing strategies. Facial skin health is a top priority for many people. Common problems such as acne, blackheads, oily skin, and dry skin should be avoided and prevented. The importance of choosing the right products to protect the skin from sunlight and provide the nutrients the skin needs is important to understand. Sunscreen is one of the basic skincare products and is the main choice for protecting skin from exposure to UV rays, especially for those who live in tropical areas. The increasing demand for sunscreen products has encouraged the cosmetics industry to continue to innovate in providing high quality products.

One of the skincare products that is currently popular with the public, especially young people, is the Azarine Cosmetic product. PT. Wahana Kosmetik Indonesia produces skincare with the registered brand Azarine SPA Products which is headquartered in Sidoarjo, and was established on September 1 2022. This product has a safe permit for use from BPOM. One of Azarine's products that is most sought after and sought after by teenagers is Azarine Hydrasoothe Sunscreen Gel SPF 45++++50 ml. Sales of Azarine products have increased significantly, especially on e-commerce platforms such as Shopee and Tokopedia. Data from the Compas Dashboard records that more than 127 thousand sunscreen products were sold on both platforms during the period 16-30 September 2023. Of the 7 best-selling brands, 5 of them are local brands, with Azarine ranking first, followed by Madam Gie, The Originote, Facetology, and Wardah.

In this case, companies have an important role in creating marketing strategies that can attract consumer interest. One way is to use brand ambassadors. A brand ambassador is someone who becomes an advertising star in presenting a product.(Setyorini, 2016)said that actors/actresses are highly trusted and trusted as one of the supporting factors from a psychological perspective that can influence consumers' attitudes and beliefs in the product. One of the brand ambassadors used by Azarine Cosmetic is actor Lee Min Ho. This famous actor from Korea has become the icon for the Azarine sunscreen product and has had a huge impact in increasing consumer interest.

Apart from marketing strategies, companies also play an important role in maintaining product quality. Product quality is an important factor in determining whether a product is suitable or not to be marketed, seen from the form, advantages and suitability of using the product.(Tjiptono, 2008). Sunscreen's ability to prevent sunburn, premature aging, and reduce the risk of skin cancer are important points in the quality of the product. Azarine offers several variants of sunscreen products with a lower SPF, namely 35 to the highest, namely 50. It could be said that this sunscreen has a higher content than other brands. This sunscreen product is also easily absorbed into the skin, is light and provides a cool sensation and does not have a white cast effect on the skin. Azarine sunscreen is safe to use for all skin types because it is formulated with natural extract ingredients which are suitable for all skin types and are able to nourish the skin.

Promotion is one of the important factors that the Azarine company must do to increase sales. Every company will try to make promotions as attractive as possible to be superior to its competitors. The company hopes that the promotion will provide short-term and long-term stimulation to consumers so that consumers are interested in exploring and getting to know the product, which will ultimately have an impact on the purchasing process.(Sulivyo, 2021)said that in the business world promotions are very important and much needed in communicating goods to customers, companies will also use promotions to show product quality and encourage customers to buy.

From previous research conducted by(Putri Maharani, 2024)obtained results that brand ambassadors had a significant positive influence on purchasing decisions for Azarine sunscreen products. Then research regarding product quality was carried out by(Lestari, 2023)said that product quality partially influences purchasing decisions. Other previous research has been carried out by(Heny Herawati, 2019)said that promotions had a positive but not significant effect on purchasing decisions. Based on the results of the previous research described above, this research was conducted to find out whether brand ambassadorship, product quality and promotion influence the decision to purchase Azarine sunscreen products, where this research will be conducted on active students at Sanata Dharma University, Yogyakarta.

More and more people are using sunscreen in this era. Because people are aware and know that sunscreen is very important to use in protecting and caring for skin, especially from exposure to sunlight. Of course, when choosing sunscreen, you must also be careful according to each person's interests and tastes. Currently, one of the most popular sunscreens is Azarine sunscreen. Therefore, Brand Ambassadors, product quality and promotions influence product purchasing decisions, one of which is Azarine sunscreen.

2. Literature Review

2.1 Brand Ambassador (Brand Ambassador)

Marketing competition for products and services must implement various aspects to attract consumer attention, one of which is by utilizing brand ambassadors. Brand Ambassadors are famous people or individuals or celebrities who play a role in portraying the best image of a product(Lestari, 2019).(Greenwood, 2013)said a brand ambassador is a famous person or celebrity published in a media who collaborates with an industry to interact and strengthen ties with the general public, with the aim of increasing sales. Using indicators(Greenwood, 2016)among others:

a. Credibility, is consumers who see that the brand ambassador has relevant knowledge, abilities or experience and these sources can be convinced and trusted so that they can provide objective and unusual information.
b. *Transference* is a famous person orcelebritywho can endorse a brand related to their profession.
c. Congruence occurs when the image, values and personality of a brand ambassador match those of the brand they represent. This conformity aims to make things easier for consumersntrust and accept the message conveyed by the brand ambassador.
d. Attractiveness is a quality possessed by a brand ambassador so that it can be attractive and can be trusted by consumers.
e. Poweriscapabilities that can influence consumer perceptions and behavior.

2.2 Product Quality

(Aristya, 2019) states that product quality is a criterion for a product or service. Industry must provide goods and services of superior quality and be able to make consumers feel satisfied with the quality of the product, in this way, an industry can easily gain market leadership. Quality means that it can reflect all aspects of the product offering that benefit consumers(Prihandono, 2019). Product quality uses indicators(Keller, 2009)by considering indicators that are appropriate to the research object, namely:

BForm is something thatshowon the physical aspects of a product such as size, color, texture and others.

a. FFeatures are product characteristics that are adjusted to enhance benefits or increase consumer interest in the product.
b. Conformity Quality is the creation of products/services that meet the desires required by consumers.
c. Durability is a characteristic of a product that shows its ability to meet needs.
d. Reliability is a measure of the small possibility that a product will not easily break or fail.
e. Ease of repair is a form of repair of a product that is experiencing a failure in its function.
f. Style is a form of appearance of a product that shows its image and appearance.
g. Design is the process of creating a concept that documents a product.

2.3 Promotion (Promotion)

(Amstrong, 2012), states that promotions are activities that communicate the benefits of a product and invite consumers to buy the product being offered. This definition explains further that potential buyers will buy the desired product when they know the advantages and disadvantages of the product compared to competing products. According to(Herlambang, 2019)The indicators used for this research are as follows:

a. Advertising is an activity of conveying messages to the wider community through paid media. The goal is to introduce a particular product, service or idea to the public and persuade themFordo something.
b. Sales Promotion is an activitymarketing whichaims to increase sales in a short period of time.
c. Public relations with publicity, isfieldconstructive strategic communicationconnectionmutual benefit between the organization and its public.

d. Personal selling is a marketing strategy in which a seller directly persuades consumers to buy certain products or services.

2.4 Purchase Decision

(Kotler, 2012), says that a purchasing decision is a consumer who has made the decision to buy an item or product through stages such as what needs are required, activities before purchasing and behavior when using the item that has been purchased and how they feel after purchasing the item or product. Next, related to factors that influence purchasing decisions:

a. Price of products or services
b. Consumer reviews and information about products or services
c. Consumer desires or needs
d. Influence of other people

2.5 There is an influence of brand ambassadors on purchasing decisions

Previous research conducted by(Putri Maharani, 2024)obtained results that brand ambassadors have a positive and significant influence on purchasing decisions and this finding is the same as research conducted by(Lailiya, 2022)who said the same thing that brand ambassadors were proven to have a significant and positive influence on purchasing decisions. From these two studies it can be concluded that brand ambassadors have a high influence on consumer purchasing decisions.

H1: Brand Ambassadors influence the decision to purchase Azarine sunscreen products

2.6 There is an influence of product quality on purchasing decisions

Previous research conducted by(Amrullah Amrullah, Pamasang S Siburian, 2016)which states that product quality has a positive and significant effect on purchasing decisions, as is the case with research conducted by(Rohmatul Ummat, 2022)which states that product quality has a significant positive effect on purchasing decisions. This is confirmed by proving that consumers tend to prefer products with high quality compared to products with low quality.

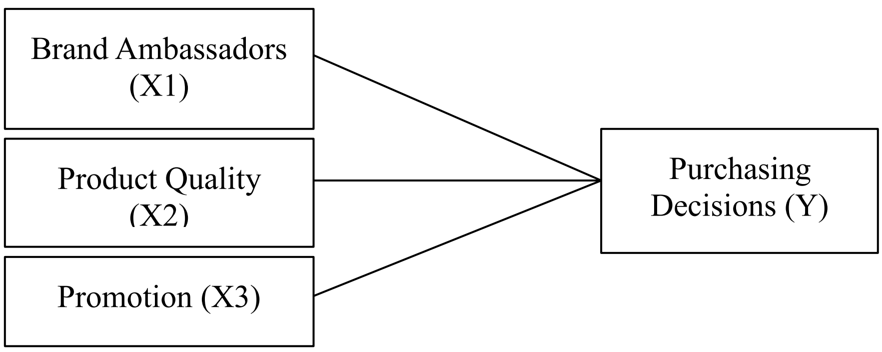
H2: Product quality influences the decision to purchase azarine sunscreen products

2.7 There is an influence of promotion on purchasing decisions

Previous research that has been carried out(Intan LinaKatrin, Hp Diyah Setyorini, 2016)states that promotions have a positive and significant influence on purchasing decisions which is very important in influencing purchasing decisions, as is the case with research conducted by(Mira Istiqomah, 2020)which states that promotions have a positive and significant influence on purchasing decisions. This shows that promotion is an effective thing that can increase consumers' opportunities to buy a product.

H3: Promotion influences purchasing decisions for Azarine sunscreen products

Figure 1. Thinking Framework



3. Research Methods

In this research, the object that is the focus of our research is Sunscreen Azarine, which is a beauty product originating from Indonesia which is present as a solution for people, especially young people, to maintain healthy, bright skin and of course not dry out due to exposure to sunlight. UV or sunlight.

3.1 Research Design

In this research we use quantitative research methods. This research is a research approach in which the results are presented in the form of statistical figures as a calculation test tool, which is related to the problem to be studied in order to produce a conclusion.(ARIF, 2020).

3.2 Research Data

The data collection technique uses a questionnaire that is created and loaded in a Google form and then distributed to respondents. The criteria for this research are active Yogyakarta students who of course use Azarine sunscreen products and often buy this product. The number of variables used in this research is 4 variables, namely brand ambassador variables, product quality and promotion as variable X which influences and variable Y which is influenced.

3.3 Population and Sample.

The population in this study were Azarine sunscreen users, active students at Sanata Dharma University, Yogyakarta. Samples are consumers who buy Azarine sunscreen products. The sampling technique in this research was an accidental sampling technique with a criterion of 90 respondents. The data used in this research is data from field observations, namely by distributing questionnaires in the form of Google forms to respondents via WhatsApp and Instagram. The characteristics of the respondents in this research are active students at Sanata Dharma University Yogyakarta and students who use Azarine sunscreen.

3.4 Data Analysis Techniques

3.4.1 Descriptive test

Descriptive analysis is statistics used to analyze data by describing data that has been collected as it is without intending to make general conclusions or generalizations.

3.4.2 Reliability test

Is an analysis that is widely used to determine the consistency of measuring instruments that use scales, questionnaires or questionnaires. If the overall Cronbach's Alpha value is > 0.6, it means that the questionnaire statement items have been declared reliable and can be trusted and can be used by future researchers.

3.4.3 Validity test

Instrument validity testing can be seen in the Crorected Item Correlation column. If the correlation number obtained is > than the critical number (r-count>r-table) then the instrument can be said to be valid.

3.4.4 Normality test

In the Normality test, it will test whether in a regression model, an independent variable and a dependent variable or both have a normal or abnormal distribution.(Dika Oktavia Sihombing, 2022). The purpose of the normality test is to test whether in the regression model, the confounding or residual variables have a normal distribution. It is known that the t and F tests assume that the residual values follow a normal distribution. The data normality test can be carried out using the one sample Kolmogorov Smirnov test, namely with the following conditions:

a. If the significance value is above 5% or 0.05 then the data has a normal distribution.
b. If the results of the one sample Kolmogorov Smirnov test produce a significant value below 5% or 0.05, then the data does not have a normal distribution.

3.4.5 Multicollinearity Test

Multicollinearity testing aims to determine whether the regression model found any correlation between independent variables or independent variables(Dika Oktavia Sihombing, 2022).This test causes an effect, namely high variables in the sample. This means that the standard error is large, which means that when the coefficient is tested, the t-count will be a smaller value than the t-table. This means that there is no linear relationship between the independent variable that is influenced by the dependent variable.

The following are the conditions for the Multicollinearity Test:

a. To find whether or not there is multicollinearity in the modelregression canknown from the tolerance value and variance inflation factor (VIF) value
b. Guidelines basedMarkTolerance
   1) If the tolerance value is greater than 0.10 then multicollinearity does not occur.
   2) If the tolerance value is smaller than 0.10 then multicollinearity occurs.
c. Guidelines based on VIF Value:
   1 If the VIF value is <10.00, it means that there is no multicollinearity in the regression model.
   2) If the VIF value is > 10.00, it means that multicollinearity occurs in the regression model.

3.4.6 Heteroscedasticity Test

This test aims to test whether in a regression model there is a difference in variance from the residuals from one observation to another. If the variances are different, it is called heteroscedasticity. The way to find out whether there is heteroscedasticity in a multiple linear regression model is by looking at the Scatterplot graph or from the predicted value of the dependent variable, namely SRESID, with the residual error, namely ZPRED. If there is no particular pattern and it does not spread above or below zero on the y-axis, then it can be concluded that heteroscedasticity does not occur.(ARIF, 2020)

3.4.7 Linearity Test

This test is used to see whether the model built has a linear relationship or not. This test is rarely used by researchers because it is usually formed based on theoretical studies that the relationship between the independent variable and the dependent variable is linear. Relationships between variables that in theory are not linear relationships can no longer be analyzed using linear regression, for example elasticity problems.

3.4.8 Coefficient of Determination Test

The Coefficient of Determination Test is used to find out how much the independent variable is able to explain the variance of the dependent variable. This is shown by the Adjusted R Square value. A negative value indicates that the independent variable cannot explain the variance of the dependent variable.

3.4.9 F test

This test was carried out to determine whether there was a significant influence between the independent variables in multiple linear regression on the dependent variable. A significance value of less than 0.05 indicates that there is a simultaneous influence between variable X on variable Y. A significance value of more than 0.05 indicates that there is no simultaneous influence of the variables.

3.4.10 T test

This test was carried out to find out whether there was a significant influence between the independent variable and the dependent variable. A significance value of less than 0.05 indicates that there is an influence of the independent variable on the dependent variable, while a significance value of more than 0.05 indicates that there is no influence of the independent variable on the dependent variable. The calculated t value is greater than the t table which shows the influence of the independent variable on the dependent variable. Meanwhile, if the calculated t value is smaller than the t table, it means that there is no influence between the independent variable and the dependent variable.

4. Research Findings and Discussion

4.1 Descriptive Analysis

Table 1 Descriptive Analysis Results

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Brand Ambassadors	90	100.00%	0	0.00	90	100.00%
Product Quality	90	100.00%	0	0.00	90	100.00%
Promotion	90	100.00%	0	0.00	90	100.00%
Buying decision	90	100.00%	0	0.00	90	100.00%
a. Limited to first 90 cases						

In table 1 above is a way to find out whether there are two missing data during the data processing process. So if you look at "N", the number is 90 and the percentage is 100%, therefore, during the processing process, no data in this study was lost. The total valid value in this test is 100%.

4.2 Validity Test

Table 2 Validity Test

Variable	Statement	R-Count	R-table	Information
Brand Ambassadors	X1.1	,713	0.1745	Valid
	X1.2	,598		
	X1.3	,714		
	X1.4	,688		
	X1.5	,695		
Product quality(X2)	X2.1	,596		
	X2.2	,632		
	X2.3	,632		
	X2.4	,721		
	X2.5	,723		
	X2.6	,746		
	X2.7	,746		
	X2.8	,639		
Promotion (X3)	X3.1	,728		
	X3.2	,795		
	X3.3	,714		

	X3.4	,707		
Purchase Decision (Y)	Y.1	,708		
	Y.2	,772		
	Y.3	,772		
	Y.4	,747		
	Y.5	,772		

Table 2

From table 2 above, all statements entered in the questionnaire are declared valid as seen from the calculated r value > r table.

4.3 Reliability Analysis

Table 3 Reliability analysis results

Variable	Cronbach's Alpha	N of Items	
Brand Ambassador (X1)	,697	5	Reliable
Product Quality (X2)	,841	8	
Promotion (X3)	,719	4	
Purchase Decision (Y)	,810	5	

Table 3

In table three above, if the overall Cronbach's Alpha value is > 0.6, it indicates that all the questionnaire statement items are reliable, trustworthy, and can be used for further research.

4.4 Normality Test

Table 4 Normality test results

One-Sample Kolmogorov-Smirnov Test				Unstandardize d Residual
N				99
Normal Parameters	Mean			0
	Std. Deviation			0.89302555
Most Extreme Differences	Absolute			0.165
	Positive			0.131
	Negative			-165
Statistical Tests				0.165
Asymp. Sig. (2-tailed)				<.001
Monte Carlo Sig (2-tailed)		Sig.		<.001
		99% Confidence Interval	Lower Bound	0
			upper Bound	0

Test distribution is Normal.
Calculated from data
Lilliefors Significance Correction.
Lilliefors' method based on 1000 Monte Carlo samples with starting seed 299883525.

From the results of the Kolmogorov-Smirnov test in table 4 above, it is known that the Asmpy value. Sig. (2-tailed) has a value <0.001. This shows that Brand Ambassador. Product quality and promotions are normally distributed on purchasing decisions.

4.5 Multicollinearity Test

Table 5 Multicollinearity Test

Coefficientsa								
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Tolerance	VIF Statistics
1	(Constant)	0.695	1,091		0.637	0.526		
	Brand Ambassadors	0.357	0.099	0.332	3,594	<0.001	0.392	2,551
	Product quality	0.287	0.060	0.444	4,815	<0.001	0.392	2,548
	Promotion	0.165	0.127	0.132	1,295	0.198	0.322	3,104

Dependent Variable: Purchase Decision

Based on table 5 above, it is known that the tolerance value for the Brand Ambassador variable is .392 with a variance inflation factor (VIF) value of 2.551, then the value for the product quality variable is .392 with a variance inflation factor (VIF) value of 2.548, then the tolerance value the promotion variable is .322 with a VIF value of 3.104. Because the tolerance value for each independent variable is 0.1 and the VIF value is less than 10, it is concluded that there are no signs of multicollinearity between the independent variables based on the values of these variables.

4.6 Heteroscedasticity Test

Table 6 Heteroscedasticity Test

Coefficientsa								
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Tolerance	VIF Statistics
1	(Constant)	0.684	1,169		0.586	0.560		
	X1	0.381	0.116	0.347	3,296	0.001	0.337	2,963
	X2	0.289	0.065	0.445	4,445	<0.001	0.373	2,680
	X3	0.131	0.150	0.104	0.871	0.386	0.265	3,780

a. Dependent variable: Y

In table 6 above, the significant value for each variable can be obtained and the resulting significant value is > 0.05. Therefore, it can be said that heteroscedasticity does not occur.

4.7 Linear Regression Analysis

Table 7 Linear Regression Analysis

Equation method	Adjusted R Square	F test		T test		Information
		F	Sig.	B	Sig.	
Y= 0.357X1+0.287X2+0.165X3	0.673	68,302	<0.001			

Brand Ambassador on purchasing decisions				0.357	<0.001	Hypothesis accepted
Product quality on purchasing decisions				0.287	<0.001	Hypothesis accepted
Promotion of purchasing decisions				0.165	0.198	Hypothesis rejected

In table 7, the results of the multiple linear regression equation show that the Brand Ambassador regression coefficient is 0.357 and the significance level is <0.001. This significant level is lower than the specified significant level, namely 0.05. Therefore, the brand ambassador variable has a positive and significant effect on purchasing decisions

The product quality regression coefficient shows 0.287 and the significance level is <0.001. Which means that this significant level is lower than the specified significant level, namely 0.05. So the product quality variable has a positive and significant effect on purchasing decisions

The promotion coefficient shows that the figure is 0.165 and the significance level is 0.189. This significance level is higher than the specified significance level, namely 0.05. So, the promotion variable is not significant in purchasing decisions.

4.8 T Test

Table 8 T Test

Coefficientsa								
Model		Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Tolerance	VIF Statistics
1	(Constant)	0.695	1,091		0.637	0.526		
	Brand Ambassadors	0.357	0.099	0.332	3,594	<0.001	0.392	2,551
	Product quality	0.287	0.060	0.444	4,815	<0.001	0.392	2,548
	Promotion	0.165	0.127	0.132	1,295	0.198	0.322	3,104

Dependent Variable: Purchase Decision

Based on table 7.1, the results of the T test can be obtained as follows:
Significant value < 0.05
Calculated T value > table T value
T table= 1.663

1. Based on the results of the partial T test table, it shows that the significant value of the influence of brand ambassadors (X1) on purchasing decisions (Y) is 0.001 < 0.05 and the calculated t value is 0.637 < 1.663. Therefore, H1 accepts that Brand Ambassadors have a significant influence on purchasing decisions.

2. Based on the results of the partial T test table, it shows that the significant value of the influence of product quality (X2) on purchasing decisions (Y) is 0.001 < 0.05 and the calculated t value is 4.815 > 1.663. Therefore, H2 is accepted which shows that product quality has an influence significantly influence purchasing decisions.
3. Based on the partial T test results table, it shows that the significant value of the influence of promotion (X3) on purchasing decisions (Y) is 0.198 > 0.05 and the calculated t value is 1.295 < 1.663, so hypothesis 3 is accepted which shows that promotion has no significant effect on purchasing decisions. .

4.9 F Test

Table 9 F Test

ANOVAa						
Capital		Sum of Squares	df	Mean Square	f	Sig.
1	Regression	168,573	3	56,191	68,302	<0.001b
	Residual	78,154	95	0.823		
	Total	246,727	98			

a. Dependent Variable: Purchase decision
b. Predictors: (Constant), Promotion, Product quality, Brand ambassador

This value and explanation can be derived from the F test results in table 7.2 above, the significant value of the influence of brand ambassador (X1), product quality (X2), and promotion (X3) on purchasing decisions (Y) is shown in the table above and the result is 0.001 < of 0.05 and the calculated F value is 68.302 > the respective F table value is 2.711. This shows that purchasing decisions (Y) are significantly influenced by brand ambassador (X1), product quality (X2), and promotion (X3) simultaneously.

4.10 Coefficient of Determination Test

Table 10 Determination Coefficient Test

Model Summary b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.827a	0.683	0.673	0.907

a. Predictors: (Constant), Promotion, Product quality, Brand ambassador
b. Dependent Variable: Purchase decision

Based on table 8 which is influenced by the Adjusted R Square (R2) coefficient value of 0.673 or 67.3%, it can be said that the variables brand ambassador X1, product quality X2, and promotion X3 influence purchasing decisions by 0.673 or 67.3%. Then the remaining 0.907 has an impact on other variables not included in this research.

4.11 Influence of Brand Ambassador (X1) on purchasing decisions (Y)

The results of this research show that the brand ambassador variable has a significant influence on purchasing decisions, which means the hypothesis is accepted. The results of this research can be seen from the results of the multiple linear regression test, namely the brand ambassador variable on purchasing decisions, showing the regression results on beta with the number 0.357 with a significance level of <0.001, lower than 0.05, which means that the brand ambassador variable has a significant effect on purchasing decisions.

This is in line with research conducted by(Putri Maharani, 2024) And(Lailiya, 2022) which states that the brand ambassador variable has a significant influence on purchasing decisions.

4.12 The influence of product quality (X2) on purchasing decisions (Y)

The results of this research show that the product quality variable has a positive and significant effect on purchasing decisions, which means the hypothesis is accepted. The results of this research can be seen from the results of the multiple linear regression test, namely the product quality variable on purchasing decisions, showing the regression results on beta with the number 0.287 with a significance level of <0.001, lower than 0.05, which means that the product quality variable has a positive and significant effect on buying decision.

This is in line with research conducted by(Amrullah Amrullah, Pamasang S Siburian, 2016)And(Rohmatul Ummat, 2022)which states that the product quality variable has a positive and significant effect on purchasing decisions.

4.13 Influence of promotions (X3) on purchasing decisions (Y)

The results of this research indicate that the promotional variable does not have a significant effect on purchasing decisions, which means the hypothesis is rejected. The results of this research can be seen from the results of the multiple linear regression test, namely the promotion variable on purchasing decisions, showing the regression results on beta with the number 0.165 with a significance level of 0.198, which is higher than 0.05, which means that the promotion variable does not have a significant effect on purchasing decisions.

This is in line with research conducted by(Heny Herawati, 2019) which states that the promotional variable does not significantly influence purchasing decisions.

5. Conclusion

Based on the data analysis carried out in the previous chapter regarding the influence of brand ambassadors, product quality and promotion on the decision to purchase Azarine sunscreen, we can conclude that: the results of testing the first hypothesis show that there is a significant influence between brand ambassadors on purchasing decisions. This shows that respondents considered the brand ambassador attractive so that respondents decided to buy Azarine sunscreen products because they thought they were good. The results of testing the second hypothesis show that there is a significant and positive influence between product quality and purchasing decisions. This shows that the better the quality of the Azarine sunscreen product, the greater and more consumers will decide to buy the Azarine sunscreen product. The results of the third hypothesis test show that there is no significant influence between promotions and purchasing decisions. This shows that although respondents consider the promotion of this sunscreen product to be interesting, there may be other reasons why respondents are not interested in buying Azarine sunscreen.

Based on the results of the research that has been carried out, the researcher provides several suggestions for future research such as: in this study the sample used was limited to active students at Sanata Dharma University using the questionnaire method as a data collection tool. For future researchers, the sample used could be wider with an increased number of respondents. It is recommended that further researchers add variables or try to replace one of the other variables in order to find out other factors that influence purchasing decisions.

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THE INFLUENCE OF WORK MOTIVATION, WORK ENVIRONMENT, AND WORK-LIFE BALANCE ON THE PERFORMANCE OF EMPLOYEES IN THE FORESTRY BRANCH OFFICE OF CENTRAL JAVA PROVINCE, REGION VI

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ABSTRACT

Employee performance is considered a crucial factor in the sustainability and success of a company. The higher the performance level of an employee, the greater the achievement of company goals will be. This research aims to determine the influence of work motivation, work environment, and work-life balance on the performance of employees in the Forestry Branch Office of Central Java Province, Region VI. The research sample consists of 50 individuals, all of whom are employees of the Forestry Branch Office of Central Java Province, Region VI, using a saturated sampling method. The data analysis techniques in this study include validity testing, reliability testing, classical assumption testing, multiple linear regression, and hypothesis testing. The results of this research are expected to provide a deeper understanding of the factors affecting employee performance and serve as a basis for improvements in human resource management.
***Keywords**: Work Motivation, Work Environment, Work-Life Balance, Performance*

1. Introduction

Employee performance is an aspect that significantly influences the sustainability and success of a company. According to Mathis and Jackson (2018), employee performance is the measure of the contribution a worker provides to the organization in terms of output quantity, output quality, output duration, workplace attendance, and cooperative attitude. The productivity of employee performance can be influenced by various factors, including work motivation, work environment, and work-life balance within an organization.

Dessler and Gary (2015) define human resource management as the policies and practices that determine the human or human resource aspects in management positions, including aspects of people or human resources from a managerial perspective, encompassing recruitment, screening, training, compensation, and evaluation. In an organization, the human resource management (HRM) system is an essential factor that cannot be separated HRM is the driving force in an organization and plays a crucial role in achieving organizational goals.

According to Noor (2013, cited in Jufrizen & Sitorus, 2021), work motivation is the drive that motivates an individual to carry out assigned tasks in order to achieve organizational goals. Work motivation is a collection of energy that comes from both internal and external sources (Adinda & Firdaus, 2023).

In addition to work motivation, the work environment is also an important aspect that affects employee performance in a company. According to Soetjipto 2008 (in Octaviani & Dasmadi, 2021), the work environment consists of elements that directly or indirectly influence employee performance, which can have either positive or negative impacts on the company. It is crucial to create a pleasant work environment as it directly impacts employee performance. If the work environment is pleasant, employees can contribute significantly to the company. Conversely, an unpleasant work environment can lead to decreased employee performance and ineffective results (Sihaloho & Siregar, 2020).

Work-life balance can be defined as the equilibrium between work and personal life for an employee. Badrianto and Ekhsan (2021) state that good work-life balance will encourage commitment and desire for employees to stay and remain in the organization.

Good employee performance will assist a company in achieving its goals (Fauzi & Fikri, 2022). The Branch Office of Forestry in Central Java Province, Region VI, located at Jalan Gatot Subroto No67, Kedungwuluh, West Purwokerto, is a part of the Regional Government Agency responsible for forestry affairs, established as a service unit with jurisdiction over Region VI (Banyumas, Purbalingga, and Cilacap). The branch office that oversees three district areas certainly requires employee productivity for the successful execution of tasks. Therefore, the author is interested in researching work motivation, work environment, and work-life balance, which may affect the performance of employees in the Forestry Department Branch of Central Java Province, Region VI.

Previous studies (Jufrizen & Sitorus, 2021; Irawan et al, 2022; Ningsih & Hermiati, 2023) have revealed that work motivation, work environment, and work-life balance variables influence employee performance. However, there is a difference with previous research findings by (Prastyo & Santoso, 2022; Saifullah, 2020) which indicate that work environment and work-life balance variables do not affect employee performance. This inconsistency in results becomes a research gap. Through this research, the author aims to demonstrate that work motivation, work environment, and work-life balance have an impact on employee performance.

2. Literature Review

2.1 Work Motivation

Reksohadiprodjo (2015) stated that motivation is the state in which someone realizes their desires to complete specific activities to achieve certain goals. According to Sutrisno (2016), motivation is an aspect that supports and encourages an individual's behavior in carrying out a particular activity. Rozalia 2015 (in Adipradana & Andriyani, 2021) says that work motivation makes employees work harder to achieve specific goals and optimize employee performance in achieving company objectives. According to Maslow (in Antika & Nataraningtyas, 2021), the indicators used to measure work motivation are:

a. Physiological Needs: related to basic human needs, both biological and physical Basic needs include clothing, food, and shelter.
b. Safety Needs (feeling secure): every individual needs protection to feel physically and emotionally safe.
c. Social Needs: related to an individual's need to be accepted in a group, socialize, and love and be loved.
d. Esteem Needs: the need to feel valued and respected by others It can be in the form of appreciation, recognition, or achievement.
e. Self-actualization Needs: the need to express opinions, ideas, and criticism.

2.2 Work Environment

According to Sedarmayanti (2017), the work environment is a place where a group gathers to achieve the company's goals, and it is equipped with supporting facilities. Siagian (2014) states that in general, the physical work environment refers to the physical form of the surroundings at the workplace that affects employees. A good physical work environment includes factors such as the workplace building, adequate work equipment, facilities, and transportation availability.

2.3 Work-Life Balance

Work-life balance can be described as an individual's ability to manage work, family commitments, and other responsibilities outside of work. According to Robbins & Coulter (2020), work-life balance programs encompass individual care, parental and child care, employee health and well-being, and relocation McDonald and Bradley (2013, as cited in Lingga, 2020) state that work-life balance can be measured through:

a. Time balance: involving the amount of time allocated to work and activities outside of work.
b. Involvement balance: encompassing the level of psychological engagement and commitment both in and outside of work.
c. Satisfaction balance: including job satisfaction levels while working and in non-work-related aspects.

2.4 Employee Performance

Moeheriono (2014) defines performance as a depiction of the level of success in implementing an activity or policy to achieve the goals, objectives, vision, and mission of an organization through strategic planning. Mangkunegara (2016) defines performance as the work results achieved by an employee, both in terms of quality and quantity, following the responsibilities assigned. Based on these definitions of performance, it can be concluded that employee performance is the result of their work in achieving organizational goals with good performance. According to Setiawan & Dewi 2014 (cited in Agung & Lestariningsih, 2022), employee performance measurement can be done through accuracy in task completion, suitability of working hours, and attendance level.

2.5 The Development of Hypotheses

Motivation can drive employees to work harder to achieve their goals (Hamidi, 2020). According to Kasmir (2016), an employee will perform well if they receive encouragement from within themselves or from the company. Research conducted by Susanto (2019) shows that work motivation has a positive impact on employee performance.

H1: Partially, work motivation affects employee performance.

Sihaloho & Siregar (2020) state that a pleasant work environment can make employees feel comfortable and improve their performance Research conducted by Irawan et al, (2022) also shows that the work environment in a company has a positive and significant influence on employee performance

H2: The work environment partially affects employee performance.

Saina 2016 (in Muliawati & Frianto, 2020) revealed that work-life balance is a balance between work and each individual's personal life. Seeing the limited human resources, the problem arises how a person can have a satisfying personal life but still give maximum effort at work. So the question arises whether the two can complement each other or contradict each other (Koubova and Buchko, 2013). In recent years, it has been shown that work-life balance is very important on employee performance. This is evidenced by the increase in employee productivity and has a positive impact on the company (Semlali and Hassi, 2016).

H3: Work-life balance partially affects employee performance.

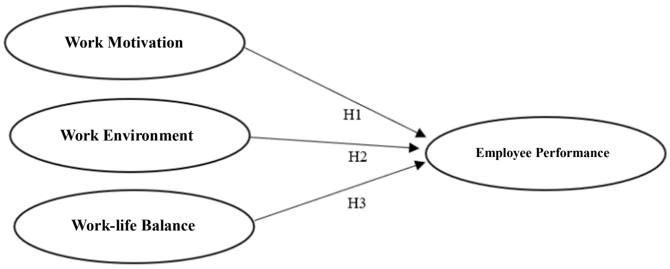

Figure 1. *Conceptual Framework of Research*

3. Research Methods

3.1 Research Design

The research design used in this study is quantitative with a survey method. Quantitative research is a method used to study a specific population or sample, collecting data using research instruments, analyzing data quantitatively/statistically, with the aim of testing predetermined hypotheses (Sugiyono, 2019).

3.2 The Population and Sample

The population in this study consists of all employees of the Central Java Province Forestry Branch VI, totaling 50 people, consisting of the Administrative Section, Rehabilitation and Conservation of Natural Resources Section, and Functional (extension) staff In this study, a saturated sample method is used by using population members as the sample.

3.3 Research Data

The data used in this study is primary data. Primary data was obtained from questionnaires distributed to respondents. Questionnaires are a technique for collecting data by presenting respondents with several written questions or statements (Sugiyono, 2018)

3.4 Data Analysis Technique

3.4.1 Validity Test

The validity test aims to measure the accuracy of a questionnaire. An instrument is considered valid if it accurately measures what needs to be measured (Sugiyono, 2018). The criteria for testing are as follows:

$r_{computed} > r_{table}$, indicating that the questionnaire test is valid

$r_{computed} \leq r_{table}$, indicating that the questionnaire test is considered invalid

3.4.2 Reliability Test

Reliability testing measures how consistent and stable a measurement is over time. This is important to ensure that the measurement is accurate and unbiased, making it reliable for measuring the desired concept (Sekaran & Bougie, 2016). Data reliability testing uses the Cronbach's Alpha analysis method. The test results are considered to have good reliability if the Cronbach's Alpha value falls within the range of 08-10, accepted reliability if the value is within the range of 06-079, and poor reliability if the Cronbach's Alpha value is < 06 (Arikunto, 2016)

3.5 Classical Assumption Test

3.5.1 Normality Test

This test aims to determine whether the distribution of residual values is normal or not. A good regression model has normally distributed residuals Mardiatmoko (2020). The method used to test the normality of data in this study is the Kolmogorov-Smirnov test. Data is considered normally distributed if the significance value of the test result is > 005

3.5.2 Multicollinearity Test

The multicollinearity test aims to determine whether there is a linear correlation between independent variables in the regression model. Multicollinearity can render the multiple regression equation unusable for forecasting Ghozali (2018). To determine the presence of multicollinearity, we look at the tolerance value and the Variance Inflation Factor (VIF) If the tolerance value is greater than 01 and the VIF is less than 10, there is no multicollinearity in the regression model.

3.5.3 Heteroskedasticity Test

According to Ghozali (2018), the heteroskedasticity test is used to determine whether there is inequality in variance and residuals in a regression model between one observation and another. To identify any issues, one can examine the pattern in the scatterplot graph between SRESID and ZPRED, where the Y-axis represents residuals and the X-axis represents the predicted values. If there is a systematic pattern in the scatterplot, it indicates heteroskedasticity; otherwise, heteroskedasticity is not indicated The significance value should be greater than 005.

3.6 Hypothesis Test

3.6.1 t-Test

The t-statistic test is conducted to determine the impact of an independent variable in explaining the dependent variable (Ghozali, 2018). If the t-test result yields a value of $\alpha \leq 005$, then the independent variable significantly affects the dependent variable.

3.6.2 F Test

According to Ghozali (2018), the F statistical test is used to determine whether a regression model can accurately predict the dependent variable. If the calculated F value is greater than the tabled F value and the significance probability is less than 005, then the regression model can be used to predict the dependent variable.

3.6.3 Coefficient of Determination (R^2)

The coefficient of determination (R^2) indicates the extent to which independent variables influence the dependent variable in the regression model. The R^2 value is interpreted as the percentage of variation in the dependent variable explained by the regression model (Algifari, 2000). If the R^2 value approaches zero, the contribution of independent variables to the dependent variable becomes smaller Generally, the multiple coefficient of determination (R^2) falls between 0 and 1, or $0 < R^2 < 1$

3.6.4 Multiple Linear Regression

Multiple linear regression analysis is a statistical method used to predict the value of a dependent variable based on changes in independent variables. Multiple regression involves more than one independent variable (Sugiyono, 2018). To perform multiple linear regression, at least two independent variables are required.

$$\boldsymbol{Y} = \boldsymbol{a} + \boldsymbol{b1X1} + \boldsymbol{b2X2} + \boldsymbol{b3X3} + \mathrm{e}$$

Explanation:

Y = Employee Performance

a = Constanta

$b_1 b_2 b_3 b_k$ = Partial Regression Coefficient
$X1$ = Work Motivation
$X2$ = Work Environment
$X3$ = Work-Life Balance
e = error

4. Research Findings and Discussions

4.1 Validity Test

***Table 1**. Validity Test Results of Work Motivation Variables (X1)*

Variable		R calculation	R table	Explanation
Work Motivation (X1)	X1.1	0.690	0.2787	*Valid*
	X1.2	0.662	0.2787	*Valid*
	X1.3	0.645	0.2787	*Valid*
	X1.4	0.679	0.2787	*Valid*
	X1.5	0.606	0.2787	*Valid*
	X1.6	0.805	0.2787	*Valid*
	X1.7	0.672	0.2787	*Valid*
	X1.8	0.795	0.2787	*Valid*
	X1.9	0.519	0.2787	*Valid*
	X1.10	0.671	0.2787	*Valid*

It can be seen in Table 1 that the work motivation variable has a calculated r value greater than the table r value of 0.2787. Therefore, it can be said that the data collection instrument used in this study is valid.

***Table 2.** Validity Test Results of Work Environment (X2)*

Variable		R calculation	R table	Explanation
Work Environment (X2)	X2.1	0.680	0.2787	*Valid*
	X2.2	0.707	0.2787	*Valid*
	X2.3	0.678	0.2787	*Valid*

	X2.4	0.776	0.2787	*Valid*
	X2.5	0.746	0.2787	*Valid*
	X2.6	0.815	0.2787	*Valid*
	X2.7	0.643	0.2787	*Valid*
	X2.8	0.425	0.2787	*Valid*

It can be seen in Table 2 that the work environment variable has a calculated r value greater than the tabled r value of 0.2787. Therefore, it can be said that the data collection instrument used in this study is valid.

Table 3. *Validity Test Results of Work-Life Balance (X3)*

Variable		R calculation	R table	Explanation
Work-Life Balance (X3)	X3.1	0.684	0.2787	*Valid*
	X3.2	0.659	0.2787	*Valid*
	X3.3	0.690	0.2787	*Valid*
	X3.4	0.520	0.2787	*Valid*
	X3.5	0.667	0.2787	*Valid*
	X3.6	0.707	0.2787	*Valid*

It can be seen in Table 3 that the work environment variable has a calculated r value greater than the tabled r value of 0.2787. Therefore, it can be said that the data collection instrument used in this study is valid.

Table 4. *Validity Test Results of Employee Performance (Y)*

Variable		R calculation	R table	Explanation
Employee Performance (Y)	Y1.1	0.828	0.2787	*Valid*
	Y1.2	0.837	0.2787	*Valid*
	Y1.3	0.829	0.2787	*Valid*

	Y1.4	0.775	0.2787	*Valid*
	Y1.5	0.680	0.2787	*Valid*
	Y1.6	0.595	0.2787	*Valid*

It can be seen in Table 4 that the work environment variable has a calculated r value greater than the tabled r value of 0.2787. Therefore, it can be said that the data collection instrument used in this study is valid.

4.2 Reliability Test

Table 5. *Reliability Criteria*

No	Interval	Criteria
1	<0,200	Very Low
2	0,200 - 0,399	Low
3	0,400 - 0,599	Quite High
4	0,600 - 0,799	High
5	0,800 - 1,000	Very High

Table 6. *Test Results of Work Motivation Variable (X1)*

Cronbach's Alpha	N of Items
0.863	10

Based on the reliability test results in the table, the work motivation variable has a Cronbach's Alpha value of 0.863 This indicates that each statement item related to work motivation is highly reliable, allowing them to be used as measurement tools in research and data processing.

Table 7. *Test Results of Work Environment Variable (X2)*

Cronbach's Alpha	N of Items
0.841	8

Based on the reliability test results in the table, the work environment variable has a Cronbach's Alpha value of 0.841. This indicates that each statement item related to the work environment is highly reliable, allowing them to be used as measurement tools in research and data processing.

Table 8. *Test Results of Work Life Balance (X3)*

Cronbach's Alpha	N of Items
0.735	6

Based on the reliability test results in the work-life balance variable table, Cronbach's Alpha has a value of 0.735. This indicates that each statement item in the work-life balance variable is highly reliable, allowing them to be used as measurement tools in research and data processing.

Table 9. *Test Results of Employee Performance (Y)*

Cronbach's Alpha	N of Items
0.851	6

Based on the reliability test results in the performance variable table, the Cronbach's Alpha value for employee performance is 0.851. This indicates that each statement item in the employee performance variable is highly reliable, allowing them to be used as measurement tools in research and data processing.

4.3 Classical Assumption

- Normality Test

Table 10. Normality Test Results

		Unstandardized Residual
N		50
Normal Parameters[a,b]	Mean	0.0000000
	Std. Deviation	1.35416972
	Absolute	0.068
Most Extreme Differences	Positive	0.068
	Negative	-0.054
Test Statistic		0.068
Asymp. Sig. (2-tailed)		0.200[c,d]

Table 10 shows a Sig (2-tailed) value of 0.200 > 0.05, which means that the data in this study is normally distributed and the regression model can be used in this research.

- Multicollinearity Test

Table 11. Multicollinearity Test Result

Model		***Collinearity Statistics***	
		Tolerance	***VIF***
1	**(Constant)**		
	Work Motivation	0.442	2.262
	Work Environment	0.401	2.493
	Work-Life Balance	0.431	2.319

Table 11 shows the tolerance values for the variables: work motivation (0.442 > 01), work environment (0.401 > 01), and work-life balance (0431 > 01). The VIF values for work motivation (2.262 < 10), work environment (2.493 < 10), and work-life balance (2.319 < 10) indicate that there is no multicollinearity in the regression model.

- Heteroskedasticity Test

Table 12. *Heteroskedasticity Test Result*

Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	**(Constant)**	2.674	1.788		1.495	0.142
	Work Motivation	0.027	0.044	0.135	0.617	0.540
	Work Environment	-0.024	0.073	-0.075	-0.325	0.747
	Work-Life Balance	-0.076	0.097	-0.174	-0.784	0.437

Based on table 12, it can be seen that the significance value of work motivation is 05.40 > 005; work environment is 0.747 > 005; and work-life balance is 0.437 > 005. It can be concluded that in the regression model, there is no heteroskedasticity issue, making it suitable for use.

4.4 Hypothesis Test

- *T*-test

Table 13. T-test Result

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	**(Constant)**	1.843	2.907		0.634	0.529
	Work Motivation	0.170	0.071	0.319	2.390	0.021
	Work Environment	0.255	0.119	0.300	2.139	0.038
	Work-Life Balance	0.318	0.157	0.274	2.025	0.049

Based on Table 13, the hypothesis testing can be explained partially as follows:

a. The work motivation variable with a calculated t-value of 2.390 is greater than the table t-value of 2.01290. This indicates that the work motivation variable partially influences employee performance.
b. The work environment variable with a calculated t-value of 2.139 is greater than the table t-value of 2.01290. This indicates that the work environment variable partially influences employee performance.
c. The work-life balance variable with a calculated t-value of 2.025 is greater than the table t-value of 2.01290. This indicates that the work-life balance variable partially influences employee performance.

- F Test

Table 14. F Test Result

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	**Regression**	157.765	3	52.588	26.922	0.000^b
	Residual	89.855	46	1.953		
	Total	247.620	49			

Table 14 shows a calculated F value of 26.922 > a table of 2.81 and a significance value of 0.000 < 0.05. Based on the results of the study, the simultaneous test of H0 was rejected which means that the variables of work motivation, work environment, and work-life balance simultaneously affect employee performance.

- Coefficient of Determination (R^2)

Table 15. Coefficient of Determination (R^2) Test Result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate
1	0.798[a]	0.637	0.613	1.398

The Adjusted R Square value is 0.613 (61.3%) which means that the ability of work motivation, work environment, and work-life balance variables to explain the variance of employee performance variables is 61.3%, while the remaining 38.7% is influenced by other independent variables that were not tested in this study.

- Multiple Linear Regression Test

Table 16. *Multiple Linear Regression Test Result*
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.843	2.907		0.634	0.529
	Work Motivation	0.170	0.071	0.319	2.390	0.021
	Work Environment	0.255	0.119	0.300	2.139	0.038
	Work-Life Balance	0.318	0.157	0.274	2.025	0.049

Based on Table 16, the regression equation can be stated in this study, namely:
Employee Performance = 1.843+0.170X1+0.255X2+0.318X3

5. Conclusions

a. Based on the validity test, it can be seen that the work motivation, work environment, and work-life balance variable has a calculated r value greater than the tabled r value of 0.2787. Therefore, it can be said that the data collection instrument used in this study is valid.
b. Based on the reliability test, it can be seen that the work motivation, work environment, and work-life balance variable of each statement item is highly reliable. It's allowing them to be used as measurement tools in research and data processing.

c. Based on the normality test, it shows a Sig (2-tailed) value of 0.200 > 0.05, which means that the data in this study is normally distributed and the regression model can be used in this research.
d. Based on the multicollinearity test, it can be seen that the tolerance values for the variables: work motivation (0.442 > 01), work environment (0.401 > 01), and work-life balance (0431 > 01). The VIF values for work motivation (2.262 < 10), work environment (2.493 < 10), and work-life balance (2.319 < 10) indicate that there is no multicollinearity in the regression model.
e. Based on the heteroskedasticity test, it can be seen that the significance value of work motivation is 05.40 > 005; work environment is 0.747 > 005; and work-life balance is 0.437 > 005. It can be concluded that in the regression model, there is no heteroskedasticity issue, making it suitable for use.
f. Based on the *T*-test, it can be seen that the work motivation, work environment, and work-life balance variable partially influence employee performance.
g. Based on the F test, it can be seen that a calculated F value of 26.922 > a table of 2.81 and a significance value of 0.000 < 0.05. Based on the results of the study, the simultaneous test of H0 was rejected which means that the variables of work motivation, work environment, and work-life balance simultaneously affect employee performance.
h. Coefficient of Determination (R^2) test, it can be seen that Adjusted R Square value is 0.613 (61.3%) which means that the ability of work motivation, work environment, and work-life balance variables to explain the variance of employee performance variables is 61.3%, while the remaining 38.7% is influenced by other independent variables that were not tested in this study.

The research findings indicate that work motivation, work environment, and work-life balance significantly influence employee performance. Work motivation is an important factor that drives employees to achieve organizational goals, while a pleasant work environment can enhance employee performance. Additionally, maintaining a good work-life balance also has a positive impact on employee performance, by encouraging commitment and desire to stay and thrive within the organization. These findings highlight the need for human resource management to pay attention to these factors in managing employees. Improving work motivation, creating a conducive work environment, and providing a balance between work and personal life for employees can contribute to enhancing performance and achieving company goals.

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ASSESSING THE IMPACT OF THE *JIWA JAGAD JAWI* VIDEO ON INDONESIAN CULTURAL AWARENESS AS TOURIST ATTRACTIONS

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ABSTRACT

Indonesia, as one of the largest countries in the world, has a rich culture spread across its seventeen thousand islands. The promotional video Jiwa Jagad Jawi that was launched in 2022 in a theme of rediscovering the mind, body, and soul of Java whilst promoting several destinations in Java, and seeks to show the depth of Javanese culture while promoting its various destinations. This research investigates the impact of videos on awareness of Indonesian culture as a tourist attraction through examining content and audience reactions. Using a qualitative approach, this analysis investigates how the film depicts Indonesian culture, traditions and landscapes, as well as the responses received from global YouTubers who re-uploaded the video. The research results show that Jiwa Jagad Jawi video effectively strengthens Indonesia's cultural heritage, increasing its attractiveness as a tourist destination. Despite various interpretations, the video has emerged as an important influence in shaping perceptions of Indonesian culture and driving tourist behavior. This underlines the importance of digital media in cultural promotion and sustainable tourism development. This comprehensive analysis aims to provide valuable insight into utilizing digital platforms as a powerful tool to foster cultural appreciation and encourage tourism growth in Indonesia.
Keywords: *cultural awareness, tourist attractions, YouTube, audience reactions.*

1. Introduction

Indonesia can be categorized as one of the biggest countries in the world after Russia, Canada, China, Brazil, and America, which is about 1.910.931,32 KM2 wide (Badan Pusat Statistik/BPS). Based on the statistical data from BPS 2014, Indonesia has more than seventeen thousand islands, including the five biggest islands. Due to these facts, Indonesia is well known for its cultural richness as a multi-cultural country. There is a lot of cultural heritage, such as artifacts and cultural sites, found all over Indonesia, from Sabang to Merauke. The diversity of traditions in every community also proves the richness of Indonesian culture. Preserving the nation's cultural heritage has always been an important mission, particularly during rapid technological development. Hence, the use of information and communication technology (ICT) has transformed the promotion of cultural attractions as they serve as a tool for improving a region's tourism development. As one of the principal areas of economic growth, travel and tourism are worth exploring in studies, particularly to support the development and advancement (Middleton, Fyall, Morgan, & Ranchhod, 2009).

There is a growing interest in digitizing projects of cultural heritage in Indonesia as it offers a solution to promote and preserve cultural heritage tourism. Due to the advancement of information and communication technologies, studies have shown an emphasis on promoting tourism using various digital platforms. Some of the platforms that have been studied were videos, motion graphics, websites, and social media (Muslimin, Cahyadi, & Aswar, 2018; Rosianta & Sabri, 2018; Salim & Som, 2018; Foronda-Robles, Mondelli, & Carboni, 2020; Permana & Sucipta, 2020; and Yonanda & Usman, 2021). Technology is always developing and is always used to support human activities. The easiest example is the presence of gadgets as a means of communication and searching for information. Technology can be viewed positively when it brings great benefits and helps human activities. However, technology can also be seen as negative if it has a bad impact on society, for example changes in values that lead to negative things or so on. This increasingly rapid technological development or progress has an influence on various areas of human life, one example being the social and cultural fields. One of the consequences of technological progress, which has a positive impact in the social and cultural fields, is the increase in the economic sector, (Kompas.com, 22/02/2022). Technology, particularly the Internet and social media, has enabled the rapid exchange of cultural ideas, values, and practices on a global scale. This increased connectedness has facilitated cross-cultural understanding and collaboration, enabling people to learn about and appreciate diverse cultures. At the same time, it has led to the spread of global popular culture, which can sometimes overshadow or displace local customs and traditions. Social platforms such as YouTube play a crucial role in disseminating information among individuals.

Among these platforms, YouTube stands out as a significant tool for transmitting information globally. This allows us to gain insights about different countries without physically visiting them. Through YouTube, we can explore the cultural and economic richness of various nations. Nowadays, people spend a lot of time to watching videos on YouTube, ranging from short to long ones. While some videos may be uninteresting, others captivate viewers. Social media and video sharing websites have become daily use platforms of society today. YouTube is the most prominent website, leading the video sharing platforms to date. YouTube's reported revenue for 2021 was about 24 billion USD (Statista, 2022).

The *Jiwa Jagad Jawi* video stands out as a prime example, having successfully captured the attention of YouTube enthusiasts. This video has garnered numerous views and comments, as well as being shared by several YouTubers in the United States of America. *Jiwa Jagad Jawi* video takes audiences on a captivating journey through the heart of Java, Indonesia, following the transformative experiences of a woman as she immerses herself in the island's rich cultural tapestry. Central Java becomes both a physical and spiritual landscape for her exploration, a realm where ancient traditions and modern life intertwine seamlessly. At the core of the film lies the protagonist's profound quest for meaning and enlightenment. As she delves deeper into Java's cultural heritage, she discovers a profound sense of noble consciousness that ignites within her a newfound appreciation for life's intrinsic values.

Through the lens of her personal journey, viewers are invited to contemplate the universal themes of identity, purpose, and the interconnectedness of all things, (Siaran Pers, Jakarta, 23 November 2023). *Jiwa Jagad Jawi* video is notable for depicting the wonders of Javanese art and architecture, featuring ancient temples such as Borobudur and Prambanan alongside captivating dance performances and natural landscapes. Through its captivating storytelling and visual splendor, the film serves as a powerful ambassador for Indonesian culture, aiming to inspire curiosity and appreciation among audiences around the world. With this background, this article attempts to examine the impact of the film *Jiwa Jagad Jawi* video on awareness of Indonesian culture as a tourist attraction. Specifically, this research seeks to explore how the film influences perceptions of Indonesian culture among domestic and international audiences, thereby shaping tourist preferences and behavior. Through analysis of audience reception, online engagement metrics, and stakeholder perceptions, this research aims to explain the diverse impacts of *Jiwa Jagad Jawi* video on cultural promotion and tourism development in Indonesia.

2. Literature Review

2.1. Cultural Tourism

Cultural tourism is a type of tourism that focuses activities on cultural tourism attractions. Cultural tourism attractions are all forms of culture that can attract tourists. This attraction can be in the form of cultural heritage from the past (sites/heritage) or living cultural values (Suwena & Widyatmaja, 2010). This form of tourism is probably the earliest emerging form of tourism in the world and is likely to be the focus of tourism development in the future (Richards, 2003). Culture is something that cannot be separated from human life. As individuals, culture shapes human identity and personality. Meanwhile, as a cultural group, it becomes socio-cultural and forms communities (Kistanto, 2017). In simple terms, the 19th-century anthropologist, Edward Taylor, defined culture as "Something complex which includes knowledge, belief, art, morals, law, custom, and many other capabilities and habits acquired by man as a member of society." (Tylor 1871 in Kistanto 2017). This definition shows how broad the dimensions of cultural coverage are.

Humanities studies often divide it into material and non-material dimensions (Hahn, 2018). The material dimension of culture or material culture is also often called artifacts, objects, or things. This dimension includes all kinds of natural and artificial objects (Hahn, 2018). All physical objects involved in human activities, such as shelter, clothing, and tools, are classified as material culture. Material culture is the cultural dimension most easily seen as an object of tourist attraction. Tourist visits to museums to see collections of historical relics or exotic ethnic objects are one example. Historical and archaeological sites, traditional buildings, and monuments are other examples. Technically an artificial tourist attraction such as a ride for games is material culture.

2.2. Indonesian Cultural Tourism

Cultural tourism, as defined by the UN General Assembly on Tourism, covers a spectrum of experiences in which visitors seek to immerse themselves in the tangible and intangible cultural aspects of a destination. This includes aspects such as art, heritage, cuisine, literature, and music, among others (UN Tourism General Assembly, 2017). Indonesia, known for its diverse cultural heritage, has many tangible and intangible cultural assets that attract tourists globally (Davidson, 1991). Tangible artifacts such as temples and historical sites blend with intangible riches such as folk songs and traditional norms, reflecting the country's rich cultural heritage (Permadi & Fauzi, 2011). Indonesia's geographic diversity plays an important role in shaping its cultural landscape, and each region contributes unique traditions and lifestyles. This geographical influence is intertwined with historical heritage, thus further enriching the nation's cultural mosaic (Permadi & Fauzi, 2011). Preserving Indonesia's cultural identity is a necessity, fostering national unity and fostering intercultural understanding (Manuaba, 1999). Vesajoki (2002) emphasizes the dynamic nature of culture, which continually develops and adapts to contemporary contexts.

2.3. Digital era and cultural promotion

In the contemporary digital era, social platforms such as YouTube are emerging as powerful tools for cultural promotion. The *Jiwa Jagad Jawi* video, which was released in 2022 by the Indonesian Ministry of Tourism and Creative Economy, succeeded in attracting widespread attention both at home and abroad. This promotional film provides a holistic picture of Indonesian culture, showing both real and unreal dimensions. The appearance of reaction videos to *Jiwa Jagad Jawi* indicates its impact in attracting audiences and stimulating discourse around Indonesia's cultural heritage (Manuaba, 1999). Notably, although previous tourism campaign videos such as "Indonesia: Zamrud Khatulistiwa" in 2009 sparked similar reactions, *Jiwa Jagad Jawi* differentiated itself by adopting a storynomic approach, which encouraged deeper audience involvement (Vesajoki, 2002). The spread of reaction videos to *Jiwa Jagad Jawi* is more than just engagement; it serves as a platform for creators to interpret and represent Indonesian culture to their audiences. Through these videos, the creators not only convey their impressions of Java as a tourist destination, but also contribute to the narrative around

Indonesia's cultural identity. However, the nuanced interactions between representation, interpretation, and promotional objectives of *Jiwa Jagad Jawi* require further exploration. The intersection between tourism promotional narratives and audience-generated content underscores the dynamic nature of cultural promotion in the digital era (Permadi & Fauzi, 2011).

2.4. The role of video Reaction

Reaction videos indeed play a significant role in contemporary cultural practices, particularly within fan communities. Gray et al. (2007) argue that these videos allow fans to affirm their shared enjoyment of specific content, thereby fostering a collective fan identity. Additionally, reaction videos provide creators with a platform to express their genuine thoughts and opinions, contributing to the construction of a collective fan identity (Bird, 2011). Kim (2016) outlines the generic structure of reaction videos, comprising three main parts: introduction, middle, and end. The introduction serves as a greeting to the audience, while the middle features the reactions, facial expressions, gestures, and comments of the creator. Finally, the end typically includes further discussion or additional opinions from the creator.

Furthermore, reaction videos serve as a potent marketing and promotional tool, as demonstrated by South Korean boy band BTS's utilization of fan reaction videos for promotional purposes (UCLA, 2018). With the potential to garner tens of millions of views, reaction videos on platforms like YouTube offer marketers an opportunity to engage with a vast audience. Just as in other social media marketing contexts, YouTube has become a significant channel for endorsers, influencers, and promotions (IAB, 2009). For marketers, building a following on YouTube validates their efforts and facilitates the viral distribution of their brand across various channels.

2.5. Experiential Marketing and Cultural Awareness

Experiential marketing as described by Kotler and Keller (2016) is a strategic approach that aims to involve consumers through direct experience, establishing an emotional connection with a brand or concept. In the context of cultural awareness, this strategy becomes a powerful tool for immersing individuals in the cultural elements of a particular region or community, fostering a deeper understanding and appreciation of their cultural heritage.

The *Jiwa Jagad Jawi* video exemplifies the principles of experiential marketing, as explained by Schmitt (1999), through a multisensory depiction of Indonesian culture, especially focusing on the Jawi community. Produced by Wonderful Indonesia, this video goes beyond traditional entertainment, offering audiences a transformative journey into the heart of Indonesia's rich culture. According to Pine and Gilmore (1998), experiential marketing aims to create memorable experiences that leave a lasting impact on participants. *Jiwa Jagad Jawi* achieves this by not only entertaining but also educating and inspiring viewers about the customs, traditions and values of the Jawi people. Through vibrant cinematography and authentic storytelling, the film invites viewers to actively participate in the cultural journey depicted on screen, thereby increasing their engagement and retention of cultural knowledge.

Additionally, Sundbo (2007) emphasized the importance of authenticity in experiential marketing initiatives. In the case of *Jiwa Jagad Jawi*, authenticity is paramount to its success, as the film depicts Jawi culture respectfully and accurately, avoiding stereotypes or caricatures. Through collaboration with local communities, cultural experts, and artists, the filmmakers ensured that the film authentically represented the lived experiences and traditions of the Jawi people, thereby increasing its credibility and impact on cultural awareness.

In assessing the impact of *Jiwa Jagad Jawi* in raising awareness of Indonesian culture as a tourist attraction, it is important to investigate the diverse responses the film elicited. While reaction videos offer insight into viewers' perceptions and interpretations, they also raise questions regarding the authenticity and fidelity of cultural representations. Therefore, a comprehensive analysis of the promotional narrative and audience reception is very important in measuring the effectiveness of *Jiwa Jagad Jawi* in promoting Indonesian cultural heritage on a global scale

3. Material and Methodology

This research uses a qualitative approach to explore the impact of the video *Jiwa Jagad Jawi* on awareness of Indonesian culture as a tourist attraction. Qualitative methods allow for exploration and in-depth understanding of individual experiences, perceptions and attitudes (Creswell & Poth, 2017). Through qualitative analysis, researchers can reveal rich insights into how the film influences cultural awareness and audiences' perceptions of Indonesia as a tourist destination.

The research in this study adopted an audience reception framework based on cultural studies. This framework views YouTubers as active interpreters of media, shaping audience meanings through their own cultural ideologies and productions (Hall, 1999; Jenkins, 2003). Thus, in this study, response videos are treated as cultural data and not as ethnographic audience data. This study only examined response videos for *Jiwa Jagad Jawi*. Focus on the content of the response videos themselves and aim to understand how viewers engage with and interpret the original content in terms of their own cultural experiences This study is based on the knowledge, which provides information gathered from the analysis of the movie *Jiwa Jagad Jawi* that was re-uploaded on YouTube. Knowledge base refers to data from sources such as social media, online forums, and user-generated content (Berg, 2009). By re-examining the data, researchers can gain valuable insights into audience reactions, interpretations, and engagement with the cultural content of the video.

This study has used narrative design to collect the retrospective review of the *Jiwa Jagad Jawi* video. A narrative approach allows researchers to explore the information, experiences, and meanings embedded in individual responses to the film (Riessman, 2008). Organizing the data narratively enables researchers to identify patterns, themes, and relationships that explain the impact of film on cultural awareness.

In the data analysis process, researchers will carefully organize and make sense of the comments and reposts about the *Jiwa Jagad Jawi* video. Researcher will use thematic analysis techniques to find common themes, patterns, and feelings shared by viewers (Braun & Clarke, 2006). By categorizing and comparing these elements repeatedly, the researcher will uncover how the film influences how viewers see Indonesian culture and why they might find it appealing as a place to visit. This method helps researchers understand in a clear and straightforward manner how the film impacts viewers' opinions.

Table 1.1; Fourteen *Jiwa Jagad Jawi* video reactions uploaded in the year 2022.

№	Channel	Tittle	Subscriber	View	Likes	Comment
1	NULOOK	Reaksi Orang Korea Shock Lihat BOROBUDUR | Wonderful Indonesia 2022 "Jiwa Jagad Jawi" Reaction (Uploaded 16 Mar 2022)	305K	456.774		270
2	SALLO!	Korean Idol Reaction Wonderful indonesia 2022 "Jiwa Jagad Jawi" (with Loudi) (Uploaded 13 Apr 2022)	68.5/k	98.129	5.1K	251
3	Dale Grant actor	Wonderful Indonesia 2022 Reaction Jiwa Jaga Jawi	82.4K	61.862	2.1K	145

		(Uploaded 3 Mar 2022)				
4	Tri Fate Geo	nericans React to Wonderful Indonesia 2022 “Jiwa Jagad Jawi” (Uploaded 19 Feb 2022)	146K	47.333	2.4K	120
5	Pall Family	Wonderful Indonesia 2022 “Jiwa Jagad Jawi”! Pall Family Reaction! (Uploaded 15 Feb 2022)	91K	28.880	1.6K	147
6	Reactions by D	Wonderful Indonesia 2022 “Jiwa Jagad Jawi” - REACTION - wow so much to take in! (Uploaded 17 Feb 2022)	202K	25.233	1.2K	83
7	Nadia Valeria	INTERNATIONAL REACTION: Wonderful Indonesia 2022 "Jiwa Jagad Jawi" (Uploaded 16 Sep 2022)	88.5K	21.980	717	
8	Seagull the Explorer	Reaksi Belarusia terhadap "Wonderful Indonesia 2022 "Jiwa Jagad Jawi" (Uploaded 21 Apr 2022)	2.61K	16.285	851	174
9	Tatla TV	Wonderful Indonesia 2022 “Jiwa Jagad Jawi”. Pakistani Reaction. (Uploaded 17 Feb 2022)	128K	12.551	621	49
10	PxHarlie	WOAH WONDERFUL INDONESIA 2022 “Jiwa Jagad Jawi”!! VIDEO PARIWISATA TERBAIK!! [FILIPINO REACTION (Uploaded 24 Feb 2022)	147K	11.544	614	60
11	Twins SF	TWINS REACTS TO WONDERFUL INDONESIA 2022 “Jiwa Jagad Jawi” (Uploaded 25 Feb 2022)	18.4K	11.029	457	79
12	FrankValchiria	Reaction Wonderful Indonesia 2022 “Jiwa Jagad Jawi” (Uploaded 21 Feb 2022)	7.8K	7.859	482	43
13	Meet Jacky	Wonderful Indonesia 2022 “Jiwa Jagad Jawi” |Dutch Couple REACTION (Uploaded 2 Mar 2022)	76.8K	3.293		161
14	King Neu	Wonderful Indonesia 2022 “Jiwa Jagad Jawi” | REACTION (Uploaded 13 Jul 2022)	38.3K	2.357	125	13

4. Result And Discussions

The *Jiwa Jagad Jawi* promotional video uploaded via the Official Account of the Indonesian Ministry of Tourism and Creative Economy entitled 'Wonderful Indonesia' on February, 5 2022, succeeded in attracting quite a lot of attention from both Indonesian and international audiences. This video is a story concept that refers to the concept of the stages of life in the Borobudur temple, as a universal book of human life. The Spiritual Value of Borobudur is a guide for human life that is not attached to one religion and belief, which tells the story of the cosmic journey of man in the stages of consciousness to the journey of seeking great peace in the cultural history of the land of Java and Borobudur.

In the video, there is a traveller who wants to travel to Java. She takes cultural and spiritual trips in Java. Here she felt a sublime awareness, felted open her eyes. Her heart longs for the sublime beauty of the land of Java. She Unwrapped Diversity: From the rich cultural heritage of Java, she learned several pieces of information about several customs and traditions. Every encounter she meets along the way is a notable lesson; there is equilibrium in humanity, and human beings are intertwined regardless of color. Among the rolling hills or calm lake, she discovered that she could have a lifetime relationship with the earth. She learned Rukun from the older and old—saman, the "deepest respect for all known beings." When she went to a library, she saw crystals, and she found java mystical teachings secrets. Delving deep into sacred practices, legends, and artifacts, she discovers age-old wisdoms about human life, reason, and the ties between time, the present, and the future. After several stops to Java's spiritual core to join meditation centers, the protagonist undergoes a dramatic internal change. Due to this, she can quickly reflect, work towards self-awareness, and restores her unconsciousness to a more profound place, beyond both inherent panic and onus, where she can instinctively loathe life and her place in it. Moreover, fervent and invitational welcoming communities throughout Java dramatize the essence of genuine human links. The feeling of unity presents itself as local sympathy, and loving one neighbor acts spiritually. She learns that real happiness and fulfillment appear when a person is part of a more extensive unit of world initiation. Her journey of integration in well-being takes her on a healing journey through yoga, traditional healing, and holistic practices. Her discovery of the interconnectedness of the physical, emotional, mental, and spiritual domains lays the foundation for her well-being journey and cultivates a holistic state of being and inner harmony. Her ethos and itinerary of "gotong royong," or mutual reciprocity, inherent in Javanese culture, have unveiled and awoken the desire to find ways to help and work for others' well being. She learned the power and transformation of voluntary service and selfless acts from community and volunteer events. After her reflection journey, the wanderer decided to reintegrate all the timeless teaching and values she would, have she would back, integrate it into her life. She wanted to live the highest integrity, empathy, and mindfulness, thinking and speaking and working for others as the *Jiwa Jagad Jawi*. Through her transformative odyssey across the expanse of Java, she not only beholds the extraordinary beauty of the land but also unearths profound wisdom, spiritual fulfillment, and a deeper connection to the universal essence of humanity.

4.1. Indonesian Tapestry: A Living Showcase of Culture and Tradition

Jiwa Jagad Jawi is an impressive exhibition of Indonesia's cultural wealth by demonstrating mesmerizingly the multifaceted culture and arts of the country. The core of it is sinden a Javanese traditional vocal style. Its melodies, imbued with everlasting grace and rhythmic intricacy, become the door to Indonesia's musical legacy, encompassing listeners in the depth of Javanese cultural heritage. Made out the video is the world of Indonesian Wayang, the ancient myths and legends being inspired by mesmerizing puppetry performances set to enchanting gamelan rhythms. Besides being entertaining, this art form also works as a medium to save Indonesia's vast amount of storytelling culture. The Javanese traditional music rhythm breathes through the whole video, giving every scene with spiritual feeling and ancestral wisdom. These tunes, handed down from generation to the next one, show us the high level of the Indonesian cultural heritage. In the spotlight are the stunning Indonesia's traditional clothing, featuring impressive kebaya dresses and detailed batik sarongs that serve as colorful representations of cultural identity. Every piece narrates a story, inviting visitors to explore the rich Indonesian textile tradition. This video highlights the rituals and spiritual practices, which explain the Indonesian culture and their strength in rising above the hardships. The Javanese poetry delves even deeper; a lyrical picture of cultural significance comes to life through it. Through metaphor and imagery, these timeless poems give a glimpse of Indonesian soul, elevating the narrative with deep spirituality. At the core of the video is the mesmerizing appeal of gamelan music, whose rhythmic intricacy and harmonic resonance is embedded in each scene with evocative melodies that capture the essence of Indonesia's musical heritage. From the graceful traditional dances to the intricate art of batik, video spotlights Indonesia’s cultural diversity and makes the audience want to dive deeper in exploring the movement, expression, and artistic expression innovations of the Indonesian people. The sensory experience of Indonesian cuisine completes the viewing experience as it appeals to both the visual and gustatory senses as it takes the viewer through bustling markets and traditional kitchens to experience through the stories of cultural heritage and culinary exploration.

Through its evocative depiction of these diverse elements, *Jiwa Jagad Jawi's* video emerges as a moving paean to the richness and vibrancy of Indonesian culture, taking viewers on a journey of transcendent discovery and appreciation.

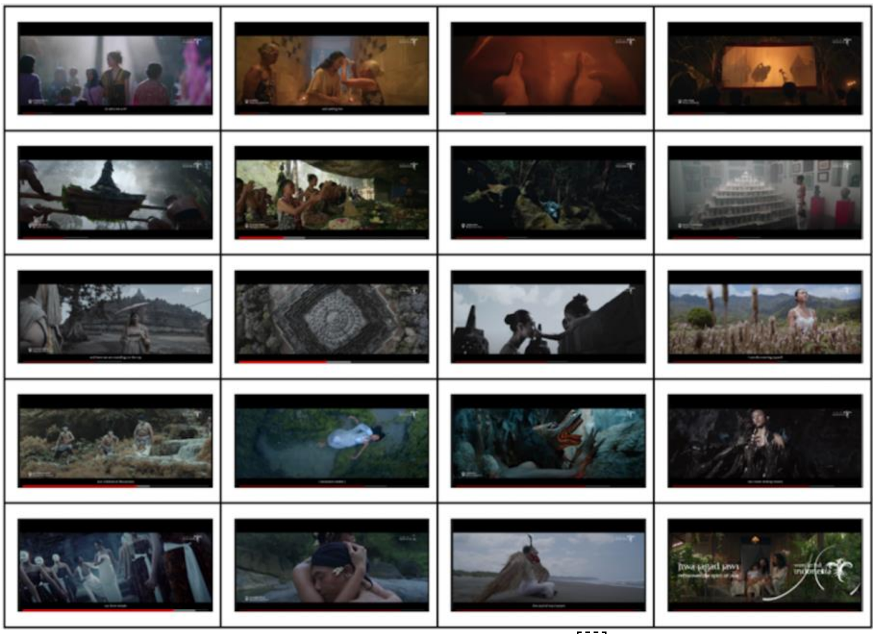

Figure 1: Jiwa Jagad Jawi
Source: Screen Capture from official video of Jiwa Jagad Jawi

4.2. Reaction on the Jiwa Jagad Jawi video

The creators of reaction videos immerse themselves in the vibrant Javanese culture portrayed in the Jiwa Jagad Jawi promotional tourism video. As the video unfolds, they weave their thoughts and perceptions into a rich commentary, punctuated by expressive gestures and facial expressions that reflect their engagement with the content. The video begins by introducing a Javanese woman embarking on a journey of self-discovery, seeking to reconnect with her roots, identity, and family. The creators express curiosity and anticipation as the story progresses, their commentary reflecting the depth of the narrative. The creators' expressions intensify as the video showcases iconic Javanese landmarks, with the majestic Borobudur Temple commanding their attention. They marvel at the intricate Javanese traditions depicted throughout the video, from the solemn rituals of worship to the lively cultural festivals.

Below are highlighted reactions from YouTubers (see table 1.1) who reposted the *Jiwa Jagad Jawi* video, providing their feedback on the content. These comments reflect the responses and reactions that emerged while they watched the video.

Table 1.2: Highlighting the top fourteen YouTubers' commenters.

YouTuber	Awareness	Perception
SALLO	"If I watch a video like this, I want to go there. Jogja is a city of culture."	-
Tri Fate Geo	"So much more traveling to any country, where they get to experience the culture. Got to experience some of the culture."	-
Nadia Valeria	"Curious about Indonesia. I did not think that this country has so many cultures. A magical area. It is really cool the way they show their culture in this video. The culture, spirituality, its aesthetics, landscapes. It's really beautiful."	-
Meet Jacky	"Indonesia has diversity in culture. So much culture, definitely. For the young generation, this video is quite great. The depth of the culture, myth, and history."	-
NULOOK	-	"Mystery, ritual, and how wonderful it is that this tradition can still be preserved."
Dale Grant actor	-	"Peace, relaxation, worth visiting, and spiritual inner."
Pall Family	-	"Javanese culture tradition. Twenty messages in one. Indonesia's culture in general. Java spirit."
Reactions by D	-	"You've got to visit this place at least once. History is just amazing, spiritual, and so much total in it. Training of the mind to be at peace, not to be stressed."
Seagull the Explorer	-	"I would definitely love to go there. A peaceful and very spiritual video. List the places in the video to visit."
Tatla TV	-	"Deeply meaningful. Lost in this video."
PxHarlie	-	"Discovering natural heritage or ancestors, reconnecting to traditions and cultures as Javanese people. Where you come from. History is part of you. This video shows the tradition and culture of Javanese people."
Twins SF	-	"Javanese culture, tradition, and history. You can't know your origin if you do not know the history, because we are the result of our history. Preserve your tradition. Really a masterpiece."
Frank Valchiria	-	"Such a cultural video picture in Indonesia. From this video, the YouTuber wants to visit Indonesia. Traditional textile. Feels close and humane. A celebratory video, either for touristic purposes done by a country to entice people visiting."
King Neu	-	"Goosebumps, peaceful. We barely see or hear this here in the U.S."

4.3. Awareness

Such remarks suggest that the video is successful as it shows off the country's cultural wealth and diversity, thus connecting to viewers emotionally and intellectually. They note that the cities are places they want to visit and suggest that this educational video might help to increase understanding and respect for Indonesian culture. Video campaign "Indonesia as a cultural destination" has a potential to attract tourists who are looking for the cultural immersion.

4.4. Perception

The feedback elicited from the emotional and perception comments shows the viewer's emotional and perceptual effect of the video. They guide such feelings as the peace, relaxation, and spirituality, which people might get, from the cultural content of the video. Moreover, they reveal the depth and complexity of Indonesian culture implied in the video, thus highlighting the emotional engagement of viewers. These emotional and perceptual responses additionally increase the appeal of the cultural sites as tourist attractions by projecting them to be destinations for transformational activities.

Each scene elicits a completely unique reaction from the creators. They are captivated by the serene splendor of Kahyangan Dlepih, enchanted by the rustic charm of Tembi Tourism Village, and enthralled by the ancient importance of Kotagede. Their statement serves as a bridge between the audience and the cultural richness on display. The video focuses on important Javanese cultural symbols that spark lively discussions among the creators. They talk about the meanings behind Semar, a significant spirit in Java, and appreciate the intricate designs of Javanese batik and traditional clothing. The creators show their excitement as they recognize familiar patterns in Javanese masks and enjoy the beautiful melodies of traditional Javanese songs. Towards the end of the video, with the message "Rediscover the Spirit of Java," the creators' express how deeply moved they be by the experience shown in the video. They admire the strength of Javanese culture and the lasting beauty of its historical sites. Overall, the creators' reactions show how powerful storytelling can be and highlight the unique legacy of Javanese culture featured in the *Jiwa Jagad Jawi* tourism video. They hope to inspire viewers to explore and appreciate the diverse culture of Java on their own journey of discovery.

4.5. Similar article

There is an article written by Dian Arymami titled "Discovering Indonesia: Video Reactions of *Jiwa Jagad Jawi* Storynomic Tourism" that emphasizes the practical implications of reaction videos as a promotional tool for Indonesian tourism. This article's main goal is the celebration of the significant role of *Jiwa Jagad Jawi* video in Indonesia's tourism promotion, especially in the context of cultural comprehension as tourism attraction for Indonesians. On the other side, Dian Ayromami's article is more focused on the practical implications of reaction videos as a marketing tool for Indonesian tourism, which are used to promote tourist destinations. On the other hand, reacting videos are presented as a useful tool for engaging a wider audience and increasing awareness of the Indonesian destinations, airing the reactions from YouTubers while underlining their role in promoting tourism in general. Despite their contrasting writing styles, both articles acknowledge the resounding success of the *Jiwa Jagad Jawi* promotional video for displaying the profound cultural and spiritual homeland of Java. They both convey their agreement that the video effortlessly shows up the wealth of Indonesia's culture and thereby creates a deep connection with the audience. Finally, both studies highlight the importance of cultural promotion, and they showcase the emotional and perceptual power of the video, which motivates the viewers to probe deeper into the Indonesian cultural world, and to bring to the awareness a newfound admiration for its cultural blend.

5. Conclusion

The promotional video of *Jiwa Jagad Jawi* by the Indonesian Ministry of Tourism and Creative Economy was a great success, not only attracting Indonesian audiences but also internationally. The video looks to have a rich narrative that effortlessly captures the nature of Java's cultural and spiritual heritage, allowing viewers to explore a world of self-discovery and appreciation. The video successfully combines the concepts of tradition, spirituality and interdependence into one unifying experience, which captivates viewers for its diversity and grandeur. Starting from the mystery of Borobudur Temple to the charm of traditional Javanese music, every scene speaks volumes about the diversity and humanity of Indonesia's cultural heritage. Additionally, viewers expressed how significant the video was in factors such as emotional connection and perception. Name some of those feelings: spirituality, peace, and wonder. This video allows viewers to know and appreciate the complexity of Javanese art and traditions, thereby fostering a new appreciation for Indonesia's cultural heritage.

From a managerial perspective, the success of the *Jiwa Jagad Jawi* video highlights the importance of strategic content creation and storytelling in promoting cultural tourism. For the 3rd ICEBMR theme, "Navigating the Blue Economy: Sustainable Development Goals and Trends in Economics, Business, Management, and Information Technology," this case provides an example of how integrating cultural heritage into tourism marketing can drive sustainable economic growth. By leveraging digital platforms and engaging narratives, businesses and policymakers can increase global awareness and appreciation of cultural assets, thereby contributing to economic development and cultural preservation.

Overall, the *Jiwa Jagad Jawi* video is not just a promotional tool for Indonesian tourism, but is also a very strong representation of the nation's cultural identity. Through its captivating story and stunning views, this film invites viewers to become more engrossed in their journey of discovery, rediscovering the spirit of Java and getting to know Indonesia's cultural heritage. This is in line with sustainable development goals by encouraging inclusive economic growth while preserving cultural and natural resources, which are important components of the blue economy.

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MAPPING PERFORMANCE OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE IN SUSTAINABLE BLUE ECONOMY USING A BIBLIOMETRIC ANALYSIS

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ABSTRACT
Environmental, Social, and Governance (ESG) issues have evolved recently, although there has been little research on bibliometrics. The purpose of this study is to analyze and map the performance of ESG in the context of a sustainable blue economy through bibliometric analysis. We used the Scopus database for this research. Several bibliometric methodologies, including research trends, productive contributors, collaboration networks, and research focus areas, are integrated with topics to create an overview. The findings reveal that the literature on ESG in sustainable blue economy has grown significantly over the past few decades. The contributions of researchers worldwide represent interests that cross geographical boundaries and provide an overview of the global challenges. Mapping ESG performance in the sustainable blue economy using network visualization reveals three clusters of current hot issues. The red clusters are primarily concerned with blue economy conservation. The green cluster focuses on a company's ESG performance, whereas the blue cluster relies on the environmental impact of its activity. These results provide a deeper understanding of research trends and gaps, as well as ESG performance development strategies for achieving a sustainable blue economy.
Keywords: *ESG performance, sustainable, blue economy, bibliometric, conservation*

1. Introduction

As the utilization of marine resources reaches a critical point, environmental issues are becoming increasingly significant. Like many other environmental assets, oceans have been affected by imperfect governance to the point of biodiversity decline, resulting in substantial negative consequences for this important socio-ecological system (Bennett et al., 2021; Gacutan et al., 2022; Saha & Kamal, 2023). Meanwhile, the contribution of seafood cultivation in coastal areas, which is often described as the blue economy, has a significant contribution to the socio-economic development of a country (Martínez-Vázquez et al., 2021; Saha & Kamal, 2023).

This has led to growing pressure on aquatic ecosystems, enhancing public and industry awareness about the importance of maintaining the sustainability of marine resources. In this situation, businesses must adhere to Environmental, Social, and Governance (ESG) responsibility criteria and develop an ESG strategy (Bian et al., 2023; Chan & Hsieh, 2022). The benefits of ESG on a company's long-term worth and flexibility are well established. Furthermore, increased investment in the environment, society, and human capital allows companies to mobilize internal resources, promote employee loyalty, and enhance productivity and work efficiency (Gao et al., 2021; Martínez-Vázquez et al., 2021). Companies with high ESG reports will likely improve their performance and attract investors.

While many developed countries have mandated ESG reports for companies, ESG disclosure is still emerging in Indonesia (Narotama et al., 2023). Only a few companies pay attention to ESG aspects in company activities, especially those related to the blue economy. This is particularly important in light of ESG's role in developing responsible policies and practices to support the sustainable growth of the maritime and marine sector (R. Y. M. Li et al., 2023; Martínez-Vázquez et al., 2021).

Previous literature discussed ESG and blue economy performance separately (Au et al., 2023; Chen et al., 2023; Kabil et al., 2021; T. T. Li et al., 2021; Martínez-Vázquez et al., 2021). Previous research on the blue economy analyzing the management of human activities in marine areas was mostly carried out using Marine Spatial Planning and Ocean Accounting. This method has emerged as a framework that extends national, environmental, and ecosystem accounting, as well as providing a structure for integrating information describing marine ecosystems and their changing relationships with society and the economy (Alsayegh et al., 2020; Gacutan et al., 2022; Stephenson et al., 2019).

Due to the lack of research in this field, the bibliometric approach provides a crucial framework for exploring trends and patterns in the relevant scientific literature. It allows us to identify contributions related to ESG and blue economy performance through bibliometric analysis. By exploring the relationship of author networks, countries, and journals, as well as keyword analysis, the development trends of this research topic can be known intuitively and visually, thereby keeping the audience informed and aware (Gao et al., 2021; Kabil et al., 2021; Martínez-Vázquez et al., 2021; Vidiasratri et al., 2024).

Thus, in this article, we conduct a bibliometric analysis to map the performance of Environmental, Social, and Governance in the context of a sustainable blue economy. Through this approach, we aim to provide deep insights into the evolution of research; fundamental research focuses, academic collaborations, and networks that motivate knowledge development in this field, thereby offering a comprehensive understanding of the research area's current state and future directions.

2. Literature Review

2.1 Environmental, Social, and Governance (ESG)

The topic of ESG gained significant attention in 2010, leading firms to increasingly recognize the importance of ESG issues. The ESG evaluation system consists of three dimensions, namely Environment, Society, and Governance, which represent environmental responsibility, social responsibility, and corporate governance responsibility (Chen et al., 2023; Gao et al., 2021; Rubio-Andrés et al., 2020).

Environmental responsibility primarily refers to the concept that a company should enhance its environmental performance in production and operations while lowering environmental expenses per unit of output. Social responsibility means that companies must adhere to higher business ethics, social ethics, and legal requirements, as well as prioritize internal contacts with external communities, such as human rights, the interests of relevant parties, and industrial ecology improvement. Corporate governance responsibility refers to a systematic management technique that enables firms to strengthen the existing corporate structure and properly allocation shareholder and board of director power.

ESG is a core indicator of non-financial performance. Investors who agree with the concept of socially responsible investing believe that ESG factors help to gain insight into a company's long-term performance (Au et al., 2023; Narotama et al., 2023).

2.2 Blue Economy

The blue economy emerged as a paradigm emphasizing the sustainable use of marine resources to improve human welfare and maintain the integrity of the marine environment (Kabil et al., 2021; Martínez-Vázquez et al., 2021; Safdar et al., 2022). The blue economy ensures that using and exploiting natural resources does not damage marine ecosystems or disturb the ecological balance. While according to Martínez-Vázquez et al. (2021) Blue economy is the latest field of study that includes ocean-dependent economic activities, often associated with other economic sectors, including tourism, marine transport, renewable energy, and fisheries. Blue growth supports the sustainable growth of the maritime and marine sectors, as oceans and seas are engines of the global economy and have great potential for growth and innovation.

The oceans are increasingly important to economic development (Martínez-Vázquez et al., 2021). However, as firms and governments compete to exploit maritime resources, severe threats to people and the environment may occur. Environmental justice challenges resulting from pollution and waste, environmental degradation and reduction of ecosystem services, livelihood consequences for small fishers, and decreasing access to marine resources required for food security and well-being are all potential risks (Bennett et al., 2021; Gacutan et al., 2022; Saha & Kamal, 2023).

The blue economy concept encourages the development of technology and economic practices inspired by natural systems, such as natural cyclical patterns and marine biodiversity. This includes sustainable use of natural resources and reduction of waste and pollution.

Literature reviewing the integration of ESG in the context of the blue economy illustrates efforts to incorporate sustainable aspects into ocean economic activities. The concept of a sustainable blue economy is emerging as a promising framework that prioritizes economic sustainability and pays attention to protecting and restoring marine ecosystems (Kabil et al., 2021). An analysis of how ESG factors are considered in developing policies, business practices, and development initiatives colors our understanding of how the blue economy can become more sustainable.

2.3 Bibliometric Studies

The bibliometric approach focused on sustainable development can provide valuable insights into effective methodological approaches, emerging research trends, and collaboration between researchers in a broader context. Applying bibliometric methodologies in the performance of ESG in the sustainable blue economy can help us identify knowledge gaps and research opportunities (Gao et al., 2021; Vidiasratri et al., 2024).

The number of ESG papers is currently increasing rapidly. Therefore, it is necessary to sort and summarize the relevant literature and then analyze the status of conducting ESG research (Kabil et al., 2021; Martínez-Vázquez et al., 2021). New academics generally need help conducting ESG research to reach future development trends quickly. Therefore, this article will summarize the main trends of ESG literature so academics who are interested in this field can get started immediately.

3. Research Methods

The research method used is a bibliometric study that analyzes publications on a particular subject to find specific information about what is being studied for exploratory and descriptive purposes. Bibliometrics offer beneficial results from author production in an area of research, trends, most cited articles, and concentrations of documents in journals that have an impact. This study consists of several steps (Martínez-Vázquez et al., 2021; Vidiasratri et al., 2024).

The first step is to choose the terms through a previous review of the economics related to the performance of ESG in a sustainable blue economy. The next step is to search and extract data. All documents in the widely recognized Scopus database, which contains terms defined in the search criteria, are analyzed to visualize the behavior of scientific production over time.

This database is renowned for its reliability and multidisciplinary research collection, with studies recommending its use due to the high proportion of exclusive journals. The data is then processed to analyze the number of articles published per year and the number of citations. Bibliometric analysis, a study of scientific activity, has been instrumental in preparing this article and has found applications in various fields.

Step 1. Literature search

An electronic literature search was conducted using the Scopus database in early May 2024. Scopus is a web-based database that provides comprehensive research information worldwide. A total sampling technique was used, and multiple sets of search terms were applied to keyword engine searches databases. All types of journal publication documents from 2019 to 2023 were retrieved, excluding conference papers or book chapters, as this study emphasizes reputable journal literature. Table 1 presents the article selection strategy.

Table 1. Flow of Literature Search Based on Scopus Database

No	Search Keyword	Document Quantity
1	Query (English search terms) = (ESG)	10,814
2	Query (English search terms) = ("environment" AND " social" AND "governance" AND "sustainable")	2,671
3	Query (English search terms) = ("environment" AND "social" AND "governance" AND "sustainable" OR “blue economy”)	2,684
4	Environmental Science	1,236
5	Publication Year: 2019 to 2023	677
6	Language: English	655
7	Journal	533
8	Article	469

Step 2: Data extraction

Data was extracted using Scopus. The following bibliometric variables were extracted: citation information (author, title, publication year, citation), bibliographic information (affiliation, journal publisher, original document language), abstract, and keywords. Scopus search results were exported and saved to RIS as the VOSviewer database.

Step 3: Data analysis

VOSviewer software created co-occurrence maps of high-frequency keywords related to ESG performance in a sustainable blue economy. This application was also used to create a network visualization among authors at the international level. The mapping results of VOSviewer software were used to analyze ESG and sustainable blue economy issues.

4. Research Findings and Discussion

4.1 Mapping Performance of ESG in Sustainable Blue Economy based on Publication Trend

After the literature search, the papers included in the analysis amounted to 469 during the study period. Table 2 shows the distribution of papers written about the performance of ESG in sustainable blue economy, published in reputable international journals indexed by Scopus. The highest productivity of this topic occurred in 2023, which amounted to 126 papers or 26.87%.

Figure 1 shows publication trends in the field of performance of ESG in sustainable blue economy research during the period 2019 to 2023. The results show a general upward trend in publications in the field. As we can see from Figure 1 and Table 2, since 2019, the number of articles on ESG and blue economy topics has continued to increase (Kabil et al., 2021; Martínez-Vázquez et al., 2021). The number of annual publications in ESG and blue economy continues to increase significantly.

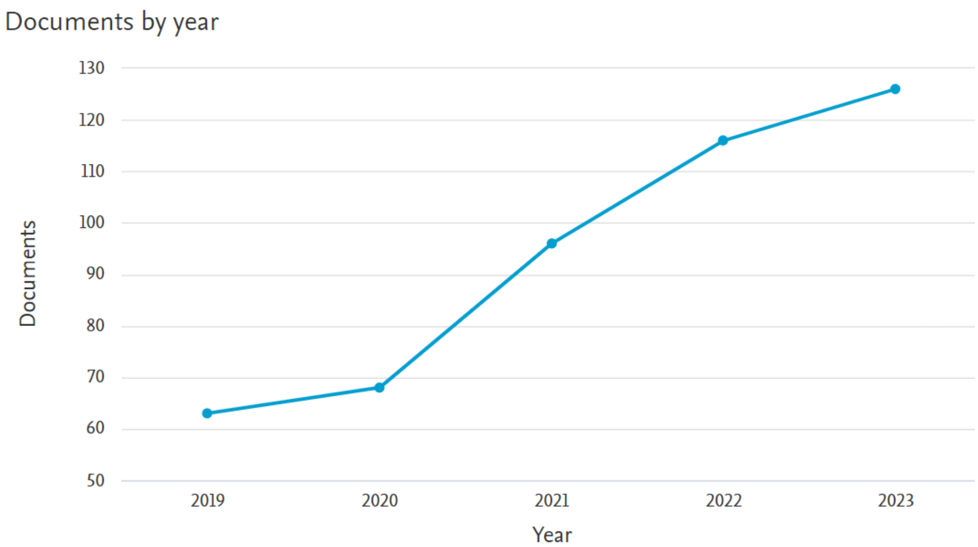

Figure 1. Evolution in The Number of Publications

It should be noted that ESG and blue economy articles published in 2019 and 2020 were widely cited, meaning they were highly impactful. Moreover, the number of ESG and blue economy papers jumped from 63 in 2019 to 126 in 2023. Although the number of paper citations decreased after 2020, the continuous increase in the number of papers also reflects the importance of ESG performance in a sustainable blue economy in academics.

Table 2. Number of Literature related to Performance of Environmental, Social, and Governance in Sustainable Blue Economy

Year	Number of Publication	Citation
2019	63	1,817
2020	68	1,905
2021	96	1,524
2022	116	1,088
2023	126	623
Total	469	6,957

4.2 Mapping Performance of ESG in Sustainable Blue Economy by Country

When looking at the number of documents by country, China, the United States, and the United Kingdom are the main contributors to the performance of ESG in sustainable blue economy, with 133, 51, and 49 publications, respectively. Research mainly involves developed countries, while Indonesia only contributes 13 publications. Research is more likely to be conducted in countries with high Gross Domestic Product per capita and less in regions such as South America, East Europe, and Africa (Vidiasratri et al., 2024).

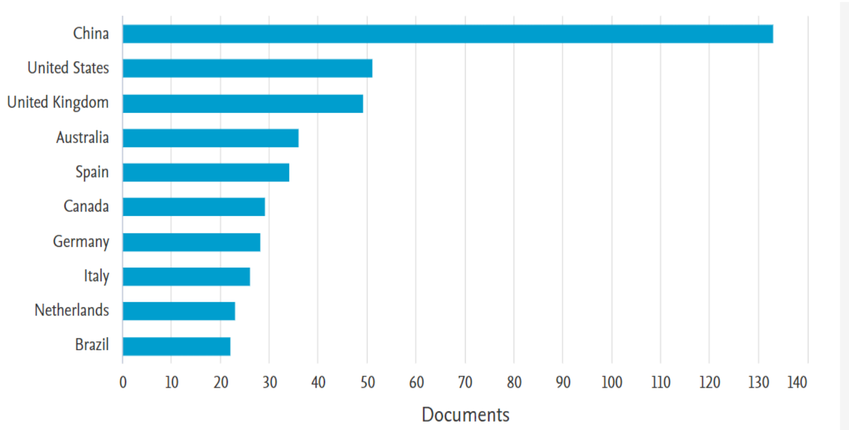

Figure 2. Number of Documents by Country

4.3 Mapping Performance of ESG in Sustainable Blue Economy by Author

Figure 3 shows prolific authors related to ESG performance in sustainable blue economy, namely Chan, Y.K. Hsieh, MY, Gee, K., and Kim, E. These authors have many collaborations with other authors. Productive authors use connections and collaboration to their advantage, where they can become the core of a collaborative network of co-authors. Improving author performance is often related to large grants, attractiveness from accredited academic institutions, and intensive communication between researchers (Martínez-Vázquez et al., 2021; Vidiasratri et al., 2024).

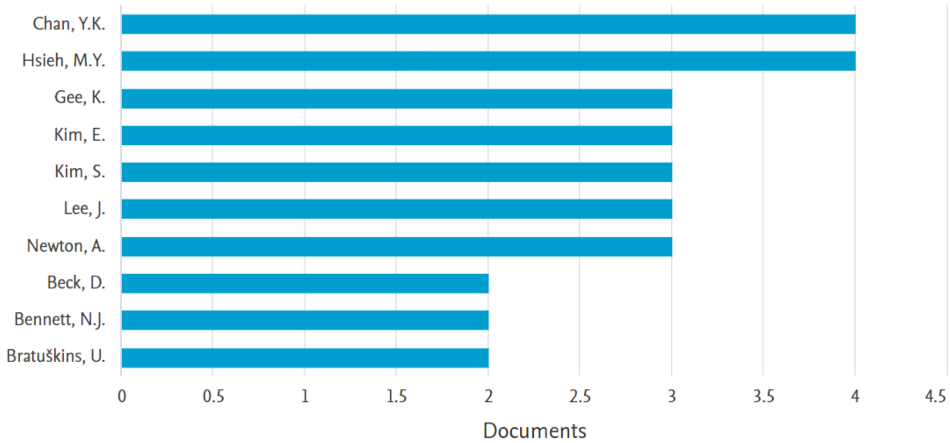

Figure 3. The Most Productive Authors

4.3 Mapping Performance of ESG in Sustainable Blue Economy based on Most Influential Publications Ranked by Number of Citations

A list of the most cited publications can be seen in Table 3. The research content of the articles presented in these papers is comprehensive, ranging from the role of the blue economy as something beneficial to the economy, developing countries, and coastal communities; the role of natural resource governance to enlighten economic, social, and environmental sustainability; risks of rapid and uncontrolled ocean development to an approach that integrates planning, decision-making; and management arrangements across sectors through integrated management of coastal and marine activities (Bennett et al., 2021; Safdar et al., 2022; Stephenson et al., 2019). The papers show that environmental performance and social performance are significantly positively related to economic sustainability performance (Alsayegh et al., 2020). In addition, many papers focus on a single country or region, such as Asia, China, Australia, and Canada.

Table 3. Most Cited Articles

No	Article	Authors	Source	Year	Citations
1	Corporate economic, environmental, and social sustainability performance transformation through ESG disclosure	Alsayegh, M.F., Rahman, R.A., Homayoun, S.	Sustainability (Switzerland), 12(9), 3910	2020	212
2	Blue growth and blue justice: Ten risks and solutions for the ocean economy	Bennett, N.J., Blythe, J., White, C.S., Campero, C	Marine Policy, 125, 104387	2021	166
3	Impacts of land consolidation on rural human–environment system in typical watershed of the Loess Plateau and implications for rural development policy	Yurui, Li,Yi, Li, Pengcan, Fan, Hualou, Long.	Land Use Policy, 86, pp.339-350	2019	106
4	Impact of good governance and natural resource rent on economic and environmental sustainability: an empirical analysis for South Asian economies	Safdar, S., Khan, A., Andlib, Z.	Environmental Science and Pollution Research, 29(55), pp.82948-82965	2022	80
5	A practical framework for implementing and evaluating integrated management of marine activities	Stephenson, R.L., Hobday, A.J., Cvitanovic, C.,…Smith, T., Ward, T.M.	Ocean and Costal Management, 177, pp. 127-138	2019	64

Furthermore, all widely cited papers were published after 2019, which shows that the topic of ESG performance in a sustainable blue economy is still in the embryonic stage, and the number of papers related to ESG blue economy will increase rapidly in the future.

4.4 Mapping Performance of ESG in Sustainable Blue Economy based on Network Visualization

To identify future research directions related to the performance of ESG in a sustainable blue economy, we analyzed the co-emergence of keywords and theme trends (Kabil et al., 2021). Keywords are the best introduction to an academic article. By observing the co-occurrence of keywords in a field, academics can quickly understand research points and future research directions in academics. This study created a keyword co-occurrence graph in VOSviewer, as shown in Figure 4. In the scientific field, analyzing the co-emergence of keywords creates a network of topics and their relationships.

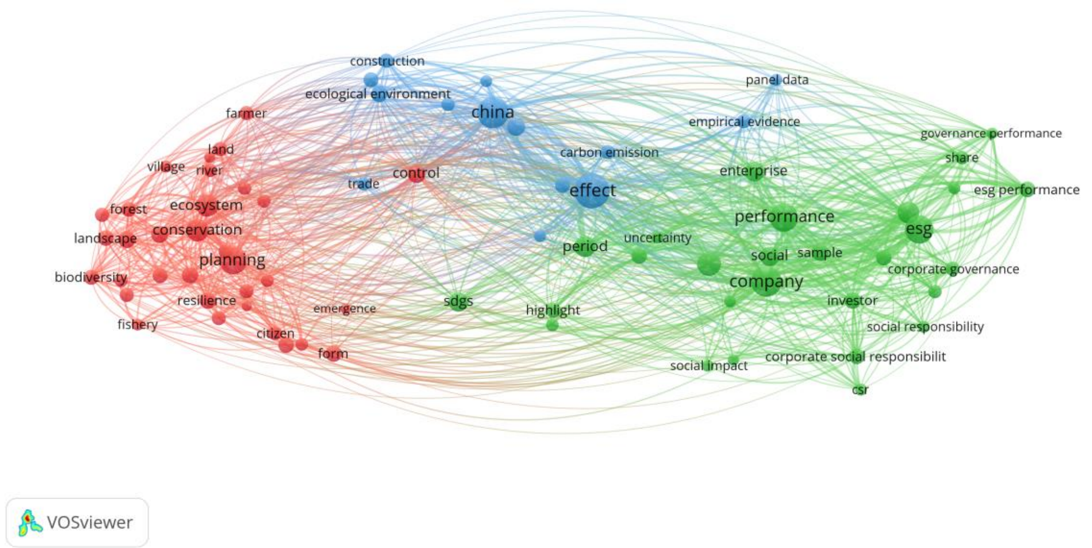

Figure 4. Network Visualization of The Performance of ESG in Sustainable Blue Economy

The node size on this map indicates how often the keyword appears. The distance between vertices and thickness of connecting lines measures keyword co-occurrence. The color of the nodes denotes a cluster of keywords, which frequently comprise terms that appear together and can be regarded as a broad area of research in the field (Gao et al., 2021; Vidiasratri et al., 2024). From 2019 to 2023, three common clusters emerged to summarize the focus topics of interest in the field of the performance of ESG in sustainable blue economy.

Cluster 1: The topics presented in the red cluster were mainly focused on blue economy conservation. Strategies to create a sustainable blue economy include, among others, creating ecosystems and preserving nature, oceans, and marine environments. This can be seen from the words that often appear together, such as ecosystem, conservation, biodiversity, water resource, social-ecological system, ocean, marine environment, human activity, fishery, food security, and land. The results of this mapping were also found in previous studies (Jin et al., 2019; Kabil et al., 2021; Martínez-Vázquez et al., 2021).

Cluster 2: The topics presented in the green cluster are mainly focused on company performance, as evidenced by words that often appear together, such as ESG performance, Sustainable Development Goals, corporate social responsibility, responsibility, investment, and social impact. ESG disclosure includes information on environmental, social responsibility, and corporate governance. Disclosure of ESG performance information shows that the Company is actively fulfilling its social and environmental responsibilities and promoting long-term sustainable development. Companies with high ESG ratings in specific areas generally have a competitive advantage over local firms, which they sustain through business and incentive schemes. At the same time, competitive advantages will enable the company to create a profit and retain its momentum for growth (Au et al., 2023; Bosi et al., 2022; Gao et al., 2021).

Cluster 3: The topics provided in blue cluster mainly were focused on the effect of company activities on the ecological environment, as evidenced by words that often appear together, such as carbon emission, ecological environment, environmental pollution, environmental issue, carbon neutrality. These studies show that a country can pursue a better life if it can achieve carbon neutrality (R. Y. M. Li et al., 2023; Rodriguez-Rojas et al., 2022; Tan et al., 2021). Furthermore, the results show a positive relationship between ESG performance and sustainable blue economy (Alsayegh et al., 2020; Saha & Kamal, 2023). Density visualization of the performance of ESG in the sustainable blue economy can be seen in Figure 5.

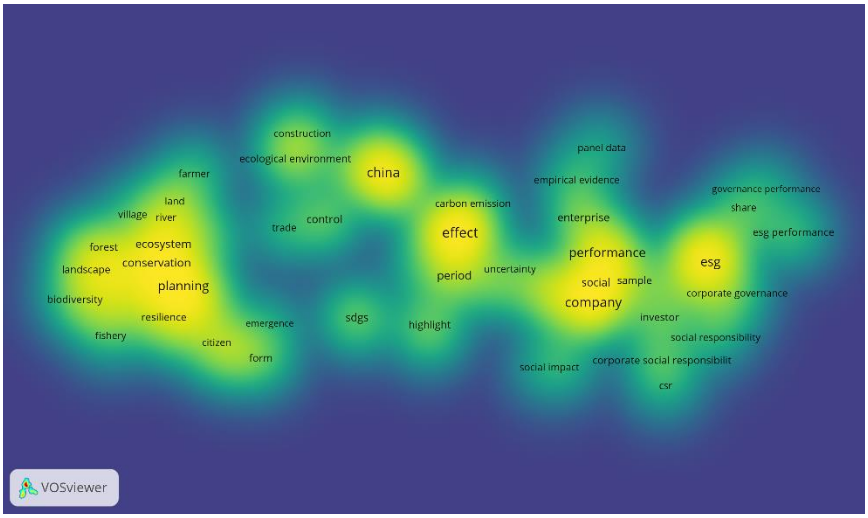

Figure 5. Density Visualization of The Performance of ESG in Sustainable Blue Economy

5. Conclusion

Bibliometric analysis analyzes emerging research trends and research collaboration in a broader context. Therefore, this study aims to map the performance of ESG in sustainable blue economy from 2019 to 2023 and provide valuable information for ESG blue economy researchers and stakeholders. This article's data originates from the Scopus database. The findings reveal that research on the performance of ESG in sustainable blue economy is still in its early stages and has produced many significant research results.

When considering the nationality of the authors, it becomes apparent that China, the United States, and the United Kingdom are the top three contributing countries, most of which are developed countries in Europe or America. However, as social and environmental responsibility features evolve globally, we anticipate a growing interest in ESG and blue economy issues from developing countries. This underscores the potential for significant growth in ESG blue economy research. It is crucial to remember that, in addition to enriching investors, companies must also contribute to the ocean, marine environment, ecological environment, and other areas. This is more than just an issue of corporate responsibility; it is an essential element for advancing the common interests of all stakeholders.

Regarding the most productive authors, Chan, Y.K. Hsieh, MY, Gee, K., Kim, E. are the scholars who write the most articles. Another exciting aspect is that 469 publications published content related to the performance of ESG in a sustainable blue economy. Furthermore, based on most influential publications show that environmental performance and social performance are significantly positively related to economic sustainability performance.

Mapping ESG performance in a sustainable blue economy using network and density visualization reveals three current hot ESG issues clusters. The red cluster focuses primarily on blue economy conservation. The green cluster focuses on a company's ESG performance, whereas the blue cluster emphasizes company activities in the ecological environment.

Based on the above analysis, we suggest following future research directions that focus on ESG performance in the ocean, maritime, and blue economies together because little research addresses this aspect. This research is expected to provide valuable insights for business practitioners, policymakers, and other stakeholders in promoting sustainable business practices and supporting healthy marine ecosystems.

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TOURISM PRODUCT DIVERSIFICATION IN TANZANIA: THE CASE FOR SCUBA DIVING

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ABSTRACT

Tourism is one of the fast growing industries in the world today. Many countries are attracted to it by its bright prospects despite temporary ups and downs. However, it is an extremely competitive industry. For East Africa, the traditional wildlife tourism product must be diversified and scuba diving is a good candidate in Tanzania. Marine tourism is relatively underdeveloped in Tanzania despite a wide range of important and valued species in the water bodies of the country. Research has shown that coastal zones around the world attract the largest number of tourists and the largest growth in the tourism sector is recorded in marine areas. Scuba diving is one of the coastal activities which are starting to receive more much attention due to its possible contribution to economic development. This paper provides an understanding of the potential and challenges for scuba diving tourism development in Tanzania and beyond. Tanzania can benefit from becoming a late comer to the planning involved in developing scuba diving especially by being more aware of its possible positive and negative impact on the marine environment.
Keywords: *Scuba diving, marine tourism, Zanzibar, product diversification*

1. Introduction

The tourism industry is the fastest growing industry in the world with an annual growth of 6 per cent. The prediction is that it will continue to grow during the next decade. Only one of every twenty jobs in Africa is in the tourism and travel industry; worldwide it is one out of every ten. There is a large potential if the travel and tourism industry could reach the global average. [Jan-Erik Jaensson, 2014] Tanzania is strategically located within Africa and between the Middle East, Asia and Europe. It is well served by international airlines. [Lusekelo Philemon, 2015].

Terrorism and epidemics now and again make a dent in tourism numbers, but the sector usually quickly rebounds. It now employs hundreds of millions and accounts for a tenth of global output. The tourism sector grew 4.4 percent in 2015 to nearly 1.2 billion people taking a trip outside their country. According to the data from the United Nations World Tourism Organization [UNWTO] in 2014 international tourism receipts from lodging, meals, transportation and purchases hit US $1.5 trillion, up from US $900 billion in 2010. [*The Citizen*, February 12, 2016]

More than 30 million tourists visit Africa every year. Over half of the international arrivals are for business purposes, and may partake in tourist activities as well, while 15 per cent travel for pure tourism and 30 per cent visit friends and family. Tourists select the continent as a destination for wildlife viewing and to enjoy its sunny skies. Africa is the world's number one destination for safaris which range from the exotic to the very simple. The tourism industry is one of the most important for the continent. It provided

12.8 million people with jobs, directly and indirectly, in 2011. Tourism in 2012 contributed over US $36 billion or 2.8 per cent of the continent's GDP. Tourists to his region mostly come from countries like France, the UK, the USA, Germany and Portugal. [*Daily News*, February 12, 2016]

The 2013 World Bank report entitled "Tourism in Africa: Harnessing Tourism for Improved Growth and Livelihoods" says that African countries can compete with other tourist rich regions of the world if they effectively plan for and integrate tourism into their economies. Tanzania, Botwana, Cape Verde, Namibia and South Africa are most likely to succeed in the tourism sector in the period 2013 – 2018. Africa's mountains, savannahs and rivers as well as cultural events like music, dance and festivals are far above the natural assets found in other regions. African governments and the private sector are called on to work together to address obstacles such as land access and visa regulations to expand tourism opportunities, transform the business climate and create jobs, especially for women and youth. It was the first World Bank Report to comprehensively examine tourism throughout Sub-Saharan Africa. It recommended practical, evidence based measures to unleash the sector's economic and development power across the continent. Tourism is one of the largest and fastest growing sectors of the world economy. However, constraints such as access to finance for investors, taxes on tourism investments, low levels of tourism skills among Africa's population, lack of security, safety and high crime, and bureaucratic processes are present in varying degrees in the sub-Saharan African countries. [*Daily News*, October 8-14, 2013] According to the UNWTO, 63.6 million international tourists arrived in Africa in 2012, compared to 17.4 million visitors in 1990. While Africa accounts for 15 per cent of the world population, it receives only 3 per cent of world tourism Africa is home to the world's youngest population, with close to 70 per cent of its population below the age of 25, and youth constituting about 37 per cent of the labor force, but making up approximately 60 per cent of unemployment. [*The Guardian*, February 13, 2014]

East Africa has again proven its charm as a preferred tourism destination after emerging first runner-up at the 12th UN World Tourism Organization [UNWTO] Awards for Excellence and Innovation in Tourism. Competition was stiff with 109 submissions from Africa, Asia, Latin America and Europe. This award recognizes initiatives that are highly innovative and managed by a public or public-private institution that reflects tangible and sustainable improvements in policy, processes and governance. EATP won for its multi-destination knowledge management tool that helps stakeholders package products without borders. EATP is made up of tourism players from the East Africa region among them Uganda Tourism Board, Burundi National Tourism Office, Kenya Tourism Board, Rwanda Development Board, and the Tanzania Tourist Board. Through this tool, regional tourism stakeholders have started trading each other's products, packaging tourism products without borders, benchmarking among themselves and learning from each other. On the marketing front, East Africa is now holding joint marketing initiatives. [*Daily News*, January 26 – February 1, 2016]

2. Tourism Planning in Tanzania

Tanzania has in the past had to play second-fiddle to Kenya, which has a more developed tourism industry and better air links to key client markets in Europe and United States. But the surge in visitors to Tanzania over the past three years has chipped away at Kenya's dominance and boosted Tanzania's ambitions to become the regional tourism hub. Frequent attacks by Somali militants have also hit Kenyan tourism hard, scaring away tourists, some of whom headed down to Tanzania for similar tropical beaches and wildlife safaris.

Tanzania has been working on an environmentally friendly high value, low volume tourist strategy for a few years that has had great effects in Africa. The amount each tourist spends in Tanzania outpaces Kenya, Egypt and South Arabic. How did they do it? Part of this comes naturally – Tanzania ranks more attractively than both Egypt and Kenya on natural resources, with Mount Kilimanjaro, Ngorongoro Crater and Zanzibar collective beating out the pyramids. But the government has also enforced strict regulations to keep hotel standards high. For example, Zanzibar's coastline is dotted with much nicer resorts and fewer low-end beach shacks than Mombasa's. [*The Guardian*, February 5, 2010]

A report entitled "International Marketing Strategy for Tanzania: Part I" says due to its limited budget, Tanzania must focus on marketing tourism attractions to countries such as the UK, the US, Germany, Italy, France, The Netherlands, Canada, Australia, Spain, South Africa and India. They provide many tourists to it. The report suggests that 90 per cent of the country's marketing budget is spent on marketing Tanzania to those 11 countries. In 2013, Tanzania's marketing budget was only 0.24 per cent of the Gross Domestic Product [GDP]. Quality tourism must be promoted to ensure environmental sustainability for economic betterment. Most travellers to Tanzania are experienced and are relatively highly educated and have high incomes. [Veneranda Smith, 2013].

As a result of this fact, the Tanzania Tourism Board [TTB] will undertake a number of initiatives as it seeks to increase the number of visitors and earnings from the sector. In 2015, the country attracts about 1.1 million visitors annually but TTB hopes the number can reach three million starting in 2017. One of such initiatives is its new website launched in 2015. The portal website is more advanced than normal websites. Anybody in the globe can access it to book online and pay for services online. Tour operators can also use it to advertise their products to the world. The government also launched a new brand as a way of promoting the country's attractions to tourists. The new brand is "Tanzania the soul of Africa" replacing the former "Tanzania the land of Kilimanjaro, Zanzibar and Serengeti". TTB also uses goodwill ambassadors who have willingly agreed to advertise Tanzania in the countries they are currently visiting without any pay which is another boost to tourism. [Rosemary Mirondo, 2016] Tanzania is unique because of prevailing peace in the country and its well-mannered and friendly people. The tourism sector directly employs close to half a million people and contributes to almost 25 per cent of total export earnings. [Beatrice Philemon, 2016] Tanzania, unlike its African competitors, has diverse tourist products which are comparable to none. Unlike other countries, Tanzania has more diversity in terms of wildlife, beaches, culture and history. Tanzania is considered one of Africa's safest destinations. Safety and security are very important factors that determine the tourists' choice for a destination. [The Guardian, February 16, 2016]

Despite the fact that Tanzania has been targeting low volume and high yield tourism as opposed to Kenya's mass tourism, the local industry is still lagging behind due to other factors like a discouraging tax regime and various infrastructure shortcomings. There are a total of 53 different taxes, levies and charges that are applicable to tourist companies in Tanzania. The average effective tax rate for businesses in the tourism sector is 48 per cent, ranging between 37 and 63 per cent. [*The Guardian*, March 9, 2016]

Poaching, multiple taxes, poor infrastructure and inadequate promotion funds should be tackled for Tanzania to realize its target of attracting two million tourists annually in the next five years according to tourism players. Tourism provides 600,000 direct jobs to Tanzanians . Over one million people earn an income from tourism which supports parks, conservation areas and now community based wildlife management areas as well as farmers, transporters, fuel stations, spare parts suppliers, builders, tent manufacturers, suppliers of food and drinks. Multiple taxes, levies and fees on tourism make Tanzania an expensive destination. The contentious issue is modality and time spent in complying with intricate taxes. On promotion, tour operators fear that Tanzania could easily lose its tourism grip to Kenya as the north neighbor is taking serious measures to attract more tourists. Kenya has also waived landing fees for charter flights to the coast reduced park entry fees for tourists and urged operators to modernize their facilities. [Adam Ihucha, 2016]

The biggest challenge to the regional East African tourism is the anachronistic nature of the predominant tourism product, which was developed in the colonial era with the Western tourism market in mind. As a result, the tourism product is largely homogenous and mainly based on the region's natural resources. The majority of sub- Sahara African countries are viewed stereotypically as safari destinations. The need for regional tourism in East Africa is now even more critical given the uncertainty of the global economy, security concerns due to increased terrorist activity, and the climate change discourse in which long haul travel is increasingly being discouraged. Arguably, the future of tourism in the East Africa region lies not in its natural resources but its ability to create innovative tourism products. The strategies implemented by South Africa, the United Arab Emirates, Malaysia, Singapore and Thailand, could provide valuable lessons for member states. Marketing campaigns in Africa need to be stepped up in order to create awareness of the range of tourist products on offer. [Geoffrey Manyara, 2016]

Product Diversity and New Tourism Product Development in Tanzania The biggest challenge to the regional East African tourism is the anachronistic nature of the predominant tourism product, which was developed in the colonial era with the Western tourism market in mind. As a result, the tourism product is largely homogenous and mainly based on the region's natural resources. The majority of sub-Sahara African countries are viewed stereotypically as safari destinations. The need for regional tourism in East Africa is now even more critical given the uncertainty of the global economy, security concerns due to increased terrorist activity, and the climate change discourse in which long haul travel is increasingly being discouraged. Arguably, the future of tourism in the East Africa region lies not in its natural resources but its ability to create innovative tourism products. The strategies implemented by South Africa, the United Arab Emirates, Malaysia, Singapore and Thailand, could provide valuable lessons for member states. Marketing campaigns in Africa need to be stepped up in order to create awareness of the range of tourist products on offer. [Geoffrey Manyara, 2016]

The current drawback why Tanzania trails behind some countries in tourism was its dependency on traditional tourism markets and a slow speed to diversify and get more visitors. It needs to target other countries like China, Russia, India, Brazil and South Africa [the BRICS countries]. These are emerging markets. Tourists from these countries are young, well-oiled with disposable income and are more adventurous that those from the traditional markers of Western Europe. [Zephania Ubwani, 2013]

3. Tourism in Zanzibar and the Isles

One alternative to the overdependence on wildlife safari tourism is Tanzania's marine tourism symbolized by the internationally famous island of Zanzibar. It is a unique coral island lying in the Indian Ocean, a short distance from mainland Tanzania. With Pemba, Mafia and 50 other island, Zanzibar was originally an independent country until 1964 when it was united with Tanganyika to form Tanzania. [Sunday News, September 11, 2011] Zanzibar is a derivation of the two Arabic words *Zenj* and *Bar* or the land of the blacks. Zanzibar is an island only 50 miles long. There are more than 30 beaches in Zanzibar and some are isolated. Zanzibar's coastline is mainly a shallow slope allowing lush coral build-ups and providing a natural home for thousands of marine animals. Because of its location, Zanzibar enjoys warm currents almost year round. Perfect for spawning, one can see a wealth of life just beneath the surface. Snorkeling is unparalleled along the rock outcroppings of Zanzibar's many beaches. Zanzibar's climate is equatorial. Days are filled with sun, but some heavy rainfall occurs during April and May. Best months to visit are from July through March, with February and March the warmest months. The Swahili are urbanized African Muslims, who have integrated many Asian cultural and architectural features into their own traditions. Towns like Zanzibar, Mogadishu, Pate, Lamu and Mombasa are still thriving today. Indian, Arabic and African building traditions blend together to form a unique and cosmopolitan architectural heritage of the Swahili culture. Swahilis are famous for its spices. Cinnamon, cloves, pepper, vanilla and many other spices grow on the spice plantations of the coast. The Swahili food is exotic and spicy flavored. The coconut is used in almost every dish. In the midst of the Indian Ocean, fish and seafood of course have a major importance. [*Daily News*, January 8, 2011] Oman defeated the Portuguese and took control of Zanzibar in 1698. In 1832, the Omani sultan, Said bin Sultan, made Zanzibar his capital and established a thriving spice trade and a major transit route to the West. It covered an area from the coasts of two East African countries, Kenya and Tanzania before the Germans gradually occupied most of it in the 1880s. The British gained control of the island as a protectorate in 1896, although it was still considered a sultanate, and granted it independence in 1963. After that, the island was ruled by sultans who were descendants of Said Bin Sultan. Zanzibar's Arab minority won control of the parliament in July, 1963, leading to a coup by a frustrated African majority The Zanzibar revolution in 1964 paved the way for what is now the modern day republic. [*Daily News*, September 18, 2010]

Cloves, Zanzibar's main cash crop, was introduced in the Isles in 1818, and flourished in the tropical climate and fertile soil of the western areas of both Zanzibar and Pemba. By the middle of the century the place was the world's largest producer of cloves and the largest slave trading center on the East African coast. There are a number of challenges facing the production of cloves in Zanzibar at the moment. The government is grappling with the problem of dwindling production of the crop and is taking measure against it. [Ali Sultan, 2011] Only seven per cent of the world supply of cloves came from the Isles in 2011. The market share was decimated by a fast moving world market, coupled with Tanzania's failed experiment with socialism in the 1970s and 1980s. Indonesia now supplies 75 per cent of the world's cloves. Aside from their culinary uses, cloves are also commonly used in painkillers in dental emergencies. [Rosemary Quipp, 2011]

In the 1980s after the clove world market price tumbled, Zanzibar, whose economy hinges on the crop, saw the tourism industry as the best alternative for its economic growth. The Zanzibar Tourist Commission [ZTC] and the Zanzibar Investment Promotion Agency [ZIPA] were established in 1996.

Zanzibar's first President and Revolutionary Council Chairman, Mzee Abeid Amani Karume, was a man of great vision, mission, vision and devotion that enabled him to take bold decisions that led to successful implementation of ambitious projects during his eight year rule. It was Mzee Karume who initiated plans for developing and promoting the tourism industry in the isles and turned it into a top tourism destination offering upmarket products across the board. His dream to turn the isles into a most exotic diverse island destination in the Indian Ocean region has finally come true. After 52 years, the tourism industry is a great spinner of foreign exchange and a great contributor to the isles' gross domestic product [GDP]. It accounts for 26 per cent of GDP and generates 80 per cent of foreign exchange. It has created 14,000 direct jobs and 45,000 indirect employment opportunities. [*Daily News*, January 12, 2016]

Zanzibar is richly endowed with both natural and man-made tourist attractions which are the basis for a vibrant tourism industry. Some of these attractions are beautiful and virgin beaches natural forests endowed with rare animal species such as *kima punju,* old Stone Town building with ancient architectural features. Handicraft works specific to Zanzibari culture such as the decorative Zanzibar doors and chests. Richness in various spices and fruits available all year round and a culture of friendliness and hospitality to visitors. The vision's policy on the promotion of sustainable tourism is to develop a tourism industry which is culturally and socially responsible, ecologically sustainable and economically viable and to promote Zanzibar as the destination for tourists in terms of historic cultures and beach holidays. The vision's objectives of sustainable tourism include utilizing more effectively the tourism potential to generate more income, employment, human resources development, foreign exchange earnings while protecting the environment, Zanzibar’s culture and traditions. The Government is dedicated to diversify the tourist attractions to achieve balanced growth of the tourism industry and maximum benefit, develop Zanzibar as a single holiday destination by building up other product elements, in particular beach resorts, cultural attractions and aggressive marketing programmes. [*Daily News*, January 12, 2016]

Initially the early tourists from Italy, South Africa, the UK, Spain, Germany and the US were low budget tourism known in tourism lingo as “backpackers”. The Government was therefore forced to attract investors for constructing high class hotels in tune with the tastes of the high-budget tourist. The government injected money for the needed infrastructure. In 2015, there are a total of 35o hotels in Unguja alone with a total of 7,743 rooms and 15,550 beds while in Pemba there are 25 hotels with a total of 231 rooms and 420 beds. The government is currently starting to develop various areas in Pemba, particularly in an 8 kilometer beach stretch named Vumawimbi, the longest beach stretch in East Africa. The first high class hotel of its kind has been constructed in the Indian Ocean at Makangale with its one room 13 meters under the sea. Zanzibar currently boasts 25 five-star hotels, 11 four-star hotels, 27 three star hotels, 16 two star hotels and 60 one star hotels. Lack of a national carrier affects the growth of the country’s tourism industry. [*Daily News*, January 12, 2016]

According to the International Marketing Strategy for Tanzania [2013] which is compiled as a 129 page document whose 28 page summary is in circulation, one of the twelve strategic goals is to increase the market share of the “spice islands” of Zanzibar from 26 per cent in 2013 to at least 30 per cent of the total number of tourist arrivals in 2018. Zanzibar’s products include pristine beaches, turquoise seas and history for medium to high value tourism. The target groups are adventure seekers, nature lovers, tourists loving sun, sea and sand, honeymooners, couples, families and small groups of friends who want to experience something special together, both the local culture and natural beauty. Another group is the philanthropists [conscientious travellers] concerned about responsible tourism. This group comprises tourists aware of the effects of tourism on the environment and on the economy of the local communities living in the places they visit. They are looking for responsible ways to interact with the local communities and their cultures and with the environment. [Apolinari Tairo, 2013] The Ireland based online travel magazine Fly Cruise Stay recognized Zanzibar as a heaven on earth, with natural white sandy beaches, tropical landscapes and crystal clear blue waters. Zanzibar is a popular choice for honeymoons. [Felix Lazaro, 2015]

Zanzibar benefits from tourists who travel directly to Kenya and other parts of Africa as they normally extend their holidays to the cultural / historical Islands. However, the latest statistics from the Zanzibar Commission for Tourism [ZCT] indicate that the islands recorded a decline in the number of arrivals in 2015. The number recorded in 2015 was 294,243 down from 311.891 in 2014. Terror attacks in Kenya, the Ebola disease in West Africa and threats in other parts of the world are to blame for the decline in tourism numbers visiting the Islands. If political disputes over the nullification of the general election results in October, 2015 deepens, the fragile tourism industry may be affected. Politicians need to understand that tourism, the main leading contributor to the economy, should be protected by avoiding violent conflicts and unnecessary tensions. [*Daily News*, February 10, 2016]

Charter flights from abroad, transporting tourists to Zanzibar, are expected to increase after Ukraine announced the launch of direct flights to the islands beginning on February 12, 2016. The first charter flight with about 180 tourists landed at Abeid Amani Karume International Airport [AAKIA]. Having tourists from emerging tourist markets such as Ukraine and other Asian countries was the focus of the government. Zanzibar has recorded an increase of tourists from Israel, China, Russia, India and Poland. Tourists come to destinations where there is peace. [Isa Yusuf, 2016]

Mafia Island, slightly smaller than New York City and 50 kilometers from mainland Tanzania, is serene on land but underwater it is a protected marine preserve that offers some of the most magnificent diving and snorkeling in the region, perhaps the world. There are sea turtles, stingrays and the occasional white tipped reef shark troll these waters nearly year round. While few modern travellers know its name, Mafia has drawn international visitors since at least the 11th century, when it served as an important trading base for Shirazi sailors who controlled the region. Later, the island became a hub for the Middle East slave trade then a military base for German, and eventually British, colonists. The island's name has nothing to do with organized crime. It likely derives from the ancient Arabic word for "archipelago". For the past century, Mafia and its 40,000 residents have been mostly ignored by the outside world, reached only by slow ferries from Tanzania. [Sunday News, February 6, 2012; Brendan Spiegel, 2012]

That began to change in 1995, when the World Wildlife Fund and other environmental activists successfully lobbied the Tanzanian government to protect the southern half of the island and the surrounding waters as the Mafia Island Marine Park. The 510 square mile preserve is home to 400 species of fish and 48 types of corals, as well as giant green sea turtles and at least a few nearly extinct mantee-like dugong. With fishing and other industry sharply curtailed inside the preserve, Mafia's rich reefs soon began attracting the attention of divers. Regular air service from Dar es Salaam, Tanzania's main entry, was added in 2006. The number of lodges and guesthouses on the island has mushroomed to roughly two dozen in 2012. In 2010 the total number of international visitors was a modest 4,100 people. [Sunday News, February 6, 2012; Brendan Spiegel, 2012]

The Indian Ocean island of Thanda is a beach residence of Swedish billionaire Dan Olofsson and is new private island resort off the coast of Tanzania. It is being pitched as offering absolute exclusivity for families and friends to rent on a sole use basis and is completely off grid and solar powered. Away from the island, guest will be able to learn about local Swahili seafaring culture on nearby Mafia Island, home to 60,000 people. Thanda Island has also partnered with the Tanzanian Marine Parks and NGO, Sea Sense, on a range of marine conservation and education programmes including research and conservation projects on sea turtles, dugongs, dolphins whale sharks, coral reefs and marine reserves. The island is surrounded by its own private reef, with a one kilometer exclusive use zone and sailing boats, stand up paddle boards and kayaks are available for use. Diving to see whale sharks or the endangered dugong is also an option. There is a powerboat zone outside the marine park allowing for water skiing, jet – skiing, wake- boarding and tubing. Exclusive use of Thanda Island starts from US $10,000 per night, with a minimum stay of 3-7 nights depending on the season. It is likely to be the most expensive accommodation room in Tanzania. The all-inclusive rate includes the team of dedicated staff, boat transfers from Mafia Island and all activities offered on the island, along with all meals and drinks including a selection of wines and champagnes. Forbes magazine which featured Thanda Island in a recent report, described the hotel as an "Indian Ocean paradise" about a 40 minute helicopter flight southeast of Dar es Salaam. [*Daily News*, February 12, 2016; *The Guardian*, March 4, 2016]

4. Water Based Tourism in Tanzania

4.1. An Overview of Aquatic/ Water Based Tourism in Tanzania

As mentioned above Tanzania is renowned for the attractiveness of its coastal and marine environments, high marine biodiversity and rich marine and coastal resources. The coastal and marine environments include among others: major estuaries, mangrove forests, coral reefs, sandy beaches, cliffs, seagrass beds and muddy tidal flats (Akwilapo, 2007). In the same environment are a wide range of important and valued species including an estimated 150 species of coral in 13 families, 8,000 species of invertebrates, 1,000 species of fish, 5 species of marine turtles, and many seabirds.

Coastal zones attract the largest number of tourists and the largest growth in the tourism sector is recorded in marine areas (Gladstone, et al., 2013; UNEP, 2009). In Tanzania the coastal zone includes the regions of Tanga, Coast, Dar es Salaam, Lindi and Mtwara. For potential the islands of Unguja and Pemba in the Zanzibar are of greater importance. According to the *Guidelines for Coastal Development in Tanzania* [2003], some of the mail coastal tourist attractions being visited can be described as follows:

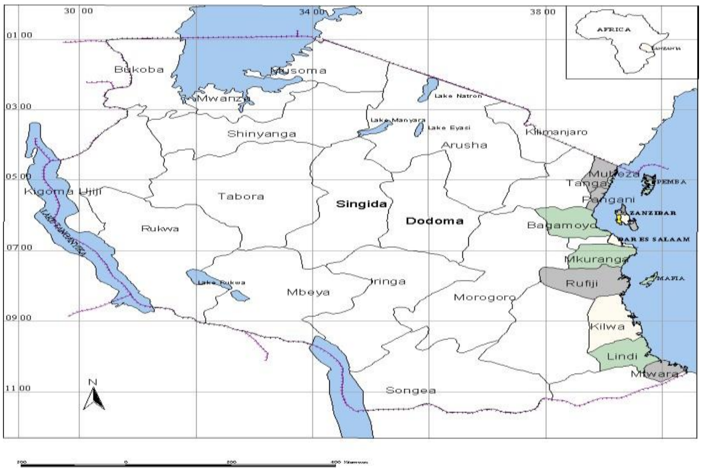
1. Bagamoyo town and the adjacent Kaole Ruins
2. The beaches and near-shore islands around Dar es Salaam and Mafia Island
3. The Saadani Game Reserve (soon to be upgraded to National Park status)
4. The history, culture and natural beauty of Pangani
5. The expansive beaches south of Dar es Salaam
6. The World Heritage sites of Kilwa Kisiwani and Songo Mnara
7. Untouched beaches of Mtwara
8. The unique Swahili coast culture and lifestyle
9. Traditional sailing vessels
10. Excellent coral reefs for diving and snorkeling

Activities in coastal and marine areas are diverse. They include (walking, collecting rarities, animal watching, tours), coastal waters (swimming, surfing, boating), deep waters (yachting, mammal watching, fishing), underwater activities (scuba-diving, shark feeding) (Gladstone, et al., 2013). Tanzania has a fringe of coral reefs along the coast all the way from north to south. It offers excellent sites for snorkeling and scuba diving. The inshore waters are characterized by a wide range of tropical fish species ranging from coral reef fishes to oceanic species like the scombrids. (Coastal Tourism Working Group, 2001) It also has birds, turtles as well as various coastal habitats like mangrove forests, salt marshes, deltas, bays and lagoons which are home to numerous species of fish, crustaceans mollusks, birds, and insects. Tanzania is practically bounded on all sides by water. It has the Indian Ocean to the east, the Great Rift Valley lakes of Africa (Lake Victoria to the northwest, Lake Tanganyika to the west and Lake Malawi/Nyasa to the southwest. All these have a wide range of diving possibilities, from shore diving, boat diving, living aboard a boat as well as snorkeling. It is thought that activities on these water bodies are more than what is presently documented. Moreover, there is much interest in scuba-diving which can become an important economic factor in terms of tourism development.

4.2. Understanding Scuba Diving and Snorkelling

SCUBA stands for Self Contained Underwater Breathing Apparatus, and describes the breathing gas cylinders that allow divers to breathe underwater (www.scuba-monkey.com/scuba-diving). Scuba diving allows an individual to explore the amazing sights of the underwater world, from ocean or lake creatures and plant life to shipwrecks and underwater caves (*Ibid*). Free diving is just diving in shallow water as opposed to scuba diving. Snorkeling is the practice of swimming on or through a body of water while equipped with a diving mask, a shaped tube called a snorkel (www.diversreefkarachi.com).

Figure 1: Map of Potential Areas for Diving and Snorkeling Tourism in Tanzania



4.2.1. Comparison of Scuba Diving and Snorkeling

Both snorkeling and scuba diving require a mask, snorkel and fins while allowing an uninterrupted view of the underwater world. However, the two differ in many ways, some of which are listed in Table 1.

Table 1: Comparison of Scuba Diving and Snorkeling

Snorkeling	Scuba diving
1. Snorkeling requires only the ability to swim and breathe because the majority of time is spent on the shallow water. 2. Training may not be required simply because an individual may merely place the mouthpiece in the mouth, adjusts the mask and puts the face in the water. 3. Snorkelers often see turtles on the surface when they ascend for fresh air. 4. Divers often use snorkeling as a way to find a new diving site.  Source: www.scuba-monkey.com	1. Scuba diving is a total immersion in deep water where divers can go to greater depths and explore things because they are more equipment that supplies them with more air than snorkelers. For that reason they need more energy to carry a container of a compressed air at their back. Divers' equipment includes, but is not limited to, a mask, fins, snorkel, wetsuit, buoyancy control device, regulator, depth gauge, air gauge and mouthpiece. 2. Scuba diving requires some training depending on the diver's need. Training can take a couple of days before one can start diving. 3. In most cases divers do not see turtles because majority are looking deep down to enjoy their time under the water  Source: www.scuba-monkey.com

Source: Researcher, 2016

4.3. Theories and Concepts Contributing to the Development of Scuba Diving

Leiper (2004) explains that a conceptual model helps to explain complex phenomena and processes in tourism (Leiper 2004 cited in Dimmock and Musa, 2015). A conceptual frame work can, for example, highlight key elements and simplify important associations in otherwise complex stakeholder relationships that influence tourism development processes and outcomes (Mair and Jago, 2010). This paper uses a system approach in proposing a conceptual model for scuba diving tourism in Tanzania. The system approach was used by Dimmock and Musa 2015 in describing the scuba tourism system where they propose a collaborative approach in sustainable development of scuba diving tourism. Their view is holistic. It includes what they called fundamental elements or stakeholders for Scuba Diving Tourism Systems (SDTS). These include scuba divers, the marine environment, the host community and the scuba diving tourism industry (including all associated industries), adaptive management and leadership. All of these are included to ensure the sustainability of marine resources and experiences (Dimmock and Musa 2015). The authors insist on the importance of the host community in the whole system. Community inclusion in any tourism system has been an agenda for decades and its importance has been seen in sustainability of the same (Mair and Jago, 2010; Dimmock and Musa 2015; Ezreth 2014).

The Coastal Tourism Working Group (2001) gives some tips on how to establish and maintain strong relationships between hotels and coastal communities in Tanzania. The system approach is thought to be used in the development of tourism in the periphery regions where it is seen as a modeling technique for framing, understanding, and discussing complex issues and problems (Blackman, 2004). The system approach helps corporate managers improve their understanding of industrial processes for tourism competitiveness. The approach is also widely used by public and private sectors for policy analysis and design.

5. The Potential for Scuba Diving in Tanzania

5.1. Rationale for Scuba Tourism in Tanzania

5.1.1. Global demand for scuba diving

Scuba diving is now a multibillion dollar industry and one of the world's fastest growing recreational sports (Ong and Musa, 2011 cited in Musa and Dimmock 2012). According to the Professional Association of Dive Instructors (PADI), the global number of certified divers in 2003 was 12.9 million, while 2008 was 17.8 million, compared with 22.2 million in 2013 (PADI, 2014). Since 1967, PADI has issued over 23,000,000 diver certifications globally (www.tdcgroup.org/investorfiles/PADI). The statistic shows a growing number of certified scuba divers giving a high potential market for this product. However, the statistic does not include the introductory courses in scuba diving even the non diving certificate. This means that the market for scuba diving is huge and it offers a lucrative income. Scuba diving major markets include America, Europe, Asia Pacific and Japan. Among the factors that contribute to the appeal and popularity of recreational scuba diving has been the development of safe and affordable diving equipment (Davis and Tisdell, 1995 cited in Musa and Dimmock, 2012), along with technological advances that enable marine craft to more easily access remote scuba diving sites (Parker, 2001 cited in Musa and Dimmock, 2012) and the growing interest in learning about and experiencing natural environments (Dimmock, 2009; Harriott, Davis, and Banks, 1997 cited in Musa and Dimmock, 2012). Scuba diving has been a major recreational activity in America, Malaysia, Singapore, Greece, UK and South Africa although recent statistics show that scuba divers have been moving to more than 91 countries in the world.

5.1.2. Expanding the Tourism Experience

Tourism development in Tanzania is currently facing difficulties because it has only a narrow range of tourism products. The industry is presently dominated by wildlife safari tourism with some cultural and adventure tourism as well. Scuba diving is thought to offer not only another type of tourism but also an addition to the existing ones. Scuba diving has become a global product in a niche market in recent year. However, it is rarely mentioned in the Tanzanian tourism marketing programs listing available tourism products especially by the Tanzanian Tourism Board [TTB]. Water tourism is rather undeveloped in the mainland water bodies, along the Indian Ocean coast and even in the off shore islands around Zanzibar. This is probably because the Government and investors' have just focused on wildlife tourism. According to the Coastal Tourism Working Group, tourists are increasingly looking for a diversified product that allows them to engage in a number of different activities within a limited time frame, and therefore a relatively small geographic area. For example, a tourist may want to spend a week at a beach resort, relaxing in the sun and engaging in various water sports. In addition to these traditional sun and sand activities, a tourist may also want to do some hiking, learn about the history and culture of the location, observe traditional cooking or farming methods, go bird-watching or see how local handicrafts are made. The destinations that can complement the traditional sun and sand activities with other unique experiences will have a major advantage over one-dimensional beach destinations even though the market for these beach-only destinations will continue to exist. The working paper presents challenges for product expansion, development and the maintenance in marine areas. Consequently scuba diving can be considered as a potential product to be developed not only along the Indian Ocean coast but even in all the other water bodies located throughout the country.

Figure 2: Potential Diving Areas in Tanzania

a. Lake Victoria

Source: www.africa-discovery.com

b. Lake Malawi/Nyasa

Source: www.africa-discovery.com

c. Lake Tanganyika

Source: news.georgiaaquarium.org

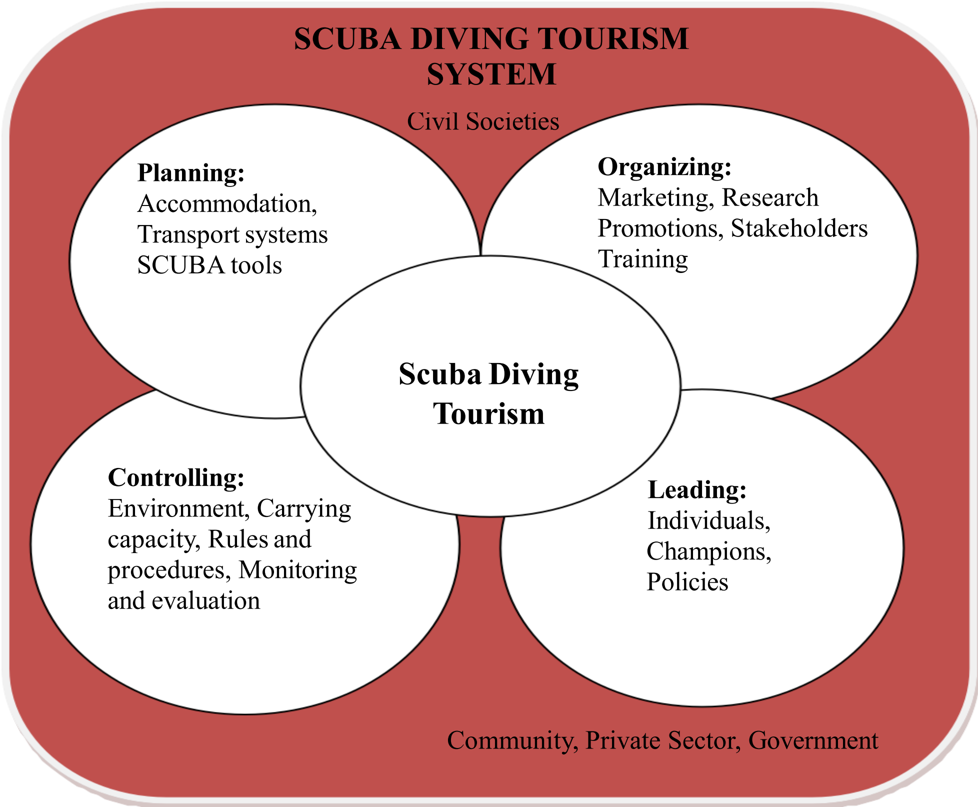
5.1.3. Conceptual Model for Scuba Diving Development in Tanzania

Tourism is a system of activities that inevitably touch the environment and the community in which it takes place. Dimmock and Musa (2015) noted that there have been research comprising a broad inquiry extending from marine environment impacts through to human physiology, health and safety as well as the motivation and satisfaction of scuba divers. They argued that those studies support an effort to understand the issues involved in scuba diving and its related tourism. Less than 30 per cent of these studies actually integrated multiple stakeholders and took perspectives in a holistic or systematic way. Scuba diving and snorkeling as well as the local businesses that support the sea activities in coastal and marine waters generate value for participants when it is well connected to the community.

Scuba diving is an economically important industry. This is evident from by the number of locations currently trying to promote their marine resources in an effort to become scuba diving destinations and scuba diving hotspots (Dimmock and Musa 2015). Scuba diving and snorkeling have both market and non market values. The market value is normally examined by how much money the diver has spent to support the host economy. The non-market value is associated with the value divers place on the marine resources they use beyond the payments they have made to access such resources. Scuba diving may be valuable to ecotourism. It may provide coastal areas with economic incentives to protect and preserve local marine wildlife and habitats. However, when the values and rights of the local community are violated, a conflict of interest may arise. Normally, such a community may be an obstacle to the development of the intended tourist product.

The non- market value is obviously very important for the sustainability of the marine resources. Hence, environmental awareness is expected to be of paramount importance in developing scuba diving tourism. Divers put more value on the environment when they see healthy corals, many sea turtles and other marine creatures. In America, where scuba diving is much more practiced, pollution is the most damaging threat to ocean health. It is followed by unsustainable fishing, loss of habitat, loss of biodiversity and, finally, climate change (www.oceana.org). In Tanzania pollution exists but not in high concentrations because scuba diving is a new product. Unsustainable fishing and loss of habitat are the most alarming indicators. Consequently, the cost of environmental destruction must be addressed during product development stage to avoid a loss of preference by divers especially when the product matures. Moreover, this must be done to avoid the destruction of the environment for other marine creatures when the ecosystem is disturbed. For this reason, it is very important to consider environmental management issues. If possible, in the beginning of this new product development guidelines for scuba diving in Tanzania should be developed. Thailand established and implemented environmentally friendly guidelines for dive operators and divers for sustainability of diving tourism in order to protect and conserve coral reef (www.greenfins-thailand.org). Learning from other parts of the world would provide a good way for developing scuba diving tourism in Tanzania. Other countries which have benefited from scuba tourism include Malaysia, Indonesia, United Kingdom, Greece and South Africa.

Figure 3: Proposed Model for Scuba Diving Tourism Development in Tanzania



Source: https://www.researchgate.net/figure/Proposed-Model-for-Scuba-Diving-Tourism-Development-in-Tanzania_fig1_348336839

5.2. Challenges for Scuba Diving Tourism Development

5.2.1. Financial Resources

Despite the fact that Tanzania is surrounded by water bodies, only a few areas have actually developed scuba diving tourism. This is because scuba diving requires high investment. Normally, a well-trained diver has to use proper equipment for safety. Protection of archaeological resources in marine areas includes the maintenance of a clean, beautiful and healthy environment which respects the values and beliefs of the host community. This maintenance includes prohibiting any act of bringing to the surface or moving objects of archaeological or other significance located in the deep water. Where consumption of marine resources is possible, a study has to be conducted to determine what can be consumed and in what amount. Despite these challenges, there are many potential scuba diving areas in Tanzania that include:

a. **Pemba Island**: Situated on the Indian Ocean Island, this island offers ocean diving where it is possible to see sharks, whales and many other local marine creatures.
b. **Member Atoll, Zanzibar:** This is the self-proclaimed tropical fish capital of East Africa.
c. **Leven Bank**: This is located far off the northern tip of Zanzibar and is populated by big game fish, tuna, barracuda and kingfish.
d. **Mafia and Mesali Island**: These are famous for whale and shark.
e. **Lake Tanganyika**: This is the deepest fresh water lake in Africa and the second

deepest in the world. Its water is clear with hundreds of species of cichlid, some of which can vie for vivid colors with marine species.

f. **Others:** These include Lake Victoria and Lake Malawi/Nyasa where diving has not yet been commercialized.

5.2.2. Training

Because it is sometimes dangerous, scuba diving requires training especially in areas of actual diving and protecting the marine environment. Training develops confidence among the divers. Diving experts are at the heart of the good training. They are required to be at the diving centers all year round.

5.2.3. Lack of Inter-industry Cooperation

Historically, the tourism industry is in fact disconnected. In accordance with the systems approach proposed in this paper, earlier studies on tourism define tourism as a discipline associated with a chain of activities. This chain must be seamless. In Tanzania, however, tourism of this kind is not yet practiced. As an academic discipline tourism should open up to other potential areas for a country's development rather than be seen as an industry that only operates on the basis of individual interests. Scuba diving tourism is thought to have the potential to unlock other areas of the economy such as agriculture, mining and manufacturing. Consequently it will require a lot of investments.

5.2.4. Detrimental Impact of Scuba Diving

Fortunately, divers' impact on coral reefs has been widely documented in many areas of the world (e.g., Dixon, Scura, and Hof, 1993; Hawkins and Roberts, 1992; Riegl and Velimirov, 1991; Tratalos and Austin, 2001 cited in Musa and Dimmock 2012). In the Northern Red Sea, significant coral breakages and higher rates of tissue loss occurred in areas frequented by divers (Riegl and Velimirov, 1991 cited in Musa and Dimmock 2012). Damage to coral colonies was evident in heavily dived sites in Egypt (Hawkins and Roberts, 1992 cited in Musa and Dimmock 2012). Reduced biological diversity in coral communities has been reported as an impact of scuba diving in the Caribbean island of Bonaire (Dixon *et al*., 1993 cited in Musa and Dimmock 2012). Thus, in developing scuba tourism, Tanzania should consider these detrimental effects and put in place interventions to prevent or overcome them.

Figure 4: Pictorial Presentation of the Negative Impact of Scuba Diving and Other Tourism Activities on Coral Reef

Source: www.africa-discovery.com

5.2.5. Marketing

Marketing poses another big challenge for scuba diving tourism development. Since diving is a niche market, its market is special ant thus requires a lot of investment in target marketing. However, once known and positively experienced, it is easy to receive customers through a word of mouth. Thus, the most important marketing tool in scuba diving is the quality of the product and the ability of the environment to provide maximum satisfaction to the customers. Also digital marketing using different technological applications is one of the major factors that help in reaching the customers more easily. However, technology requires high investment while the return is very slow.

6. Conclusion

It is thought that the components of the proposed model would be thoroughly studied to ensure sustainable development of scuba diving tourism in Tanzania. Divers require quality marine environments evidenced by quality of underwater sights. Quality defines the value placed on marine sites both by divers and the host community. Research has shown that where community interest are ignored and get no share of the revenue from coral reef they put no interest in preserving them. Thus community priorities should be defined for sustainable development of the product. A product is always good when it develops good experience. Such experienced in scuba diving may be achieved when other services such as accommodation, food, transports and other businesses are developed in the diving areas. Generally the scuba diving tourism system requires careful management and responsible use of the marine environment.

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THE EFFECTIVENESS OF *JIWA JAGAD JAWI* FROM AN EXPERIENTIAL MARKETING PERSPECTIVE

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ABSTRACT

This paper investigates the experiential marketing efficacy of the Jiwa Jagad Jawi video, scrutinizing its impact on viewers through emotional engagement, cultural immersion, storytelling, and authenticity. Employing a qualitative approach, it analyses viewer comments sourced primarily from YouTube, alongside literature and case studies. The video is lauded for its ability to immerse audiences in a sensory-rich journey, evoking profound emotions, triggering memories, and fostering cultural connections. Through captivating visuals and authentic storytelling, it transcends traditional advertising methods, leaving a lasting impression and forging deep-seated connections with the audience. The findings underscore the transformative potential of experiential marketing strategies, providing valuable insights for future brand campaigns seeking to engage and resonate with audiences on a meaningful level.
Keywords*: Experiential Marketing, Emotional Engagement, Cultural Immersion, Storytelling, Authenticity.*

1. Introduction

In today's fast-paced, highly competitive world, experiential engagement has emerged as a potent and compelling strategy for fostering meaningful connections. It is no longer enough to simply advertise a product or service; brands need to create an emotional connection with their customers to stand out from the crowd. And it is also important to consider that the experience is a longitudinal process that starts well before the experience takes place right through after the consumption of a service, to consider even long-term impacts (Fyall et al 2019).

Experiential marketing considers not only the rational desires of consumers, but also their emotions. The purpose of experiential marketing is to accurately determine the expectations of consumers from goods and services and to meet the expectations of consumers by creating an appropriate experience strategy Kustini, N. (2011). In this context, it is stated that experiential marketing activities generally serve the purpose of providing viewers with different experiences.

Jiwa Jagad Jawi provides a framework for understanding the interconnectedness of humanity and the shared emotions and values that bind us together. This exploration goes beyond mere promotion; it delves into the realm of storytelling, emotion, and cultural relevance to create experiences that leave a profound impact. Notably, the launch of Jiwa Jagad Jawi in 2022 showcased Indonesia's rich culture, cuisine, and natural beauty, offering a compelling example of its potential in experiential marketing campaigns. Jiwa Jagad Jawi was launched in 2022 in a theme of rediscovering the mind, body, and soul of Java whilst promoting several destinations in Java.

Specifically, this paper aims to address the following research problem: How does the Jiwa Jagad Jawi video enhance the experiential marketing experience for viewers? By examining existing literature, analysing case studies, analysing the comment, and drawing insights from industry experts, I seek to provide a comprehensive understanding of the role of Jiwa Jagad Jawi in shaping consumer perceptions and behaviour.

2. Literature Review

Experiential Marketing

The concept of experiential marketing was first introduced by Schmitt (Çeltek2010). According to Schmitt (1999,214) experiential marketing is defined as "a phenomenon that looks at consumption for customers who act with their senses and minds from the perspective of experience and approaches them according to the experiences of the customers." According to the International Association of Experiential Marketing (IXMA, 2010), experiential marketing is a tool that enables communication between the business and the customer via the sensory pathway and an interaction between customers and brands, products and services. Experiential marketing practices focus on customers' experiences rather than the benefits and functions of products (Altunışık et al. 2006).

Schmitt (1999) produced the Strategic experiential modules (SEM) to create successful experiences. According to Schmitt, those experiences need to show five characteristics:

a. SENSE: Sensory experiences. Schmitt advocates relying on the five senses for a satisfactory experience. Those five senses need to come together to provide consistency (an underlying concept that one can clearly identify) but with freshness every time. In other words, a consistent message with diversity of expressing it throughout time.
b. FEEL: Affective experiences. The objective here is to elicit emotion and, more importantly, know which tools/events can be used to prompt those emotions. Care should be brought to make sure that consumers are also willing to empathise with the situation given.
c. THINK: Cognitive experiences. Those experiences are in direct connection with consumers' intellect. The objective here is to create cognitive, problem-solving experiences by playing on consumers' surprise, intrigue, and provocation. Again, this is very present in the tourist experience, where intellectual challenge is often tested through learning about history and culture and now magnified through various treasure-hunts, geo-catching games that aim to test one's own intellectual capacities. The previous case study about the iceman museum highlights this point.
d. ACT: Physical, behavioural and lifestyle experiences. These experiences aim to target consumers' physical abilities and encourage them to even consider alternative ways of doing things. Holidays provide many opportunities to try new activities, new sports that can provide tourists with cognitive experiences of long-lasting memories.
e. RELATE: Social-identity experiences (relating to different groups or cultures). This experience is linked to the desire for self-improvement, to be perceived more positively by others, and relate to a broader system (such as discovering a new culture). Again, this is very present in tourism consumption whereby travelling will often stimulate the desire to know more about the culture of the country visited, rely on one's own culture, and the world in which one lives. This experience also relates to the Consumer Culture Theory vision of tribes and the necessity to belong to a tribe as a new way of finding an identity in contemporary societies.

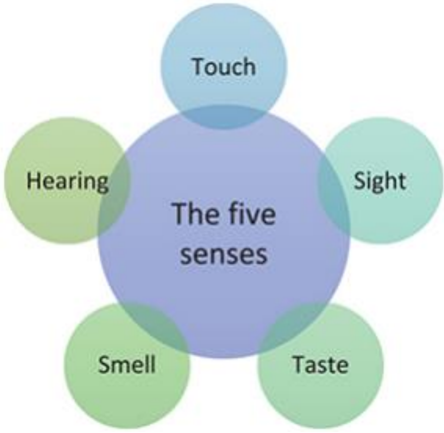


Figure 1. Five Senses
Source: Fyall et al., (2019)

3. Methodology

This qualitative research employs a multi-faceted approach to explore the impact of the Jiwa Jagad Jawi video, sourced primarily from YouTube, within the context of experiential marketing. Utilising YouTube video analysis and qualitative analysis of viewer comments, the study aims to uncover nuanced responses, emotions, and narratives surrounding the video, all of which contribute to shaping the experiential journey of the audience. With a total of 2,729 comments and a viewership of 667k, viewer engagement metrics such as views, likes, dislikes, comments, and shares were systematically analysed. A subset of comments was randomly selected to ensure representation across various viewer demographics and opinions, providing quantitative insights into the video's reach and resonance among viewers. Additionally, qualitative content analysis of viewer comments will be conducted to identify key themes, emotions, and interpretations expressed by the audience, shedding light on how the video contributes to creating memorable and immersive experiences. Through this comprehensive approach, the research seeks to deepen our understanding of how the Jiwa Jagad Jawi video enhances people's experiences in experiential marketing, offering valuable insights for marketers seeking to create impactful and engaging brand experiences in the digital realm.

4. Result and Discussion

The "Jiwa Jagad Jawi" video, spanning 8 minutes and 12 seconds, stands as an artistic cinematic masterpiece, narrating the journey of a Javanese woman on a quest to rediscover her roots, identity, and family. Through compelling storytelling and visually captivating scenes, the video delves deep into themes of cultural heritage, self-discovery, and the importance of familial connections. Its evocative narrative resonates with viewers, offering a poignant reflection on the universal human experience of seeking belonging and understanding.

Reaction video creators unanimously praised the Jiwa Jagad Jawi video for its exceptional cinematic production quality. They consistently expressed admiration for the artistic and masterfully crafted visuals, using words like 'fantastic,' 'magnificent,' 'beautiful,' and 'amazing' to describe the cinematography. This widespread appreciation underscores the video's ability to captivate audiences through its stunning visuals and impeccable production values.

Viewer Comments Analysis:

> @artankhan6323, I am of Javanese descent who was born and grew up in Sumatra, watching this video gave me goosebumps, moved, proud, indeed the inner bond cannot be deceived, matersuwun really misses the ancestors of the land of Jawi. Aku keturunan jawa yg lahir besar ditanah Sumatera, melihat video ini merinding, terharu, bangga, memang ikatan batin tidak bisa dibohongi matersuwun sanget kangge poro leluhur eng tanah jawi.

@artankhan6323's comment reflects a deep emotional connection to the video, expressing feelings of pride and nostalgia. The viewer's personal background as a Javanese descendant born and raised in Sumatra adds a layer of cultural resonance to their response.

> @UlfiAlfisnaini, *this video is so magical, the collaboration between the narration, the setting, the music feels like it hypnotises anyone who sees it*.

@UlfiAlfisnaini's comment emphasises the magical quality of the video, highlighting its hypnotic effect on viewers. This underscores the captivating nature of the visuals and their ability to immerse the audience in the experience.

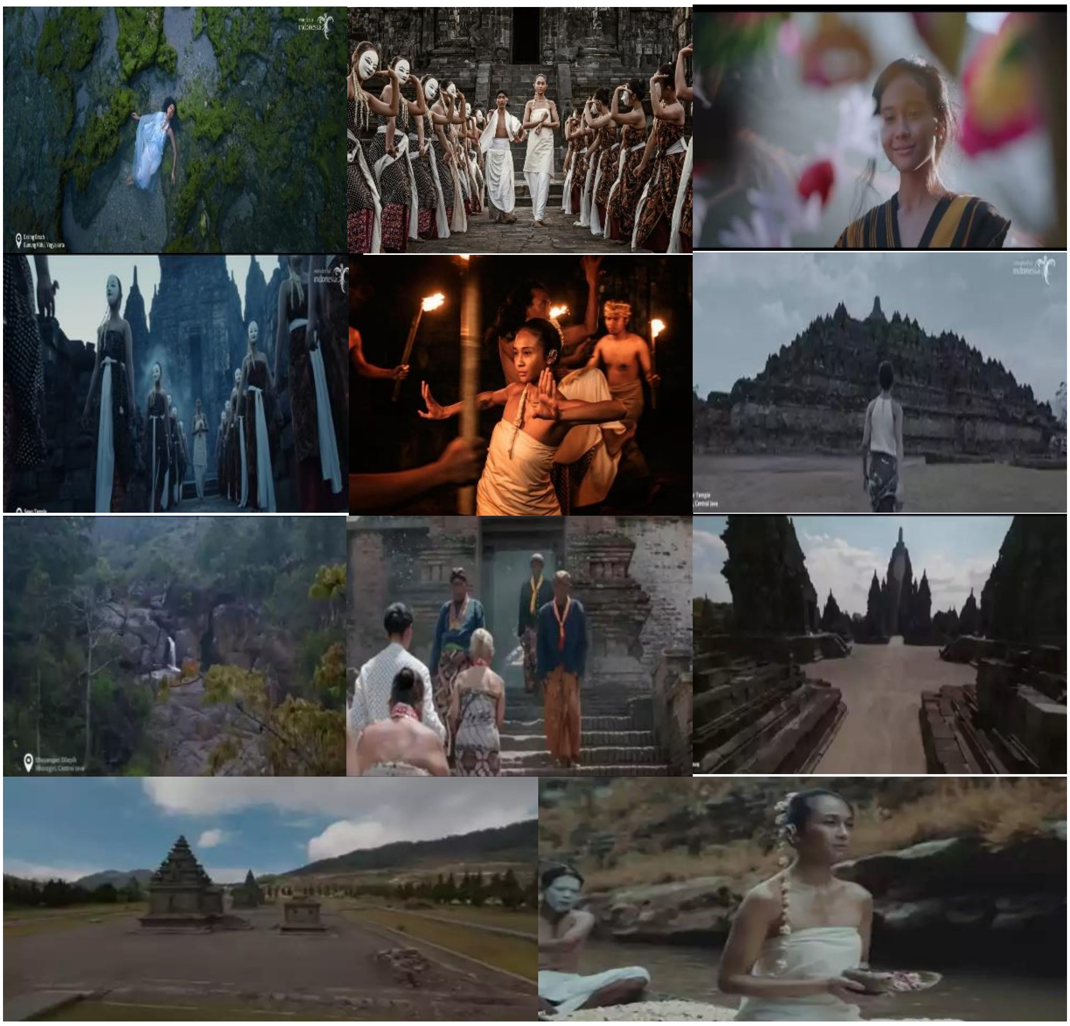
> @maqouelongtchi7231, of all Wonderful Indonesia's videos, this is my most favourite video. Watched it many times, still never get bored of watching it again and again. Even though I'm not Javanese, I can understand the meaning of the message conveyed by this video, I can even understand the Javanese language in this video even without translation. *Dari semua videonya Wonderful Indonesia, this is my most favorite video. Berkali2 ditonton, tetap tidak pernah bosan untuk menontonnya lagi dan lagi. Walau saya bukan orang Jawa, tapi saya bisa memahami maksud dari pesan yang disampaikan oleh video ini, bahkan bahasa Jawa di video ini bisa saya pahami bahkan jika tanpa adanya translate*.

@maqouelongtchi7231's repeated enjoyment of the video suggests its lasting appeal and universal resonance. Despite not being Javanese, the viewer expresses a deep understanding and appreciation for the video's message, showcasing its ability to transcend cultural boundaries.

> @sutorodw, *the video is insanely great. It really shows Java from a different perspective— the root, the heart, the DNA, the "real". Not Java that we see on a daily basis. Couldn't fault it, couldn't love it more.*

@sutorodw's comment underscores the transformative nature of the video, offering a fresh perspective on Java that goes beyond stereotypes. This reflects the authenticity and impact of the media's portrayal of Javanese culture.

The entirety of the Jiwa Jagad Jawi video is immersed in rich Javanese cultural symbols, each carefully chosen to weave a tapestry of heritage and tradition. Throughout the video, viewers are treated to depictions of iconic elements such as Semar, a revered figure in Javanese mythology symbolising the protective spirit of Java. Additionally, the video showcases the intricate beauty of Javanese batik patterns and traditional attire, alongside the enigmatic allure of Javanese masks. Complementing these visuals are the soul-stirring melodies of traditional Javanese songs, further enveloping the audience in the essence of Javanese culture. Together, these cultural symbols create a sensory experience that celebrates the richness and vibrancy of Javanese heritage.



https://www.google.com/search?q=wonderful+indonesia+2022+jiwa+jagad+jawi&client=firefox-b-

In the analysis provided, several key aspects of experiential marketing theories are utilised to understand how the "Jiwa Jagad Jawi" video enhances people's experiences:

a. Emotional Engagement

The Jiwa Jagad Jawi video taps into the emotional aspect of the audience by showcasing the rich cultural heritage and values of Java. As @artankhan6323 expressed, *"Watching this video gave me goose bumps, moved, proud, indeed the inner bond cannot be deceived, matersuwun really misses the ancestors of the land of Jawi."* Through its evocative portrayal of traditional customs, landscapes, and everyday life, the video invites viewers to feel and sense the sights, sounds, and emotions woven throughout the narrative. @UlfiAlfisnaini similarly described it as "magical," highlighting how the collaboration between narration, setting, and music hypnotises viewers. This immersive experience instils a profound sense of pride and nostalgia, connecting viewers with their roots on a deeply emotional level. @maqouelongtchi7231 even remarked, *"Even though I'm not Javanese, I can understand the meaning of the message conveyed by this video."* This emotional resonance not only fosters a deeper appreciation for Java's cultural tapestry but also creates a profound connection with the brand or product being marketed. As @sutorodw aptly put it, the video shows Java from a different perspective, capturing its essence as the 'root, the heart, the DNA, the real.' By intertwining the essence of Jiwa Jagad Jawi with the marketing message, the video enhances the overall experience, transforming mere viewers into active participants in a shared cultural journey."

b. Cultural Immersion

By featuring elements of Jawi culture, the Jiwa Jagad Jawi video offers a unique and immersive experience for the audience. As @maqouelongtchi7231 expressed, *'Dari semua videonya Wonderful Indonesia, this is my most favourite video. Berkali-kali ditonton, tetap tidak pernah bosan untuk menontonnya lagi dan lagi.'* It allows viewers to immerse themselves in the rich tapestry of Java's cultural heritage, offering a glimpse into its traditions, customs, and values. This cultural immersion not only enriches the audience's understanding of Jawi culture but also fosters a sense of connection and appreciation for its diverse perspectives. By providing viewers with the opportunity to explore and engage with different cultural facets, the Jiwa Jagad Jawi video enhances their overall experience, transforming passive observation into an active cultural journey.

c. Storytelling

The video employs storytelling techniques to convey messages effectively. As @UlfiAlfisnaini noted, *'The collaboration between the narration, the setting, the music feels like it hypnotises anyone who sees it.*' Stories have a powerful impact on human psychology and memory, making the marketing message more memorable and impactful. This is evident in the way viewers, like @sutorodw, describe the video as 'insanely great,' highlighting its ability to captivate and resonate with audiences. By effectively weaving storytelling elements into the narrative, the Jiwa Jagad Jawi video enhances viewer engagement and creates a lasting impression that extends beyond mere advertising."

d. Authenticity

Authenticity is crucial in experiential marketing, and the "Jiwa Jagad Jawi" video authentically represents the Jawi culture. As @sutorodw emphasised, *'The video is insanely great. It really shows Java from a different perspective—the root, the heart, the DNA, the "real".'* This authenticity builds trust and credibility with the audience, enhancing their experience and perception of the brand. By presenting Jawi culture in an authentic and respectful manner, the video fosters a deeper connection with viewers, as highlighted by @maqouelongtchi7231's comment, 'Even though I'm not Javanese, I can understand the meaning of the message conveyed by this video.'"

The Jiwa Jagad Jawi video enhances people's experiences in experiential marketing by immersing viewers in a sensory-rich journey that evokes emotions, triggers memories, and fosters cultural connections. As @artankhan6323 described*, 'Watching this video gave me goose bumps, moved, proud, indeed the inner bond cannot be deceived, matersuwun really misses the ancestors of the land of Jawi.'* Through captivating visuals, authentic storytelling, and immersive soundscapes, the video invites viewers to explore the cultural heritage and values of Java. @UlfiAlfisnaini's comment highlights the emotional impact of the video, stating that *'The collaboration between the narration, the setting, the music feels like it hypnotises anyone who sees it.' This immersive experience allows viewers to feel a sense of belonging and pride*, as @maqouelongtchi7231 expressed, *'Even though I'm not Javanese, I can understand the meaning of the message conveyed by this video*.' By fostering cultural connections and emotional engagement, the Jiwa Jagad Jawi video creates a profound and memorable experiential marketing experience for its audience."

This emotional engagement creates a deeper connection with the brand or product being marketed, transforming the passive act of consumption into an interactive and memorable experience. By tapping into the audience's emotions, senses, and cultural identity, the Jiwa

Jagad Jawi video elevates the experiential marketing landscape, leaving a lasting impression that transcends traditional advertising approaches.

There are already authors who have written about Jiwa Jagad Jawi, each offering unique perspectives on this cultural phenomenon. For instance, Dian Arymami explores the impact of Jiwa Jagad Jawi through the lens of reaction videos in her article, "Discovering Indonesia: Video Reactions of Jiwa Jagad Jawi Storynomic Tourism." In contrast, this article delves into "The Effectiveness of Jiwa Jagad Jawi from an Experiential Marketing Perspective," focusing on how the promotional video creates memorable experiences for viewers. These distinct approaches shed light on different aspects of Jiwa Jagad Jawi and its influence on tourism promotion and audience engagement.

5. Conclusion

In conclusion, the Jiwa Jagad Jawi video exemplifies the potency of experiential marketing in forging profound connections with audiences. Its adept utilisation of emotional resonance and cultural authenticity transcends conventional advertising methods, immersing viewers in a sensory-rich journey that evokes deep-seated emotions. By authentically depicting Javanese cultural heritage and values, the video instils a sense of belonging and pride among viewers, amplifying their overall engagement and fostering enduring connections with the marketed brand or product. To replicate its success, future creators should prioritise authenticity, emotional storytelling, and high production quality, tailoring content to resonate with target audiences while maintaining cultural sensitivity. As the landscape of experiential marketing evolves, the Jiwa Jagad Jawi video serves as a guiding beacon, showcasing the transformative potential of storytelling, emotion, and cultural authenticity in driving impactful marketing campaigns.

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ANALYSIS OF POPULATION AND UNEMPLOYMENT ON ECONOMIC GROWTH IN INDONESIA DURING THE COVID-19 PANDEMIC

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ABSTRACT

Understanding the effect of population and unemployment rate on Indonesia's economic growth during the COVID-19 pandemic period is the main focus of this study. Through descriptive and explanatory approaches as well as multiple linear regression analysis, the study highlights that population increase has a positive impact on economic growth, while the unemployment rate has a negative influence. These findings confirm that economic growth can be spurred by population growth, but can be hampered by high unemployment. In addition, factors such as the quality of human resources, infrastructure, and government policies also influence the dynamics of economic growth. Therefore, it is important for the government to continue to improve these aspects in order to optimize Indonesia's economic potential. This study provides a deep understanding of the relationship between demographic factors and economic growth during the COVID-19 pandemic.

***Keywords**: Number of Population, Unemployment, Economic Growth during the Covid-19 Pandemic Period, Indonesia.*

1. Introduction

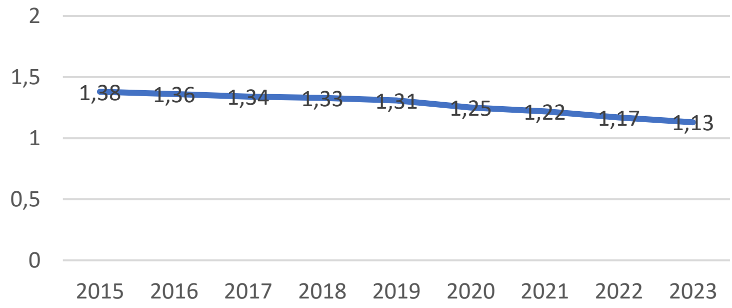
Indonesia has been seriously affected by the COVID-19 pandemic. Indonesia ranks third in the number of deaths due to COVID-19 in Asia (Worldometer, 2020). Indonesia's economic growth has decreased due to the Large-Scale Social Restrictions (PSBB), including restrictions on people's economic activities. The government also implements health protocols such as maintaining distance, avoiding crowds, and issuing *Work From Home* policies. This makes it difficult for producers to run their businesses directly, and consumers face difficulties in obtaining daily necessities. Some sectors and companies are experiencing difficulties, even some of them are bankrupt or do not have *cashflow*, resulting in layoffs.

The impact of the Covid-19 pandemic caused a decrease in economic growth by minus 5.32% in the second quarter of 2020, (BPS, 2020) in the third quarter of 2020 indicating a decrease ranging from minus 2.9% to minus -1.1%. This negative impact penetrated the employment sector, reflected in an increase in the number of unemployed, the deteriorating economic situation prompted a number of companies to make layoffs. The decrease in the number of job vacancies reached 62% as of May 2020 reflecting a significant decrease in labor demand (Thomas, 2020).

The sectors most affected by the COVID-19 pandemic include tourism, MSMEs, households, finance, textiles, etc. (Firdaus, 2020). The trade sector experienced a significant reduction in employment, with around 677,000 to 953,200 workers reduced (Bappenas, 2020). Meanwhile, the construction sector experienced a reduction in employment by 3.2% to 4.5% of the number of workers in February 2020. Some sectors that can still absorb labor during the pandemic include education, information and communication, health services and social activities, and financial and insurance services (Rizal, 2020).

In addition, population is a potential input that can be used as a factor of production to increase the production of a company's household. (Zulfa, 2016). Indonesia's population growth rate in 2023 is at 1.13%. The population growth rate is the lowest level in eight years. As for the period 2015-2022, Indonesia's population growth rate continues to decline every year and increase by 1.13% in 2023. (Annur, 2023)

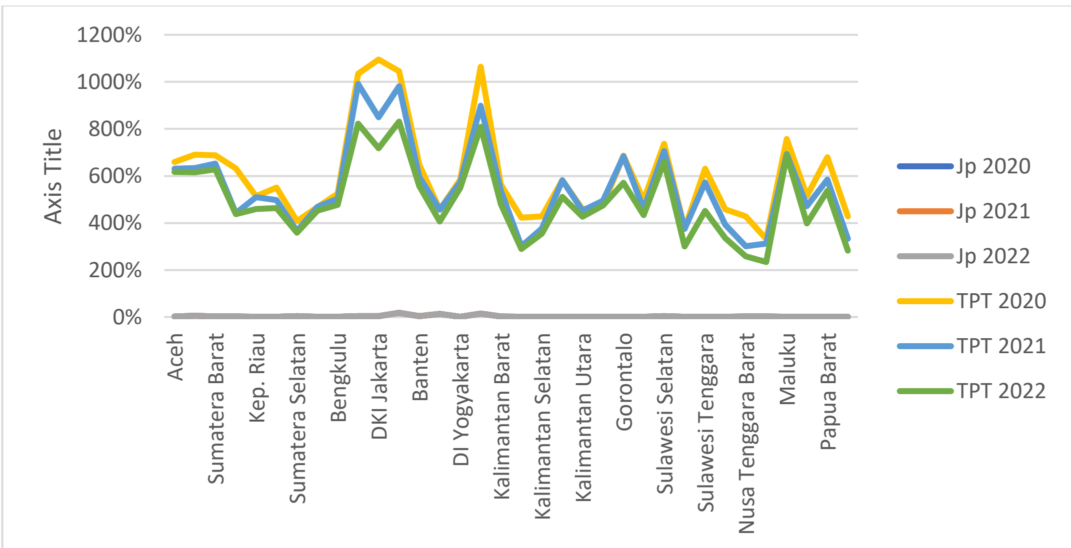
Figure 1. Indonesia's Population Growth Rate in 2015-2023



Source : BPS data processed by the author, 2024

Open unemployment is a type of unemployment that is formed due to the availability of job opportunities smaller than the growing workforce. (Wahab, 2022). The number of unemployed people in Indonesia has tended to decline in the last three years, since reaching its highest peak at the beginning of the COVID-19 pandemic. Then, the number of unemployed people in Indonesia exceeded 9.77 million people in August 2020. That figure is up 2.67 million people compared to the same period last year. In 2021, the number of unemployed or open unemployment rate (TPT) in August 2021 reached 6.49 percent of the total labor force or equivalent to 9.10 million. This number is lower than the TPT in August 2020. (Andrean W. Finaka, 2023) Economic growth reflects the state of the economy of a region or country. (Nuzulaili, 2022). (Wahab, 2022) and the Central Statistics (BPS) noted that the Indonesian economy in 2022 managed to grow 5.31 percent compared to the previous year (*year-on-year* / yoy). The domestic economy in 2022 managed to grow thanks to high growth in the fourth quarter of 2022 which rose 5.01 percent (BPS. 2022).

Figure 2. Economic growth, number of unemployed, open unemployment rate (TPT) in 2020-2022.



Source : BPS data processed by researchers, 2024

2. Literature Review

2.1 Economic Growth

A country's economy is measured by its economic growth, which reflects the success of economic development. If there is an increase in the production of goods and services, or in other words, there is a development of a country's Gross National Product (GNP), then it is a positive indicator of economic growth. Good economic growth should be reflected in an increase in per capita output, real wage growth, and an increase in living standards (Astuti et al., 2019). The factors that affect the economic growth of a society or country can be categorized into three, as stated by Subandi (2016). First is capital accumulation, which includes investments in various forms such as land, physical equipment such as machinery and infrastructure, as well as human resources through education and training. This investment in capital increases production capacity and directly supports economic growth.

Second is population and labor growth. Increasing population can be a human resource that has the potential to increase the workforce, but must be balanced with improving the quality of education and training to improve their skills. In addition, adequate job creation also needs to be done to accommodate labor growth. Third is technological progress, which is considered the most important factor in driving economic growth. Technological advances can change the way resources are produced and used, both neutrally and by saving labor and capital. This can increase productivity and efficiency in various sectors of the economy, which in turn will accelerate overall economic growth

Overall, a combination of capital accumulation, population and labor growth, and technological advances play an important role in determining the pace of economic growth. To achieve high and sustainable economic growth, appropriate policies are needed to encourage investment, improve the quality of the workforce, and encourage technological innovation. This will help create an economic environment conducive to long-term growth and the overall well-being of society.

2.2 Unemployment

Unemployment refers to individuals who have not managed to get a job, even though they are included in the category of the labor force who have the ability and desire to work (Fikri &; Gopar, 2020). The COVID-19 pandemic situation has caused many people to find it difficult to find work due to job losses and increasing job competition (Indayani &; Hartono, 2020).

In this context, there are several types of unemployment such as covert unemployment, underemployment, and open unemployment (Franita, 2016). Involuntary unemployment often occurs when economic growth slows, leading to company bankruptcies and layoffs. On the other hand, voluntary unemployment occurs when individuals are able to work but choose not to work (H, 1992).

In addition, frictional unemployment is also a phenomenon caused by an imbalance between labor demand and available jobs (Prof. Dr. Ir. Johannes, 1981). Some factors that cause high unemployment include imbalances between the number of workers and employment, company preferences for technology, quality of human resources, lack of education, high poverty rates, mass layoffs, remote work locations, global competitiveness, difficulty finding jobs, and too high expectations of prospective workers (Kasnelly, 2020).

Unemployment refers to the condition of a person who wants a job but has not managed to get it, and they do not participate in the process of production of goods and services, causing a general shortage of demand. The inflexibility of wage levels in the labor market can result in a decrease in firm production and an increase in the number of untapped labor. As a result, unemployment occurs where individuals belonging to the labor force are unemployed and actively looking for work. It is important to note that a person who is not working but is actively looking for work cannot be categorized as unemployed, as revealed by Mankiw (in Nanga, 2018).

2.3 Periode Pandemic

Government regulations stipulate the implementation of Large-Scale Social Restrictions (PSBB) authorized by the Minister of Health and can be implemented by Regional Governments with the approval of the Minister of Health. Involvement in the world of work makes individuals more vulnerable to the impact of the pandemic, as stated by McKibbin (in Fernando, 2020). As a result of this regulation, factors such as average monthly income, family size, education level, and incidence of disease are significant determinants of urban poverty rates (Ramadhani, 2023).

The COVID-19 pandemic has had a significant impact on unemployment and economic growth in Indonesia. Large-scale social restrictions (PSBB) and other preventive measures have resulted in many sectors of the economy being hit, causing a decline in production, business closures, and a decrease in income. This has contributed to an increase in the unemployment rate in the country, with many workers losing their jobs or experiencing cuts in working hours. In addition, limited mobility and global economic uncertainty also affect Indonesia's overall economic growth. With declining exports and imports, as well as declining business activity, Indonesia's economic growth has slowed. Therefore, sustainable economic recovery measures and policies that support the labor sector are key in facing the economic challenges faced by the COVID-19 pandemic.

3. Research Methods

This study uses a descriptive and explanatory approach using numerical data to reveal the relationship between population, unemployment rate, and economic growth in Indonesia during the COVID-19 pandemic period. The variables used in this study are independent variables that affect economic growth as dependent variables. The data source used comes from secondary data obtained from trusted institutions such as the Central Statistics Agency (BPS).

The method of data analysis is carried out using multiple linear regression, Multiple linear regression is a statistical model used to predict the value of the dependent variable (Y) based on two or more independent variables (X1, X2, ..., Xn). This model is called "multiple" because it involves more than one independent variable, and "linear" because the relationship between the dependent variable and the independent variable is assumed to be linear; a method used to analyze the relationship between three main variables, namely population, unemployment rate, and economic growth.

Classical Assumption Test:

a. **Normality:** Kolmogorov-Smirnov/Shapiro-Wilk test (H0: Normal distribution)
b. **Homoscedasticity:** Breusch-Pagan/White Test (H0: Constant residual variance)
c. **Multicollinearity:** VIF (Variance Inflation Factor) > 10 (indication of multicollinearity)
d. **Autocorrelation:** Durbin-Watson/Ljung-Box Test (H0: No autocorrelation)

Best Model Test:

a. **Anova:** F test (H0: All regression coefficients zero)
b. **t-test: Individual t-test** (H0: Individual regression coefficient = 0)
c. **F-test:** Overall F test (H0: All regression coefficients zero, except intercept)

Hypothesis Testing:

$$\mathbf{PAD_{it}} = \boldsymbol{\beta_0} + \boldsymbol{\beta_1}\mathbf{P_{it}} + \boldsymbol{\beta_2}\mathbf{R_{it}} + \boldsymbol{\beta_3}\mathbf{JP_{it}} + \boldsymbol{\beta_4}\mathbf{TK_{it}} + \boldsymbol{e_{it}}$$

Information:
$\mathbf{PAD_{it}}$: Local Original Revenue
$\mathbf{P_{it}}$: Local Tax
$\mathbf{R_{it}}$: Regional Retribution
$\mathbf{JP_{it}}$: Population
$\mathbf{TK_{it}}$: Poverty Rate
$\boldsymbol{e_{it}}$: Error

4. Research Findings and Discussion

This study presents research findings based on explanations of statistical descriptions and results of logistic regression analysis. Information description of research data is presented in the following table:

Table 1. Description of Research Data Statistics

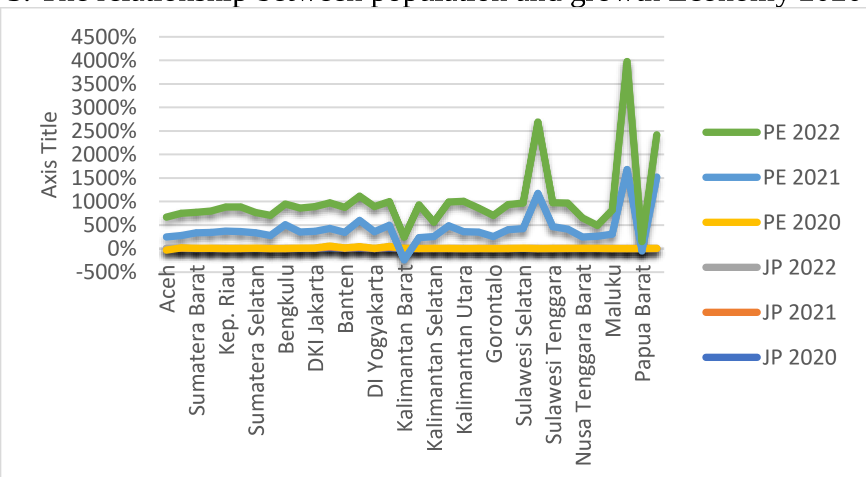
Variable	Obs	Average	Deviation Std.	Minimum	Maximum
Total Population	102	8026.083	11271.96	701.8000	49405.80
Opened Unemployment	102	5.497255	1.852934	2.340000	10.95000
Economic Growth	102	2.907059	4.445997	-9.340000	22.94000

Source : BPS, data processed by the author, 2024

From table 1 above, it can be seen that this study involved 102 variables. The average population in the area in this study was 8026 people with a standard deviation of 11271.96 people. This shows that there is considerable variation in population numbers in the study area. The average open unemployment rate was 5.49% with a standard deviation of 1.85%. This suggests that the unemployment rate in this study area is relatively low. The average economic growth rate is 2.91% with a standard deviation of 4.45%. This suggests that economic growth rates in this study area vary.

Based on the descriptive statistical analysis above, it can be concluded that the population in this study area is quite diverse, the unemployment rate is relatively low, and the economic growth rate varies.

Figure 3. The relationship between population and growth Economy 2020-2022



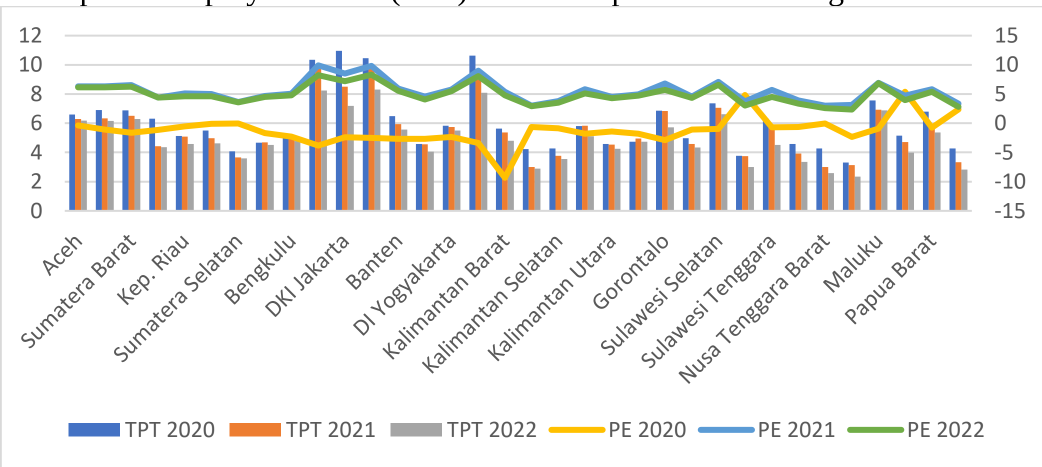
Source: BPS, data processed by the author, 2024

Based on diagram above, there is a significant relationship between population and economic growth in Indonesia during the 2020-2022 period. This can be seen from the trend that shows that regions with higher populations, such as West Java and East Java, generally experience higher economic growth as well. For example, West Java with a population percentage of 15%, experienced economic growth of 4.96%. On the other hand, regions with lower populations, such as Bengkulu and Gorontalo, generally experience lower economic growth.

This relationship can be explained by several factors. First, a high population can increase demand for goods and services, thereby encouraging the growth of economic sectors such as trade, tourism, and manufacturing. Second, a high population can provide the human resources needed to support economic growth.

However, it should be noted that the relationship between population size and economic growth is not always linear. Several other factors, such as the quality of human resources, infrastructure, and government policies, can also affect economic growth. Therefore , it is important for the government to continue to improve the quality of human resources, infrastructure, and government policies to maximize the potential for economic growth in Indonesia.

Figure 4. Open unemployment rate (TPT) relationship and Economic growth in 2020-2022



Source : BPS, processed by the author, 2024

Based on graph shown above, there is a negative relationship between the open unemployment rate (TPT) and economic growth in Indonesia in 2020-2022. This means that when economic growth increases, TPT tends to decrease, and vice versa. This relationship can be explained by several factors. First, high economic growth encourages the creation of new jobs, thereby reducing the number of unemployed. Second, economic growth can increase people's income, which in turn can increase demand for goods and services. This encourages companies to open new jobs to meet the demand.

However, it should be noted that this relationship is not always linear. In some cases, high economic growth is not always followed by a significant decline in TPT. This can be caused by several factors, such as workforce skills that do not match the needs of the labor market, or the presence of external factors that affect the economy, such as the COVID-19 pandemic.

Overall, it can be concluded that there is a negative relationship between TPT and economic growth in Indonesia in 2020-2022. High economic growth can help reduce TPT, but this relationship is not always linear and is influenced by several other factors.

4.1. Classical Assumption Test

The Classical Assumption Test used in this study is multicholinerlity and heterokedasticity. The Classical Assumption Test can be illustrated in the following table :

Tabel 2. Uji Multikolinearitas

	X1	X2
X1	1.000000	0.489150
X2	0.489150	1.000000

Source : data processed by the author, 2024

X1 : Total Population
X2 : Open Unemployment Rate

From the results of the multicholinerality test table 2 above, it can be concluded that the value of the correlation coefficient between independent variables ranging around 0.4 indicates the absence of significant multicollinearity in this research model.

Tabel 3. Hasil Regresi Linear Berganda

Variable	**Economic Growth**	
	(1) Fixed Effect	**(2) Random Effect**
Total Population	0.005494	3.70E-05
Open Unemployment Rate	-3.382536	-0.870392

Source : data processed by the author, 2024

Based on table 4 of multiple linear regression results above, there are two regression models analyzed, namely Fixed Effect and Random Effect models. Both models aim to see the influence of two independent variables, namely the Number of Population and the Open Unemployment Rate (TPT), on the dependent variable, namely Economic Growth.

4.2. Model Fixed Effect

In the Fixed Effect model, the regression coefficient for the Total Population variable is 0.005494. This shows that every increase of 1 unit of Total Population will increase Economic Growth by 0.005494 units, ceteris paribus.

While the regression coefficient for the Open Unemployment Rate (TPT) variable is -3.382536. This shows that every increase of 1 unit of the Open Unemployment Rate (TPT) will decrease Economic Growth by 3.382536 units, ceteris paribus.

4.3. Model Random Effect

In the Random Effect model, the regression coefficient for the Total Population variable is 3.70E-05. This shows that every increase of 1 unit of Total Population will increase Economic Growth by 3.70E-05 units, ceteris paribus. While the regression coefficient for the Open Unemployment Rate (TPT) variable is -0.870392. This shows that every increase of 1 unit of the Open Unemployment Rate (TPT) will decrease Economic Growth by 0.870392 units, ceteris paribus.

It can be concluded that Population has a positive influence on Economic Growth in both regression models, Open Unemployment Rate (TPT) has a negative influence on Economic Growth in both regression models. The population and open unemployment rate (TPT) have a significant influence on economic growth in Indonesia. Increasing the population will encourage economic growth, while increasing the Open Unemployment Rate (TPT) will hinder economic growth.

5. Conclusion

This research analyzes the relationship between population, unemployment rate and economic growth in Indonesia during the COVID-19 pandemic period. Based on data analysis using multiple linear regression, it was found that population size has a positive influence on economic growth, while the open unemployment rate has a negative influence. This shows that an increase in population can encourage economic growth, while an increase in the unemployment rate can hinder economic growth. This finding is in line with economic theory which states that a high population can increase demand for goods and services and provide the human resources needed to support economic growth.

However, it is important to remember that the relationship between population, unemployment rate and economic growth is not always linear. There are other factors such as the quality of human resources, infrastructure and government policies which can also influence economic growth. Therefore, it is important for the government to continue to improve the quality of human resources, infrastructure and economic policies that support it so that the potential for economic growth in Indonesia can be maximized. This research provides valuable insight into the relationship between demographic and economic factors in Indonesia during the COVID-19 pandemic period.

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THE EFFECT OF PROFITABILITY, FIRM SIZE, AND LEVERAGE ON TRIPLE BOTTOM LINE DISCLOSURE IN COMPANIES LISTED IN THE SRI-KEHATI INDEX 2019-2021

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ABSTRACT
This study aims to determine: (1) the partial effect of profitability on Triple Bottom Line disclosure, (2) the partial effect of firm size on Triple Bottom Line disclosure, (3) the partial effect of leverage on Triple Bottom Line disclosure in companies listed on the Sri-Kehati index in 2019-2021. This research uses secondary data obtained from financial reports and the company's Sustainability Report. The population in the study was 37 companies and used purposive sampling in selecting the sample, resulting in 12 companies. The secondary data obtained was processed using multiple linear regression analysis techniques with SPSS 20. The results of this study show that: (1) profitability affects the percentage of Triple Bottom Line disclosure, (2) firm size affects the percentage of Triple Bottom Line disclosure, (3) leverage has no affect on the percentage of Triple Bottom Line disclosure.
***Keywords**: Profitability, firm size, Leverage, Triple Bottom Line.*

1. Introduction

Triple Bottom Line is a company concept that focuses on 3P, namely profit, people, and planet. The Triple Bottom Line concept was first introduced in 1997 by John Elkington (in Gami, 2020) who explained that a company should not only prioritize profit, but the company must also handle and be responsible for current social and environmental issues. The Triple Bottom Line concept helps companies evaluate company performance so that it can help in building sustainable economic growth because it provides an overview of the environmental and social impacts. The Triple Bottom Line carried out by the company will be reported in the sustainability report which is usually published every year by a company. According to the Financial Services Authority Regulation, 2017 Number 51/POJK.03/2017, a sustainability report is a report containing the economic, financial, social, and environmental performance of a financial services institution, issuer, and public company to the public in carrying out its business.

There are several social and environmental cases that result in the community bearing the impact. For example, a nickel mining company operating in Southeast Sulawesi is one of the company's failures in implementing the Triple Bottom Line. Several nickel mining companies in Southeast Sulawesi do not have good systems and technology to manage their waste to prevent pollution. Nickel mining companies will clear land by cutting down all the trees in an area which are then dug up, but the result of this activity makes the land unstable and prone to landslides when it rains (Baraputri, 2023). However, there are also companies that have successfully implemented the Triple Bottom Line, for example PT Pertamina which runs the Independent Energy Village program. 'Desa Energi Berdikari Program' is a program established by Pertamina as an environmental and social responsibility action with the aim of increasing community independence in the energy and economic sectors. This program is implemented in Ujung Alang Village which is located on the coast of Cilacap where the village does not have access to electricity at all, therefore Pertamina is building an off-grid electricity network that utilizes solar and wind energy as renewable energy in Ujung Alang Village, apart from that Pertamina also provides training to manage renewable energy to the community as a form of community independence (CNN Indonesia, 2023).

The Triple Bottom Line disclosed in a company's sustainability report can be measured by the Global Reporting Initiative (GRI). According to GRI 101 (2016), the GRI Sustainability Reporting Standards are designed for companies to report the company's impact on the economy, environment and society. GRI has several versions which are always updated to suit developments in sustainability reports. In this research, the 2018 GRI Standards were used because the period used during the research was the 2019-2021 period, where in this period the 2018 GRI Standards were used to measure sustainability reports.

There are several indexes on the Indonesian Stock Exchange which are divided based on performance type, one of which is the Sri-Kehati Index. The Sri-Kehati Index is a stock index created by the Indonesian Stock Exchange and the Indonesian Biodiversity Foundation (KEHATI). The Sri-Kehati Index consists of 25 issuers which was published on June 8 2009, where this index was chosen because of the company's concern for the environment, company involvement in the community, corporate governance and ethical behavior in business. Disclosure of the Triple Bottom Line by companies is important to understand the company's impact and role on social and environmental aspects in addition to generating profits for the company. There are several factors that can influence a company's Triple Bottom Line disclosure, namely profitability, firm size, and leverage.

Profitability is a measure used by companies to determine how effective a company is at generating profits through its business activities Nofita and Sebrina (2023). Based on research conducted by Gami (2020) and Rely (2018), it explains that profitability has an effect on Triple Bottom Line disclosure, meaning that the higher the profitability produced by the company, the more information the company provides in its Triple Bottom Line disclosure. However, the results of this research are inversely proportional to research conducted by Yunina and Fadillah (2019) and Adiatma, Suryanawa (2018) showing that profitability does not affect Triple Bottom Line disclosure.

Ida 2013 (in Imron and Hamidah, 2022) states that firm size is a description of how large or small a company is, and this size can be determined from the company's total assets. Based on research conducted by Imron and Hamidah (2022), it is stated that firm size has an effect on Triple Bottom Line disclosure, meaning that the larger the firm size, the more information the company conveys regarding Triple Bottom Line disclosure. However, the results of this research are different from research conducted by Rely (2018) showing that firm size has no effect on Triple Bottom Line disclosure.

Kasmir (2018:151) suggests that leverage is a ratio used by companies to determine the company's ability to fulfill its obligations in the short term and long term. Research conducted by Gami (2020) and Fadillah (2019) shows that leverage has no effect on Triple Bottom Line disclosure. High leverage can hinder a company from disclosing the Triple Bottom Line because if the company has a high leverage ratio, it will risk causing large losses for the company.

2. Literature Review

2.1 Triple Bottom Line

Triple Bottom Line is a concept based on people, planet and profit in carrying out company activities. Companies must be able to fulfill community welfare, contribute to the environment, and achieve company goals, namely making a profit in running their business. Widyatama et al. (2021) argue that the Triple Bottom Line is an approach that provides an understanding of the concepts of profit, planet, and people. Adhikari 2012 (in Nursimloo et al. 2020) put forward the Triple Bottom Line concept which basically shows the company's business behavior towards society, the environment and profits which arise because of the interest in disclosing company activities in financial and non-financial forms. The company's Triple Bottom Line disclosure is reported through a sustainability report which is published once a year as a form of corporate responsibility and the company's role in environmental problems, social issues and economic growth. Triple Bottom Line disclosure can be calculated using the GRI guidelines published by an organization which aims to help companies or organizations report the impact caused by their business activities.

2.2 GRI

GRI or Global Reporting Initiative is an independent international organization formed to help companies and organizations in the world to be accountable for the impacts produced by companies due to business activities carried out by these companies and organizations (Globalreporting.org). The purpose of establishing GRI is so that companies can comply with responsible environmental principles, pay attention to social issues, economic growth and corporate governance. According to GRI 101 (2016), the GRI Sustainability Reporting Standards are designed for companies to report the company's impact on the economy, environment and society.

2.3 Profitability

The level of profit a company has can be calculated using the profitability ratio. Kasmir (2018:196) believes that profitability ratios are ratios used by companies to measure the company's ability to obtain profits for shareholders. A company can survive if the company is profitable, so the company will try to increase its profitability. The higher the profitability ratio is expected to provide more information regarding the Triple Bottom Line disclosure. Disclosure of the Triple Bottom Line can attract investors who care about sustainability to invest their capital in the company. This is because, apart from paying attention to profits, companies also care about and are responsible for social and environmental issues. This research uses a profitability formula which is calculated using the company's net profit after tax divided by equity (Return on Equity).

2.4 Firm Size

Firm size helps investors or the general public to know the size of the business run by the company. Firm size is a measure used to determine how large or small a company is, which can usually be seen from total assets, share value, number of employees, and others (Rely, 2018). The larger the firm size is expected to provide more information regarding Triple Bottom Line disclosure. The bigger the company, the greater the impact it has on social and the environment. Triple Bottom Line Disclosure can improve the company's image in the community and shareholders as a form of the company's concern and responsibility towards social and environmental issues. Firm size can be determined by calculating the logarithm of total assets owned by a company.

2.5 Leverage

Companies need sources of funds obtained from their own funds or sources of funds originating from loans to run their business. According to Rudiwantoro (2022) leverage is a ratio used by companies to determine a company's ability to finance company activities with debt. The lower the leverage ratio, it is expected that the more information the company will provide regarding Triple Bottom Line disclosure. A good leverage ratio can show the company's ability to manage its finances, so that the company is also able to be responsible for social and environmental problems. The leverage ratio used in this research compares the company's total debt with the total assets owned by the company (debt to asset ratio).

3. Research Methods

3.1. Research Design

The type of research used in this research is associative research. Kasmir (2022:12) revealed that associative research is research that is used to determine the relationship between variables used in research. Quantitative research is the approach used in this research. According to Kasmir (2022:12) quantitative research aims to prove the theory used in research and to see the influence or relationship of a variable.

3.2. Population and Sample

Kasmir (2022:177) explains that population is an organization, person, region, or other data needed in research. There are 37 companies listed in the Sri-Kehati Index for the 2019-2021 period which are used as the population. According to Kasmir (2022:182) a sample is part of the population that will be used in research as data. This research used a purposive sampling technique to determine the research sample. The sampling criteria used are: (a) companies that are consistently listed in the Sri-Kehari Index for the 2019-2021 period, (b) companies that report their financial statements in the 2019-2021 period consecutively, (c) companies that earn profits in the 2019-2021 period consecutively, (d) companies that reported sustainability reports for the 2019-2021 period consecutively. In this research, 12 companies were selected because they met the sampling criteria.

3.3. Research data

The data used in this research uses secondary data because the data was obtained indirectly through the company website and the IDX website. According to Kasmir (2022:258) secondary data is defined as data obtained through various sources that have been processed. Data collection in this research used panel data method data collection techniques.

3.4. Data analysis technique

3.4.1. Descriptive analysis of data

According to Sugiyono (2017:35) descriptive statistical analysis is defined as data analysis that is used to explain data by calculating the minimum value, maximum value, mean value and standard deviation in research data.

3.5. Classic assumption test

3.5.1. Normality test

According to Kasmir (2022:262) the normality test is a test used to test whether research data is normally distributed or not. In this research, the Kolmogorov Smirnov test was used.

3.5.2. Heteroscedasticity Test

Kasmir (2022:264) suggests that the heteroscedasticity test is a test that functions to assess whether or not the residual variance is similar in one observation to another. This heteroscedasticity test uses a Scatterplot graph.

3.5.3. Autocorrelation Test

According to Kasmir (2022:265) the autocorrelation test is a correlation test in a certain period with another period or research carried out over a certain time series.

3.5.4. Multicollinearity Test

According to Kasmir (2022:264) the multicollinearity test is a test that functions to ensure whether or not there is a relationship between independent variables.

3.6. Multiple Linear Regression Analysis

According to Arifin (2017:156) multiple regression is an analysis used for two or more independent variables and one dependent variable.

3.7. Hypothesis testing

3.7.1. t test

Kasmir (2022:266) explains that the t test functions to see the influence of the independent variable on the dependent variable.

3.8. Coefficient of Determination

According to Fauzi, et al (2019:211) the coefficient of determination is defined as a test that can be used to measure how much or how well the regression equation model contributes to the independent variable in influencing the dependent variable.

4. Research Findings and Discussion

4.1 Descriptive analysis of data

Table 1
Triple Bottom Line

CODE	2019	2020	2021	Average
ASII	24,7%	34,1%	31,8%	30,2%
BBCA	17,6%	32,9%	34,1%	28,2%
BBNI	8,2%	18,8%	34,1%	20,4%
BBRI	22,4%	40,0%	41,2%	34,5%
BMRI	29,4%	30,6%	47,1%	35,7%
BSDE	51,8%	51,8%	58,8%	54,1%
KLBF	14,1%	40,0%	45,9%	33,3%
SIDO	28,2%	41,2%	41,2%	36,9%
SMGR	24,7%	43,5%	64,7%	44,3%
UNTR	20,0%	29,4%	31,8%	27,1%
UNVR	21,2%	29,4%	45,9%	32,2%
WIKA	42,4%	45,9%	55,3%	47,9%
Average				35,4%

Source: Processed secondary data (2024)

Based on this table, the average Triple Bottom Line is 35,4%. Companies with an average Triple Bottom Line above 35,4% are Bank Mandiri, Bumi Serpong Damai, Sido Muncul Herbal Medicine and Pharmaceutical Industry, Semen Indonesia, and Wijaya Karya. The highest average of companies that disclose the Triple Bottom Line is the Bumi Serpong Damai company at 54,1%, while the company with the lowest average that discloses the Triple Bottom Line is the Bank Negara Indonesia company at 20,4%.

Table 2
Profitability

CODE	2019	2020	2021	Average
ASII	14,3%	9,5%	11,9%	11,9%
BBCA	16,4%	14,7%	15,5%	15,5%
BBNI	12,4%	2,9%	8,7%	8,0%
BBRI	16,5%	8,1%	10,5%	11,7%
BMRI	13,0%	9,0%	13,8%	11,9%
BSDE	9,3%	1,4%	4,3%	5,0%
KLBF	15,2%	15,3%	15,2%	15,2%
SIDO	26,4%	29,0%	36,3%	30,6%
SMGR	7,0%	7,5%	5,2%	6,6%
UNTR	18,2%	8,9%	14,8%	14,0%
UNVR	140,0%	145,1%	133,3%	139,5%
WIKA	13,6%	1,9%	1,2%	5,6%
Average				23,0%

Source: Processed secondary data (2024)

Based on this table, the average profitability is 23%. The company's profitability in 2019-2021 experienced fluctuations. On average, companies experienced a decrease in profitability ratios from 2019 to 2020 and experienced an increase in profitability ratios in 2021. Companies with average profitability above 23% were the Sido Muncul Herbal Medicine and Pharmaceutical Industry and Unilever Indonesia. However, in 2019-2021 the Wijaya Karya company continued to experience a decline in its profitability ratio from 13,6% in 2019 to 1,9% in 2020, which then in 2021 also decreased to 1,2%. The company with the highest average profitability is the Unilever Indonesia company at 139,5%, while the company with the lowest average profitability is the Bumi Serpong Indah company at 5%.

Table 3
Firm Size

CODE	2019	2020	2021	Average
ASII	1454,6%	1452,9%	1456,5%	1454,7%
BBCA	1496,3%	1503,2%	1508,9%	1502,8%
BBNI	1492,7%	1495,0%	1498,4%	1495,4%
BBRI	1515,1%	1520,7%	1522,5%	1519,4%
BMRI	1515,0%	1518,8%	1523,7%	1519,2%
BSDE	1373,7%	1378,4%	1378,9%	1377,0%
KLBF	1330,7%	1335,3%	1340,9%	1335,7%
SIDO	1254,8%	1258,5%	1260,9%	1258,1%
SMGR	1390,2%	1389,2%	1388,4%	1389,3%
UNTR	1404,8%	1399,9%	1405,1%	1403,3%
UNVR	1331,5%	1331,2%	1328,0%	1330,3%
WIKA	1379,3%	1383,3%	1384,1%	1382,3%
Average				1413,9%

Source: Processed secondary data (2024)

Based on this table, it can be seen that the average firm size is 1413.9%. Companies with an average firm size above 1413.9% are Astra International, Bank Central Asia, Bank Negara Indonesia, Bank Rakyat Indonesia, and Bank Mandiri. The company with the highest average firm size is the Bank Rakyat Indonesia company at 1519.4%, while the company with the lowest average firm size is the Sido Muncul Herbal Medicine and Pharmaceutical Industry company at 1258.1%.

Table 4
Leverage

CODE	2019	2020	2021	Average
ASII	46,9%	42,2%	41,3%	43,5%
BBCA	80,5%	82,3%	83,0%	81,9%
BBNI	81,4%	83,7%	86,9%	84,0%
BBRI	83,5%	83,7%	82,6%	83,3%
BMRI	74,5%	77,0%	76,9%	76,1%
BSDE	38,3%	43,4%	41,6%	41,1%
KLBF	17,6%	19,0%	17,1%	17,9%
SIDO	13,2%	16,3%	14,7%	14,7%
SMGR	55,0%	52,0%	45,7%	50,9%
UNTR	45,3%	36,7%	36,2%	39,4%
UNVR	74,4%	76,0%	77,3%	75,9%
WIKA	69,1%	75,5%	74,9%	73,2%
Average				56,8%

Source: Processed secondary data (2024)

Based on this table, it can be seen that the average company leverage is 56.8%. The higher the leverage ratio, the more debt the company's activities are funded. The company with the highest leverage ratio is Bank Negara Indonesia at 84%, while the company with the lowest average leverage ratio is the Sido Muncul Herbal and Pharmaceutical Industry company at 14.7%.

4.2 Classic assumption test

4.2.1 Normality test

Table 5
Normality test

		Unstandardized Residual
N		36
Normal Parameters[a,b]	*Mean*	,0000000
	Std. Deviation	11,84228283
Most Extreme Differences	*Absolute*	,129
	Positive	,086
	Negative	-,129
Kolmogorov-Smirnov Z		,777
Asymp. Sig. (2-tailed)		,582

Source: Processed secondary data (2024)

Based on the table above, it can be seen that the significance value of the normality test is 0.582, meaning the value is greater than 0.05, so it can be concluded that the data tested is normally distributed.

4.2.2 Heteroscedasticity Test

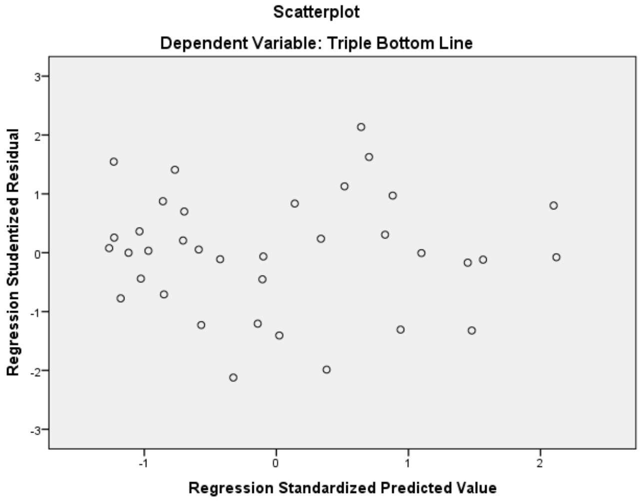

Figure 1. Heteroscedasticity Test

Based on the figure, it can be seen that the points do not form a wavy pattern then widen and narrow, apart from that the points spread above and below the number 0, so it can be concluded that in this test there is no heteroscedasticity.

4.2.3 Autocorrelation Test

Table. 6
Autocorrelation Test

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
	,411[a]	,169	,091	12,3850	1,937

Source: Processed secondary data (2024)

Based on this table, it can be seen that the d value is 1.937 with 3 variables and 36 samples. It is known from the Durbin Watson statistical table of 5%, the dL value is 1.295 and the dU value is 1.654. The value of 4 – dL is 2.705 and 4 – dU is 2.346, so in this test, it can be concluded that the data does not have autocorrelation because dU < d < 4 – dU or 1.654 < 1.937 < 2.346.

4.2.4 Multicollinearity Test

Table 7
Multicollinearity Test

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*	*Collinearity Statistics*	
	B	*Std. Error*	*Beta*			*Tolerance*	*VIF*
(Constant)	189,696	66,653		2,846	,008		
Profitability	-,169	,082	-,474	-2,073	,046	,497	2,013
Firm Size	-,115	,051	-,732	-2,243	,032	,244	4,096

Leverage	,227	,159	,433	1,421	,165	,280	3,574

Source: Processed secondary data (2024)

Based on table IV. 19 it can be seen that the VIF value of the profitability variable is 2.013, the company size variable is 4.096, and the leverage variable is 3.574, while the tolerance value of the profitability variable is 0.497, the company size variable is 0.244, and the leverage variable is 0.280 where the VIF value is < 10 or the tolerance value is > 0.01, meaning There is no multicollinearity in the data.

4.3 Multiple Linear Regression Analysis

In this research, the following multiple linear regression equation can be obtained:

$$Y= 189.696 – 0.169X1 – 0.115X2 + 0.227X3$$

4.4 Hypothesis testing

4.4.1 T Test

Table 9
T Test

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
	B	*Std. Error*	*Beta*		
(Constant)	189,696	66,653		2,846	,008
Profitability	-,169	,082	-,474	-2,073	,046
Firm Size	-,115	,051	-,732	-2,243	,032
Leverage	,227	,159	,433	1,421	,165

Source: Processed secondary data (2024)

Based on this table, it can be seen that: (1) profitability has an effect on the percentage of Triple Bottom Line disclosure, (2) firm size has an effect on the percentage of Triple Bottom Line disclosure, (3) leverage has no effect on the percentage of Triple Bottom Line disclosure.

4.5 Coefficient of Determination

Table 10
Coefficient of Determination

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
	,411[a]	,169	,091	12,3850

Source: Processed secondary data (2024)

Based on this table, it can be seen that the R Square value is 0.169, which means that the influence of profitability, firm size and leverage simultaneously on the percentage of Triple Bottom Line disclosure is 16.9%, while 83.1% is influenced by other variables.

5. Conclusions

The results of this study show that: (a) profitability affects the percentage of Triple Bottom Line disclosure, (b) firm size affects the percentage of Triple Bottom Line disclosure,

(c) leverage has no affect on the percentage of Triple Bottom Line disclosure. The research carried out still has many shortcomings, apart from that the variables studied to determine the influence on the percentage of Triple Bottom Line disclosure are only limited to the profitability, firm size and leverage variables taken from company data for 2019-2021. The Triple Bottom Line disclosure reported in the Sustainability Report is expected to show the company's concern and responsibility for the economy, social issues and environmental issues that are currently occurring. Future researchers are expected to use other variables and use company data for the period after 2020 to develop research.

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THE INFLUENCE OF GROWTH OF MICRO, SMALL AND SMALL ENTERPRISES MEDIUM TO ECONOMIC GROWTH IN BENGKULU PROVINCE

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ABSTRACT

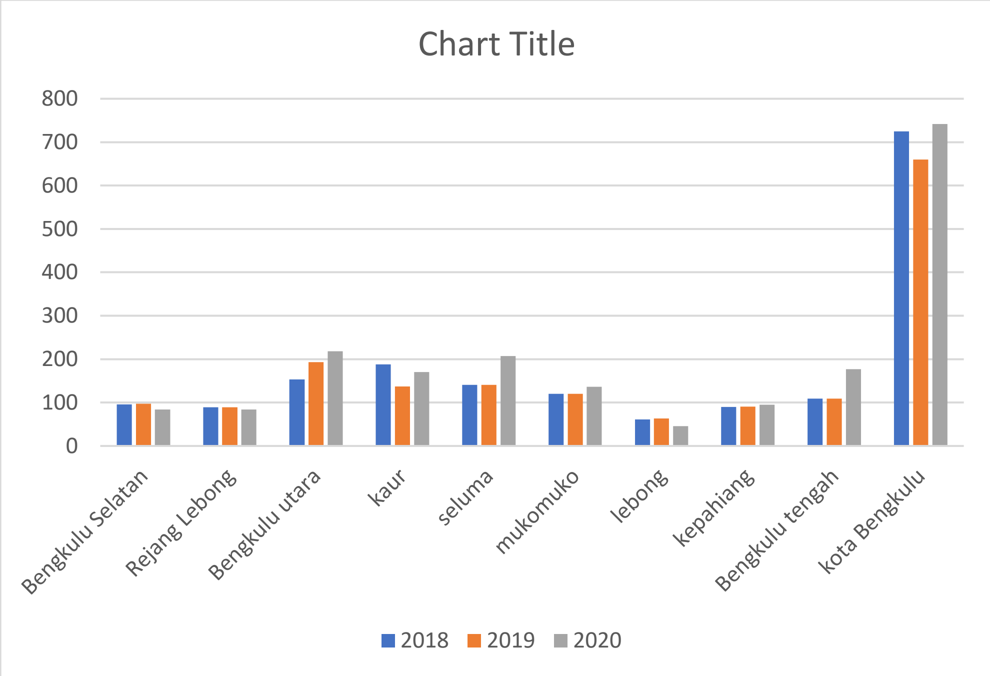
The purpose of this study was to determine the development of Micro, Small and Medium Enterprises (MSMEs) and their influence on economic growth. This study used a quantitative approach with a simple linear regression analysis model. The data used was panel data obtained from Bank Indonesia, Central Statistics Agency, Bappenas using period data from 2018-2020. The results showed that MSMEs have a positive and significant effect on economic growth. This article focuses on Bengkulu Province, which perhaps has not been studied much in previous research. Many studies on MSMEs and economic growth may have been conducted at the national level or in other regions, but research specifically in Bengkulu adds new and contextual data that is important for regional understanding.
***Keywords**: MSME,Economic Growth,MSME Performance*

1. Introduction

Micro, small and medium enterprises (MSMEs) are very important to increase the prosperity of a country, especially developing countries such as Indonesia. The potential of MSMEs to increase people's income and create jobs is huge (Lamazi, 2020). To increase per capita income and strengthen the economy of a region, (MSMEs) offer solutions to introduce creative goods or services from a region to the general public, as well as provide business opportunities for local business people. Therefore, business people (MSMEs) are asked to participate in Indonesia's economic development (Suprapto 2022).

In addition, (MSMEs) play a significant role in driving economic growth and job creation in Indonesia. MSMEs can play a greater role in the economy if they receive sufficient support (Rana et al., 2022). A study found that encouraging the growth of MSMEs in low-income areas can be an effective method to boost economic growth (Stiglitz, 2016; Zidana, 2015). Judging from the role of small and medium enterprises according to that "in Indonesia's economic development, small and medium enterprises" have always been described as sectors that play an important role for the advancement of economic growth in Indonesia (Hapsari et, al 2014).

Figure 1. Active MSMEs in Bengkulu Province

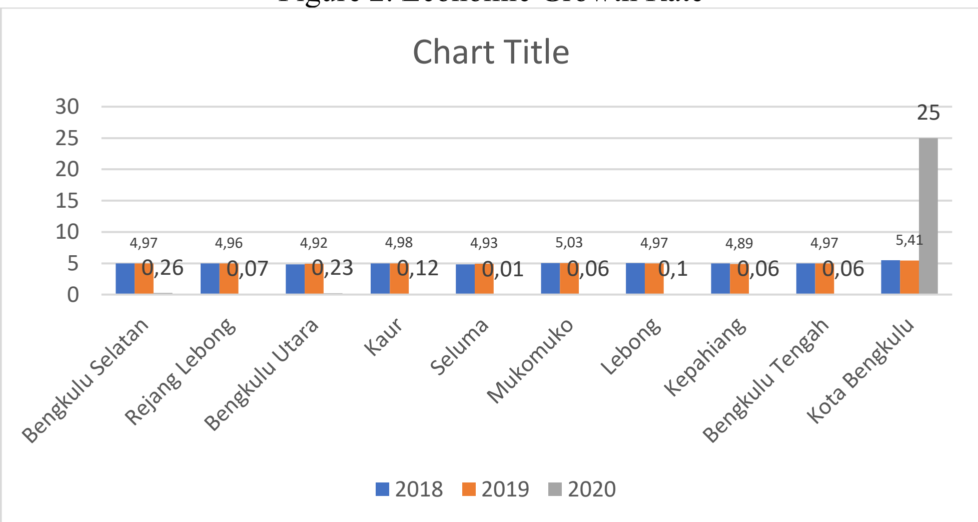


Source:central bureau of stastics whose data is processed (data for 2018-2020).

Based on the image presented above for the period 2018 to 2020, there are variations in the number of active MSMEs in various regencies and cities in Bengkulu. Bengkulu City showed quite high numbers in the three years, with the number of active MSMEs reaching 725 in 2018, falling slightly to 660 in 2019, and again rising to 742 in 2020. This shows the potential and strong economic activity in the provincial capital of Bengkulu.

However, there is significant variation among other districts. For example, North Bengkulu Regency showed a fairly stable upward trend from year to year, with the number of active MSMEs rising from 153 in 2018 to 218 in 2020. On the other hand, Lebong Regency showed a slightly fluctuating trend, but tends to decline from year to year, with the number of active MSMEs dropping from 61 in 2018 to 46 in 2020. This can be due to a variety of factors, including changes in local economic conditions, local government policies, and other social and demographic factors.

Figure 2. Economic Growth Rate



Source:Central Bureau of Statistics whose data is processed data on the rate of economic growth for 2018-2020

Based on the economic growth chart presented from 2018 to 2020, there were significant variations between districts and cities in Bengkulu Province. The majority of regions experienced a positive growth trend during the period, albeit with different degrees of variation. Bengkulu City showed very significant growth, with an economic growth rate that reaches 25% in 2020. This shows that the city became a strong economic centre within the province.

On the other hand, several districts such as North Bengkulu, Kaur, and Seluma also showed a positive growth trend, albeit with a lower growth rate compared to Bengkulu City. Meanwhile, other districts such as South Bengkulu, Rejang Lebong, and Lebong showed fluctuations in their economic growth during the period, some even experienced a decline in certain years, as happened in South Bengkulu in 2020. Factors such as natural resources, infrastructure, and local government policies most likely play an important role in determining each region's economic growth rate.

From the image of MSMEs and the rate of economic growth above, it proved that MSMEs play a very important role in economic growth. MSMEs are also an important driver of economic recovery and development of other sectors. MSMEs also need to maintain their performance to remain sustainable so that their performance can have a greater impact on economic growth (Hakim et al., 2022; Nurlinda &; Sinuraya, 2020; Son, 2016). (MSMEs) is strongly influenced by the rise of the Indonesian economy in terms of business capacity, product quality, and expansion. marketing of goods, micro, small and medium enterprises (MSMEs) that have the opportunity to develop (Laily, 2016). In accordance with the progress of the times, economic development and development play a very important role in increasing regional economic income that contributes to the welfare of the community. (MSMEs) are one of the most sectors as the main driver of economic progress.(Anugrah,2023)

The impact of micro, small and medium enterprises on economic growth that has been carried out previously found that MSMEs can have a positive impact on the local economy by creating jobs, improving living standards and contributing to poverty alleviation (Nurhayati, 2020; Somadi, 2020). Based on these problems, this study aims to identify the influence and correlation with the growth of micro.small and medium enterprises on the economic growth of Bengkulu Province.

The reason for creating an article entitled "The Influence of MSMEs on Economic Growth in Bengkulu Province" is because MSMEs are the backbone of the local and national economy, playing a key role in job creation, innovation, and poverty alleviation. The focus on Bengkulu Province offers a unique and important perspective that is often underrepresented in economic literature that generally centers on more developed regions. By analyzing empirical data and the specific context of Bengkulu, this article can identify challenges and opportunities unique to MSMEs in the area, providing insights that can be used by local policymakers and stakeholders to develop effective strategies to support MSMEs and drive regional economic growth. The research can also contribute to a broader understanding of regional economic dynamics and help inform more inclusive national policies.

2. Literature Review

2.1 Economic Growth

Continuous improvement in the economic condition of a country towards a better state is called economic growth. The long-term increase in the ability of a country (region) to provide more and more economic goods to its population is known as economic growth. These capabilities are increasing as a result of technological advances as well as necessary institutional and ideological adjustments (Haniko et al., 2022). Economic growth can be defined as the process of continuous improvement of a country's economic conditions towards a better state within a certain period of time. For the economic growth of a country (Hasyim, 2016).

If people's real income in a given year is greater than people's real income in the previous year, then the economy experiences growth. The addition of Gross Domestic Product (GDP), which means an increase in National Income, is considered as economic growth in the macroeconomy (Soleh, 2014).

2.2 Micro, Small and Medium Enterprises (MSMEs)

According to Tambunan, (2014: 22) Micro, Small and Medium Enterprises MSMEs are productive business units that stand alone, carried out by individuals or business entities in all sectors of the economy. In principle, the distinction between Micro Enterprises (UMi), Small Enterprises (UK), and Medium Enterprises (UM) is generally based on the initial asset value (excluding land and buildings), average turnover per year or the number of permanent workers

In addition, micro, small and medium enterprises are business activities or businesses run by individuals, households, or small business entities. With their contribution to employment, income, equity, rural economic development, and exports, micro, small and medium enterprises have always been considered to play an important role in Indonesia's development (Imur, 2023). Micro, Small and Medium Enterprises (MSMEs) strive to grow businesses in order to build a national economy based on equitable economic democracy. This means that MSMEs are a tool of national struggle to grow and build the national economy by involving as many economic actors as possible based on their potential and on the basis of justice for all stakeholders (Wilantara &; Indra, 2016).

2.3 Micro, Small and Medium Enterprises (MSMEs) in the Regional Economy

Local economic development policy is a policy that is considered appropriate and strategic in the context of developing regional potential. The micro, small and medium enterprises (MSMEs) sector has proven to be able to save the Indonesian economy from the previous crisis, Micro, small and medium enterprises (MSMEs) have not seen significant changes since the economic crisis ended. In addition, the contribution of micro, small and medium enterprises (MSMEs) is recognized as part of the local economy. (Navastara 2014:26).

Creative businesses can generate rapid economic growth without requiring adequate labor (Halim, 2020). Previous research from (Firmansyah and research Hidayati 2016 found that the growth of MSMEs on economic growth showed a significant positive relationship, meaning that MSME growth was getting higher in line with existing economic grow 2018 th (Firmansyah 2018 &; Hidayati 2016).The influence of MSMEs on economic growth according to research Raselawati shows a significant positive influence, meaning that economic growth increases in line with the increasing number of MSMEs (Raselawati, 2017).This is in line with research) which shows that the MSME sector as a whole affects economic growth, which in turn can have an impact on national development (Riswara, 2018).

3. Research Methods

This study used the explanatory research method, which is to explain the relationship between independent and bound variables. The data used in this study was obtained from the Central Bureau of Statistics of Bengkulu Province from 2018 to 2020. Secondary data is data obtained indirectly through intermediary media, namely research results, books, articles, various publications and related institutions related to the problem being discussed (Rawung et al., 2022). The method used is the linear regression method. The type of data used is panel data. Panel Data is a combination of time series and cross section. Time series data is the use of research time from the period 2018 – 2020 while cross section data consists of 10 districts of Bengkulu Province.

The regression model is written with the following equation:

$$YIt = BoIt + B1\ X1It + eit$$

Information:
Y: Economic growth i.e. Economic Growth Rate
Bo: Konstanta
X1: Micro, Small and Medium Enterprises in Bengkulu Regency / City in 2018-2020
β1: Regression Coefficient
ε : error
It: 10 districts/cities of Bengkulu from 2018-2020

The best model interpretation techniques use CEM, FEM, and REM and are selected through tests such as the Chow test, Hausman test, and Lagrange Multiplier (LM). The Chow test is performed to determine the appropriate regression method for panel data between FEM and CEM. To select a regression model, panel data between FEM and SEM was performed Hausman Test. While the LM test is used when the Chow test results show CEM and REM shows Hausman results. In addition, to determine the influence between variables is done with the T test and F test and R.sauare rate.

To clarify and strengthen the influence of the results of the regression analysis obtained, a classical assumption test is used. The classical assumption test consists of normality, multicholinerity and autocorrelation. The classical assumption test used is multicollinearity According to Ghozali (2017) states that the multicollinearity test aims to test whether in the regression model there is a high or perfect correlation between independent variables and heterokedasticity test According to Umar (2013) the heterokedasticity test is carried out to find out whether in a regression model there is an inequality of variance from the residual of an observation to another observation. The classical assumption test is carried out to clarify the influence of the results of the regression analysis obtained.

4. Research Findings and Discussion

The following assumption test shows the calculation results of the model tested using the Eviews 12 program to determine the selected estimation model:

Multicollinearity Test: The purpose of this test is to find out how relationships exist among independent variables. The appearance of correlation among independent variables indicates a problem of multicollinearity. If there is multicholinerity, a correlation test can be performed using it. The correlation matrix can be used to determine whether there is a relationship between multicollinearity problems or independent variables. According to Soemantri (2019), multicollinearity is identified when the correlation value is more than 0.80.

Tabel 1. Multicollinearity Test Results

	X	X01
X	1.000000	0,5814322
X01	0,581432	1.000000

Source : processed data (Eviews 12)

Correlation matrix in Table 1. Indicates that the correlation value is not more than 0.80, which indicates that there is no multicollinearity.

The heteroscedasticity test is used to evaluate the difference in variance from the overall residual observations in the regression model. Homokedacity occurs when the residual variance of two events is equal, whereas heteroskeditas occurs when the residual variance of two events is different. The Glesjer test is used to test for heteroscedasticity. When the sum of chi-squared probabilities exceeds α 0.05, the determination of the model is determined (Soemantri, 2019).

Table 2. Probability Value of Glesjer test

Variable	Prob.
C	0,33000
X1	0,10579

Source : processed data (Eviews 12)

Analysis of Coefficient of Determination The results of the analysis as shown in table 1. The coefficient of determination or R square (R_2) is 0.251747 this means 25% variation in economic growth (Y) can be explained by the variable, namely MSMEs. While the remaining 75%. Other causes that are not included in this research model are explained. Hypothesis Testing t-Test (Hypothesis Test) Based on the results of data processing, it can be seen in Table 1 that a prob value of 0.026337 is obtained and Ha is accepted, meaning that the variable, namely MSMEs (X), affects economic growth (Y). Regression Model Panel Data Regression equation is used to see the influence of independent variables, namely MSMEs with dependent variables, namely economic growth. In order for the regression analysis results of the panel data obtained to be more accurate and faster, regression analysis is carried out with the help of the eviews 12 program where the following regression results are obtained:

5. Panes Data Regression Results

Table 3 Source: Data processed (Eviews 12)

VARIABLE	**COEFFICIENT**
Number of MSMEs	-0.054700** (0,0207)**
Economic growth	13.255 (0,000)**
R-Squared	0,25
F-Statistic	0.639**
Total Observation	30

Based on table 3, the regression equation is obtained as follows:

$$Yit = 13.25523-0.054700$$

Based on the above equation can be interpreted as follows: The regression value of 13.25523 states that if MSMEs (X) are zero, then the economic growth rate is a constant value of 13.25523. The value of the regression coefficient of the negative poverty variable, amounting to -0.054700 means that if poverty decreases by 1%, the human development index will increase by -0.054700% provided that other variables are considered fixed or constant. This shows that the contribution of the MSME sector has a positive impact on the economic growth of a region. Impact of COVID-19 Pandemic: The significant decline in economic growth in 2020 can be attributed to external factors, especially the COVID-19 pandemic. This pandemic can hamper the growth of MSMEs and the economy as a whole through various mechanisms such as restrictions on economic activity, decreasing people's purchasing power, and supply chain disruptions in Bengkulu Province.

Several studies show that the performance of MSMEs has a positive influence on economic growth. In the context of Indonesia, research conducted by (Aqida &; Fitria, 2019) found that MSMEs have a positive and significant impact on economic growth and poverty reduction. The study also identified that factors such as access to credit, training, and market information positively affect MSME performance. Similarly, research conducted by (Firmansyah, 2022; Halim, 2020) found that MSMEs have a significant and positive impact on economic growth in Indonesia. The study identifies factors such as human resources, business networks, and market access that positively affect the performance of MSMEs.

The impact of MSMEs on Economic Growth can be assumed that MSMEs have a significant contribution to economic growth in Bengkulu Province. Because MSMEs are one of the main drivers of local economic growth, improving MSME performance can result in an increase in the GDP of a region. However, a significant decline in economic growth in 2020 could indicate the negative impact of external factors, such as the COVID-19 pandemic, which could hamper MSME growth and the economy as a whole. Therefore, strategies to support MSMEs and strengthen the local economy are important in facing challenges like this.

6. Conclusion

Research shows that the performance of MSMEs contributes positively and significantly to economic growth in Bengkulu Province Various components, such as access to credit, human resources, marketing, and technology. In addition, the performance of MSMEs has a significant influence on economic growth, and policies that encourage access to finance, technology, and business networks can significantly improve the performance of MSMEs, which in turn can encourage economic growth in Bengkulu Province. Thus, the role of MSMEs must be imitated. Despite variations in economic growth in Bengkulu during the period, MSMEs remain an important sector that needs to be supported to boost economic growth This study provides an overview of the effect of MSME performance on economic growth in Bengkulu Province. However, there are several factors that have not been studied in depth, such as factors that affect the performance of MSMEs and the socio-economic impact of MSME development in the area. Therefore, the suggestion for future research is to examine these factors in more detail and identify strategies that can improve the performance of MSMEs and provide a positive socio-economic impact for the people of Bengkulu Province.

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USING LESSONS FROM TOURISM MARKETING VIDEOS TO RAISE AWARENESS ABOUT CLIMATE CHANGE IN TANZANIA

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ABSTRACT

This study examines how climate activists in Tanzania can enhance their climate awareness campaigns by employing techniques from tourism marketing videos and integrating experiential sensory marketing theory principles. The study uses a comparative analysis with a renowned tourism documentary and three videos on climate awareness from Tanzania. It used experiential theory to explore how sensory elements such as visuals, sounds, and narratives can create memorable and impactful experiences for audiences. The findings suggest that employing stimulating narratives and enhancing sensory experiences can significantly improve engagement and raise awareness about climate change. This research contributes to the field by emphasizing the effectiveness of experiential storytelling techniques grounded in sensory marketing theory in climate activism campaigns. However, this study focuses exclusively on the context of climate change awareness in Tanzania. Despite this narrow focus, the findings offer valuable insights for academics, tourism professionals, and policymakers, suggesting the potential use of videos to enhance tourism's environmental impact positively. By leveraging the power of video content, stakeholders can disseminate educational messages and promote sustainable practices within the tourism industry. Thus, this study is a valuable tool for informing future initiatives aimed at climate activism and sustainable tourism development.
Keywords: *Climate Change; Awareness; Tourism Video marketing; Experiential marketing.*

1. Introduction

Climate change has been a topic of significant discussion over the past few decades. In the 1970s, *The Limits of Growth*, a report by the Club of Rome, warned about the consequences of excessive CO2 in the atmosphere (Meadows et al., 2013). While there was initial interest, attention waned until pivotal events shifted the narrative. The release of the film *The Day After Tomorrow* in 2004 represented a dramatic ice age triggered by climate change, followed by the devastating impact of Hurricane Katrina in 2005, highlighting the tangible and severe effects of climate change. Subsequently, the documentary *An Inconvenient Truth* in 2006, which received an Oscar, further underscored the link between CO_2 emissions and global warming. Additionally, international initiatives like the Kyoto Protocol, the Paris Agreement, and COP meetings, along with influential documents such as Pope Francis's *Laudato Si*(Francesco, 2015) and *Laudato Deum*(Fernández-Reyes, 2023) have increased global attention toward climate action.

Insufficient efforts to inform communities and stakeholders about climate change could hinder our ability to enact meaningful action. For instance, (Tàbara et al., 2010) developed the 'climate learning ladder' to help people better understand how climate change affects them. This tool aims to improve awareness of climate issues and empower people to make informed decisions (Masson-Delmotte et al., 2021) to address them effectively. A country like Tanzania is a significant food producer reliant on rain-fed agriculture but faces increasing challenges from floods and droughts due to climate change. Despite recognizing climate change as a major threat, Tanzanian authorities are still in the early stages of implementing resilience initiatives. To address these challenges, the country has expressed interest in the Resilience and Sustainability Trust (RST) (Khatibu & Lokina, n.d.)

In that regard, many studies have discussed that Global temperatures have been rising significantly in recent years and are projected to continue increasing due to ongoing greenhouse gas emissions (Reino, n.d.). Over the past few decades, the Earth has experienced a substantial temperature increase, surpassing historical trends (Marcott et al., 2013). This temperature rise has led to various impacts across different regions, including an increase in natural disasters such as droughts, desertification, rising sea levels, floods, and storms (Masson-Delmotte et al., 2021). The evidence for rapid climate change is clear, with rising sea levels, warming oceans, shrinking ice sheets, declining Arctic sea ice, retreating glaciers, and increasing ocean acidity. Climate change poses a significant challenge with far-reaching implications across ecosystems, human societies, and economic systems (Jones et al., 2020).

Principle 10 of the Rio Declaration on Environment and Development (Declaration, 1992) and Article 6 of the United Nations Framework Convention on Climate Change (Hickmann et al., 2021) highlight the importance of raising awareness, ensuring access, and providing education about climate change to improve societal understanding. Similarly, the East Africa Climate Change Policy and the Tanzania Climate Change (Orindi & Murray, 2005) share the goal of enhancing public awareness of climate change.

However, despite these efforts, there remains a gap in effective communication regarding climate change awareness, particularly in Tanzania. This study aims to explore how climate activists can utilize theories from tourism marketing videos to enhance awareness about climate change in Tanzania. Consequently, this study will employ a qualitative methodology to show how climate activists can adopt the tourism marketing theory of experiential marketing to enhance climate change awareness. The findings of this study are expected to contribute to both policy and practice in the realm of climate change awareness, as well as enrich the existing literature on the subject.

The following section of this paper is a literature review of this study together with its theoretical framework, integrating concepts from climate change awareness, experiential marketing, and video marketing to investigate innovative strategies for climate activists.

2. Literature Review

2.1 Tourism Video Marketing

Tourism video marketing, also known as film tourism or movie-induced tourism, encompasses tourist behavior influenced by visual media, including traditional formats like film and television, as well as pre-recorded products such as video, DVD, and Blu-Ray (Bayram, 2020).

According to (Connell, 2012) numerous well-known tourist destinations, including the UK, USA, Korea, and Australia, have leveraged film tourism. In the UK, film has been a significant component of VisitBritain's marketing strategy since the 1990s, while the Visit America Alliance's television campaign in 2004 encouraged viewers to visit movie sets they had seen. Tanzania has also embraced this trend with the release of *Tanzania: The Royal Tour*, which aired on April 19, 2022. In this TV show, Peter Greenberg travels with Tanzania's President, SamiaSuluhu Hassan, serving as his special guide. Together, they explore the country, showcasing its wonders through the eyes of its leader (Maelezo TV, 2022).

Tanzania's tourism sector has experienced significant growth, which can be attributed in part to strategic initiatives such as its participation in the *Tanzania: The Royal Tour* film. The influx of foreign tourists increased by an impressive 95%, soaring from 922,692 in 2021 to 1.8 million in 2023. Similarly, domestic tourism has seen a significant increase recently from 851,000 in 2021 to 1.9 million in 2023. These increases in tourist numbers translated into substantial economic gains, with tourism sector revenues rising from $1.3 billion in 2021 to $3.37 billion in 2023. Tanzania's success in the tourism industry was further highlighted by its achievement as the second-highest country in Africa for tourist growth in 2023 and recognition as one of the top 10 nations globally with rapid tourism expansion post-Covid (wizarayamaliasilinautalii, 2024).

Figure 24 Summary table highlighting the success of "Tanzania:The Royal Tour" documentary in Tanzania.

2.1.1. Climate Change Awareness

Studies on climate change have identified a wide range of effects, including changes in nature, impacts on water access, population displacement, ocean acidification, and challenges with insurance. Some anticipate gradual changes, while others suggest the possibility of sudden and significant shifts in the Earth's system (O'neill & Nicholson-Cole, 2009). Efforts to address climate change are crucial, with multifaceted approaches required. These include implementing policies to reduce greenhouse gas emissions, promoting sustainable practices, investing in research and development for innovative solutions, supporting international cooperation, fostering resilience and adaptation, and empowering individuals and communities (Lenton et al., 2008)

Climate projections for Tanzania indicate increased frequency and severity of droughts and floods, accompanied by rising temperatures and changing rainfall patterns. Deforestation intensifies these challenges. While Tanzania ranks moderately in vulnerability and readiness compared to other sub-Saharan African countries, there is a need for greater preparation to mitigate climate change impacts(Khatibu& Lokina, n.d.).

Many studies show that how people see the risks of climate change affects how much they support and get involved in efforts to deal with it. The existing literature on risk perception suggests that when individuals are consistently aware of and encounter threatening situations, they tend to develop strategies aimed at minimizing the perceived risk (Luís et al., 2018).

Videos are an effective tool for raising awareness about climate change (Smith, 2018; Jones & Brown, 2019). They can convey information in a visually compelling and emotionally engaging manner, evoking empathy and concern (Keith, 2023). Documentaries and social media videos have proven effective in raising awareness and motivating action (Chattoo, 2020). This study aims to improve the effectiveness of climate change awareness in Tanzania by using videos. To do this, the study draws inspiration from tourism marketers who use experiential marketing techniques to create engaging videos. The goal is to increase awareness about climate change using videos that are both informative and captivating. (Fauville et al., 2020)

2.2 Theoretical Framework

2.2.1. Sensory Marketing

According to Schmitt (Schmitt, 1999) one of the pioneers in introducing the concept of experiential marketing, there are five key ways to create an engaging experience for consumers: through sensory engagement, emotional resonance, physical interactions or lifestyle integration, cognitive and creative stimulation, and social identity connections. Recent studies in experiential tourism have primarily focused on exploring the sensory, emotional, and lifestyle dimensions of consumer experiences. Several researchers have explored different aspects of the experiential economy(Agapito et al., 2013), (Pera, 2017), (Cameron, 2012), and (Sung et al., 2022) have studied the role of emotions, immersive experiences, and storytelling. (Kastenholz et al., 2020) have analyzed how various dimensions of experience, such as sensory engagement, personalization, and genuineness impact tourist destinations' consumption patterns. Additionally, (Knobloch et al., 2017), (Chandralal & Valenzuela, 2015) and (Su et al., 2020) have investigated the significance of emotion and experience in tourist consumption behaviors, highlighting the emotional quality and innovation factors within the dimensions of tourism experiences.

Sensory marketing utilizes taste, smell, sound, sight, and touch to create immersive brand experiences, influencing customer perceptions and expectations. Marketers strategically leverage sensory stimuli to establish tangible connections with consumers, shaping positive brand impressions (Velasco et al., 2021).The primary focus of sensory imagery research in marketing centers on individual sensory experiences (Krishna & Elder, 2021). For instance, one approach involves inducing a vivid perception of a cookie's aroma through a visual advertisement featuring a cookie (Krishna & Elder, 2021). While there is recognition of multisensory imagery (Lukosius, 2003) empirical evidence predominantly indicates modality-specific patterns of imagery.

The impact of the five human senses on consumer behavior has been extensively explored in the literature (Akarsu et al., 2019). Moreover, places and individuals' surroundings are recognized as multisensory environments, comprising not only visual stimuli but also associated sounds, smells, tastes, and tactile sensations (Agapito et al., 2013); Casey, 1996; (Falkheimer & Heide, 2006); (Macnaghten & Urry, 1998). While some authors argue that tourism research has predominantly focused on the visual aspects of the tourist experience (Pan & Ryan, 2009), this does not imply a sole emphasis on sight in tourism. Cultural, social, and geographical influences have historically shaped shifts in sensory perception (Vannini et al., 2013), consequently impacting travel experiences (Smith, 2007).

(Fyall et al., n.d.) emphasize the importance of experiential marketing in creating memorable tourist encounters. Their work highlights the need to engage all senses deeply in experience design, offering contemporary perspectives on utilizing sensory elements for unforgettable journeys. This contribution enhances the understanding of sensory-driven tourism experiences, highlighting the effectiveness of tourism videos in applying experiential marketing principles to deeply engage audiences.

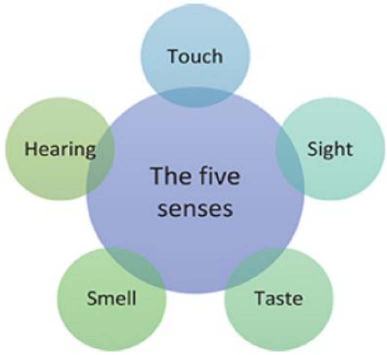

Figure 25. The five human senses. Source: Fyall et al., n.d)

The effectiveness of experiential marketing centers on how these stimuli are perceived and influence decision-making through mental imagery processing (Skavronskaya et al., 2017) Mental imagery processing is the cognitive process through which sensory information is represented in working memory.

The theoretical framework of this study aligns with Fyall et al.'s (2019) concept (figure 1), suggesting that a successful experience integrates three crucial elements: surprise, consumer involvement, and sensory engagement. This framework guides a thorough exploration of how tourism marketing videos employ experiential marketing techniques. Additionally, it prompts an examination of how climate activists can draw insights from these strategies to create videos that effectively raise awareness about climate change.

Figure 26. The key experience components Source: Fyall et al (2019)

3. Research Methods

People make sense of the world through stories (Webster & Mertova, 2007) points out, narratives serve as both a way of understanding and a method of communication. This study adopts a qualitative research (Lawrence Neuman, 2014) approach to analyze how climate change awareness activists can draw insights from tourism marketing strategies, particularly in the realm of video marketing. The research design combines e lements of observation(Tomaszewski et al., 2020), content analysis (Krippendorff, 2018) and narrative analysis(Webster & Mertova, 2007). The focus is on analyzing the effectiveness of experiential marketing techniques utilized in tourism promotion and assessing their applicability to climate activism.

Data collection involved a thorough examination of selected videos related to tourism promotion and climate activism in Tanzania, with a primary emphasis on *The Royal Tour*, a Tanzanian tourism marketing film recognized for its significant impact on the country's tourism economy. This film was chosen based on its relevance and success, as acknowledged by the Department of Research, Ministry of Natural Resources and Tourism (wizarayamaliasili, 2024), thereby providing valuable insights into experiential marketing strategies.

In identifying key climate activists for inclusion in this study, an observation was made. It highlighted the significant contributions of two activists, Upendo Mwakyusa (Upendo Mwakyusa, 2023) and Regina Magoke,(Regina Magoke, 2024) known for their impactful grassroots activism within local communities. Additionally, the recognition from the Finland Embassy highlights institutional efforts to address climate change in Tanzania (Forestry and Value Chain Development Programme by the Governments of Tanzania. and Finland, July 2022).

The study utilized content analysis as a methodology (Krippendorff, 2018). The videos provided valuable insights into understanding how sensory experiences influence our perceptions. It was suggested that by using similar techniques, we can effectively convey the importance of environmental issues and inspire action. The researcher's findings align with the five senses theory of experiential marketing, which can be an effective way to communicate the urgency of addressing climate change and motivate individuals and communities towards sustainability and environmental conservation.

4. Results and Discussions

As per the analysis of videos from The film *Tanzania: The Royal Tour* https://tanzaniaroyaltour.go.tz/, along with contributions from climate activists Regina Magoke and Upendo Mwakyusa, and insights from the video by the Embassy of Finland, the following was taken.

Tanzania: The Royal Tour presents Tanzania's landscapes and cultural heritage vividly, employing immersive storytelling and captivating visuals. Guided by Peter Greenberg and President SamiaSuluhu Hassan, the film invites viewers on a cinematic journey through the nation's natural wonders and cultural treasures. The audience gains insight into Tanzania's diverse offerings through compelling imagery and genuine encounters. President Hassan's involvement adds depth to the narrative, emphasizing the country's attractions and encouraging exploration. Ultimately, the film serves as a promotional tool for Tanzania's tourism industry, showcasing its beauty and significance to potential visitors. By highlighting the nation's rich cultural heritage, the film ignites a sense of adventure and exploration.

Figure 27 An aerial photograph of Mount Kilimanjaro, as presented by the Honorable President to Peter Greenberg, illustrating the significant snow melt caused by climate change.

Regina Magoke video on Climate Education for Young Children. In this first video, Regina Magoke is depicted engaging with young children who are holding posters about climate change. The scene is set inside a class room setting, suggesting a grassroots approach to climate activism. Regina Magoke's message emphasizes the importance of climate education for young generations, positioning children as key stakeholders in environmental conservation efforts. Through her interaction with the children, she cultivates a sense of environmental responsibility and empowers them to become advocates for climate action. This grassroots initiative underscores Regina Magoke's commitment to nurturing environmental literacy from an early age and mobilizing youth as agents of change. (Regina Magoke,2024) video link

Figure 28 : A photograph of Regina Magoke providing climate education

In the second video, Upendo Mwakyusa delivers a comprehensive message about climate change, outlining its causes, impacts, and the role that individuals can play in addressing it. Mwakyusa's communication style is clear, concise, and accessible, making complex scientific concepts understandable to a broad audience. By providing practical examples and emphasizing the importance of collective action, she motivates viewers to recognize their role in combating climate change. Through her passionate advocacy, Mwakyusa inspires empathy and urgency, encouraging viewers to become actively engaged in environmental stewardship.(Upendo Mwakyusa ,2024) Video link

Figure 29 : A photo capturing Regina Magoke raising awareness about climate change.

The following link (Forestry and Value Chain Development Programme by the Governments of Tanzania. and Finland, Jul 2022) Video link, Grandpa & the grandchildren: An educational documentary on the importance of forests for children leads to an educational video documentary shared by the Embassy of Finland in Tanzania, aiming to educate and inspire viewers about the critical importance of forests and sustainable practices. Through captivating visuals and informative narration, the documentary explores the many-sided dynamics of the Forestry and Value Chains Development (FORVAC) program, a collaborative effort between the Governments of Tanzania and Finland. It emphasizes the different roles of forests, particularly highlighting their significance to children, as shown through the portrayal of an elderly man sharing his wisdom with village youth.

Figure 30: A photo of a grandfather raising awareness among children about the importance of forests.

The video provides a detailed insight into various aspects of forest conservation and sustainable livelihoods, including the importance of bees, the production of clay stoves that reduce wood and charcoal usage, and the role of Community-based Natural Resources Committees in local villages. Furthermore, it showcases real-life examples and success stories, illustrating the positive impact of community-driven initiatives on climate change resilience and forest conservation efforts.

4.1 The effect of visual sense (sight) on video communication

Based on my analysis of the four videos, I have found that using visually captivating imagery and footage can effectively raise awareness. Through the sense of sight, viewers can experience Tanzania's beauty and cultural heritage captured in *Tanzania: The Royal Tour* film. The film makes use of different cinematic techniques, such as aerial shots that capture the beauty of the country's landscapes from a bird's-eye view. The cultural performances that are featured in the film also help to highlight the rich and diverse traditions of the country. These elements come together to create a visually stunning and culturally engaging experience for viewers. The film captures the beauty of both Dar es Salaam and Zanzibar, as well as some of Tanzania's national parks, including the world-famous Ngorongoro Conservation Area (NCA) and Serengeti National Park. The film provides an awe-inspiring visual delight that allows viewers to experience the beauty of Tanzania through the screen. It leaves viewers with an intense desire to witness it in person. The vivid cinematography and captivating storytelling showcase Tanzania's rich natural landscapes, cultural heritage sites, and leisure destinations, making it an ideal destination for sightseers. The film inspires viewers to plan a visit and create an unforgettable experience of sightseeing.

The first video by Regina Magoke lacked direct visuals about climate change, representing a missed opportunity to visually convey the urgency and impact of environmental issues. *In the second video* by Upendo Mwakyusa, although some visuals were present, they failed to effectively ignite a sense of climate activism among viewers. This suggests that the visuals may have fallen short in communicating the severity of climate change or motivating action. Conversely, *the third video,* which highlighted the importance of forests to children through visuals, missed the opportunity to showcase the consequences of environmental degradation visually. While it effectively emphasized the significance of forests for children, it did not visually convey the negative impacts of deforestation.

According to Wang et al. (2018), sensory marketing insights indicate that visual storytelling techniques are crucial for effective climate activism. Activists can use photos, videos, and infographics to illustrate the impact of climate change on landscapes, communities, and ecosystems. This approach can help raise awareness and engage people in climate-related issues, emphasizing the power of visual media to drive positive change. The other three videos that focus on climate activism can also benefit from visually compelling storytelling techniques to emphasize the importance of addressing climate change. Even though these approaches may have less direct visual impact compared to videos that explicitly depict environmental degradation, they still have the potential to inspire support for climate activism efforts through impactful visuals such as photos, videos, and infographic.

4.2 The effect of (auditory sense) sound on video communication

"*Tanzania: The Royal Tour*" masterfully captures the essence of Tanzania's history, culture, and natural beauty. It does so by using captivating background sounds that create an immersive experience for viewers, making them feel as though they are embarking on a journey through the country themselves. The documentary takes viewers on a tour of Tanzania's rich landscapes, from the Serengeti Plains to the stunning beaches of Zanzibar. Along the way, it explores Tanzania's cultural heritage, including the Maasai people and their traditions.

However, the climate activism videos featuring Regina Magoke and Upendo Mwakyusa lack captivating background sounds that could truly engage the audience. For instance, Regina Magoke's video would greatly benefit from including sounds that create a classroom setting, such as school bells or children's voices, to amplify the message of climate education for young generations. Similarly, Upendo Mwakyusa's videos could use captivating sound elements to complement the comprehensive message about climate change, inspiring viewers to recognize their role in addressing environmental challenges. On the other hand, the Embassy video effectively uses sound, exciting viewer interest and enhancing the sensory experience (Krishna, 2012)."

According to Boykoff (2019), climate activists can benefit from using captivating background sounds to make their messages more engaging for their audiences. By using sound strategically, including narration and background music, climate advocacy videos can create an immersive experience for viewers. This technique is similar to what tourism marketers use to evoke emotions and create compelling stories. Climate activists can select soundtracks that resonate with their audience and also include ambient sounds from natural environments or personal testimonials to effectively convey the importance of climate action and create a stronger emotional connection with their viewers.

4.3 The effect of tactile tactile sense (touch) on video communication

In *Tanzania: The Royal Tour*, the presidential guide emphasizes tactile experiences by facilitating physical interactions with destinations, accommodations, and attractions. The focus is on engaging the sense of touch by highlighting textures, materials, and surfaces to create memorable experiences for viewers. Similarly, the film shared by the embassy also incorporates this sensory element by showcasing the touching of trees, further enhancing the immersive nature of the content.

However, in contrast, the other two videos lack this tactile dimension. For instance, Regina Magoke's video lacks tangible interactions as it primarily focuses on verbal communication in a classroom setting, without incorporating physical elements that engage the sense of touch. Likewise, Upendo Mwakyusa's videos primarily rely on verbal explanations without providing opportunities for tactile engagement.

According to Finnegan (2020) research, climate activists could improve their advocacy efforts by creating videos that offer tactile experiences, which resonate with the Tanzanian setting. In order to achieve this, they could make use of elements such as soil samples from deforested areas, interactive exhibits showcasing traditional farming techniques, or tactile representations of endangered wildlife. Such methods can be effective in conveying the tangible impacts of climate change, by enabling people to physically interact with elements such as soil erosion or forest degradation, thus instilling a deeper understanding of environmental issues.

4.4 The effect of gustative sense (taste) on video communication

Based on my analysis of four videos, the concept of taste is used as a sensory marketing tool that represents cultural identity, environmental values, and sensory experiences related to travel and conservation. "Tanzania: The Royal Tour" provides viewers with a figurative taste of Tanzanian culture by showcasing traditional cuisine, local customs, and culinary experiences, establishing a sensory connection to the country's rich heritage. Similarly, the video shared by the embassy offers a taste of Tanzania's natural landscapes and biodiversity, highlighting the diverse ecosystems and unique flavors of the region. In the context of climate activism, taste symbolizes the metaphorical flavor of environmental stewardship and sustainability efforts.

As demonstrated in the work of Cheok and Karunanayaka (2018Climate activists and tourism marketers can use storytelling techniques to help people experience the benefits of conservation, such as clean air, freshwater, and healthy ecosystems. One way to incorporate symbolic representations of taste is by making use of metaphors or analogies, such as "tasting" the benefits of conservation. This can help people understand the positive impact that conservation efforts can have on their daily lives. For example, they can imagine the taste of clean air, the freshness of drinking pure water, or the richness of a healthy ecosystem. By employing such techniques, climate activists and tourism marketers can connect with audiences on an emotional level, and inspire them to take action towards a more sustainable future.

4.5 The effect of the Olfactive sense (smell) on video communication

In *Tanzania: The Royal Tour,* the enjoyment of the portrayed places implicitly evokes *the sense of smell*, highlighting the irresistible charm and attractions of Tanzania's natural beauty. As viewers witness the breathtaking landscapes and vibrant cultural scenes, they are likely to imagine the smell of the fresh scent of the wilderness, the earthiness of the soil, or the salty flavor of the ocean breeze. These sensory associations contribute to the overall experience, enhancing the perception of the depicted destinations as appealing and captivating.

In Regina Magoke's video on climate education for young children, the grassroots approach to environmental advocacy provides a refreshing and compelling perspective on the topic. Although there are no direct references to smell, the videos could employ an outdoor learning environment which may evoke olfactory memories of nature's scents, creating a deeper emotional connection with the natural world.

Upendo Mwakyusa's video on climate change awareness discusses environmental conservation and the urgent need for action. Although there are no direct olfactory elements, the comprehensive message about the importance of preserving the environment may indirectly remind viewers of the smells of outdoor environments, reinforcing the urgency of taking action against climate change.

The Embassy of Finland's video emphasizes the importance of forests for children's well-being. The video indirectly evokes olfactory associations with the natural scents of trees and vegetation, emphasizing the sensory experience of being in nature and the importance of preserving natural environments.

Based on the work of Chen and Haviland-Jones (2000), I learned that climate activists can enhance their video content by adding olfactory elements. Tourism marketers often use scents to create emotional connections with their customers, which works similarly for climate advocacy videos. By integrating natural smells like those of fresh air, blooming flowers, or pine trees, activists can evoke positive emotions and engage viewers with environmental issues.

They can also use scent to emphasize the urgency of taking action against climate change, such as the smell of smoke to represent wildfires or pollution. By incorporating scent into their videos, activists can create powerful sensory experiences that make the message more memorable and compelling.

Table 28: A summary of results and discussion.

TITLE	VISUAL SENSE (SIGHT)	AUDITORY SENSE (SOUND)	TACTILE SENSE (TOUCH)	GUSTATIVE SENSE (TASTE)	OLFACTIVE SENSE (SMELL)
Tanzania: The Royal Tour	Utilizes visually captivating imagery, cinematic techniques, and cultural performances to showcase Tanzania's beauty.	Masterfully uses captivating background sounds to enhance the immersive experience for viewers.	Emphasizes tactile experiences by highlighting textures and physical interactions with destinations.	Provides a figurative taste of Tanzanian culture through showcasing traditional cuisine and local customs.	Implicitly evokes the sense of smell through breathtaking landscapes, potentially stimulating olfactory associations.
Regina Magoke's Video	Lacks direct visuals about climate change, missing an opportunity to visually convey the urgency of environmental issues.	Lacks captivating background sounds that could truly engage the audience, missing opportunities for immersive experiences.	Primarily focuses on verbal communication without incorporating physical elements to engage the sense of touch.	N/A One way to incorporate symbolic representations of taste is by making use of metaphors or analogies, such as "tasting" the benefits of conservation.	The use of an outside setting environment could indirectly evoke olfactory memories of nature's scents.
Upendo Mwakyusa 's Video	Some visuals present but fail to effectively ignite a sense of climate activism.	Could benefit from including captivating sound elements to complement the comprehensive message about climate change.	Primarily relies on verbal explanations without providing opportunities for tactile engagement.	N/A For example, climate activists can imagine the taste of clean air, the freshness of drinking pure water, or the richness of a healthy ecosystem. By employing such	The comprehensive message may indirectly remind viewers of outdoor smells, reinforcing the urgency of taking action.

				techniques, climate activists can connect with audiences on an emotional level, and inspire them to take	
Embassy of Finland's Video	Utilize visually captivating visuals fail to visualize the negative effects of forests.	Effectively uses sound to enhance viewer interest and sensory experience, indirectly evoking olfactory associations with natural scents.	Showcases tactile engagement with elements such as touching trees, enhancing the immersive nature of the content.	Highlights the importance of forests and indirectly evokes olfactory associations with the natural scents of trees.	Indirectly evokes olfactory associations with natural scents, emphasizing the sensory experience of being in nature.

5. Conclusion

This study has revealed the potential for using storytelling and sensory experiences in climate activism, particularly through video communication. By incorporating experiential storytelling techniques and insights from tourism marketing strategies, climate activists can improve the effectiveness of their advocacy efforts. The study analyzed several videos, including "Tanzania: The Royal Tour," Regina Magoke's video on climate education, Upendo Mwakyusa's video on climate advocacy, and the Embassy of Finland's documentary on the importance of forests for children. These videos demonstrate that conveying messages and provoking change effectively involves engaging multiple senses. While the analyzed videos effectively used immersive experiences and ambient sounds to engage audiences and inspire action, there is an opportunity for climate activists to integrate additional sensory elements such as visuals, soundscapes, tactile interactions, and olfactory cues. Moving forward, climate activists can take a more holistic approach by incorporating sensory elements that resonate with viewers and induce emotional responses. By creating immersive experiences that appeal to multiple senses, activists can enhance audience engagement, raise awareness about climate change, and mobilize communities towards collective action. Sensory storytelling in video communication presents a powerful tool for climate activism, enabling activists to communicate complex issues in compelling and accessible ways. Harnessing the full potential of sensory storytelling will be crucial in driving meaningful change and fostering a more sustainable future as we tackle the challenges of climate change.

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ANALYTICAL STUDY ON STRATEGIC THINKING OF BEGINNER VOTERS IN DETERMINING POLITICAL VOICES DURING LEGISLATIVE ELECTIONS IN INDONESIA

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ABSTRACT

This research explores the role of strategic thinking in the political decision-making process for novice voters during the legislative election period in Indonesia. This research examines the factors that influence the political choices of first-time voters using an analytical approach in qualitative research. Through surveys, in-depth interviews, and content analysis, first-time voters gain insight into considering factors such as party policies, candidate credibility, social issues, and interactions with their political environment. The research results highlight the importance of strategic thinking in the political election process, especially for novice voters who lack experience in political affairs. This research informs that first-time voters tend to use a more analytical approach in voting, considering the long-term consequences of their political choices. Apart from that, family, peers, and social media influence significantly shape their political perceptions. This research contributes to providing an understanding of the political behaviour of novice voters and the importance of strategic thinking in the context of modern politics. The implications of these findings can help political stakeholders design more effective communication strategies and target first-time voters more precisely, thereby increasing the quality of political participation in Indonesia.

Keywords: *strategic thinking, first-time voters, political elections, political analysis*.

1. Introduction

Legislative elections in Indonesia as a means of determining people's representatives in occupying DPR, DPD and DPRD seats in various regions have passed but are very interesting to research, especially about the problem of deciding political choices due to the dilemmatic perspective of the role of reason and free will. Voters, especially novice voters, can be inconsistent and change like an amoeba or chameleon. Political expert at the Faculty of Social and Political Sciences UGM, Dr Mada Sukmajati, even emphasised that voters in the millennial generation and generation Z are those who quickly change their choices or are often referred to as moody where they change their preferences according to their mood, thoughts and emotions (Grehenson, 2023). Apart from that, another publicly visible characteristic is first-time voters' lack of political enthusiasm, whose political views tend to be pessimistic. However, of the 204.8 million voters in 2024, according to data from the General Election Commission (KPU), 25 million voters who are first-time voters are expected by the Minister of Women's Empowerment and Child Protection (PPPA) to become intelligent voters in their role as pioneers and reporter (2P) (Public Relations Bureau, 2024).

Beginner voters need intelligence to think and make choices (Prasetyawati & Adi, 2021). Moreover, there is political competition between the candidates. Each individual or group (contestant) can use various methods to achieve political goals. A legislative member was caught by the Corruption Eradication Commission (KPK) carrying IDR 8 billion to carry out a dawn attack (alleged). (Amindoni, 2019), indicates election fraud because it impacts efforts to shift the personal commitment of voters, especially first-time voters.

The quality of democracy in Indonesia is a severe challenge of implementation. Therefore, from the researcher's point of view, this perspective is fascinating not only for experienced voters but also for novice voters who have just entered the stage of political participation. It is essential to understand how first-time voters make their political decisions. This angle touches on strategic thinking.

Strategic thinking is organising choices through institutional thinking by evaluating alternatives and decisions to find the best fit between the institution, its resources and the environment. Strategic thinking includes all actions because it is essential before every action related to strategy (Haley, 2016). people often understand strategic thinking in connection with strategic planning. Leba et al. (2020) emphasise that strategic thinking is part of the strategic planning process because much strategic thinking is needed to develop a successful strategic plan. Thus, strategic thinking refers to an individual's ability to plan long-term steps and identify the consequences of various options (Rizan, et al., 2023). This ability is crucial in understanding how voters make political decisions in elections.

The political context in Indonesia displays interesting characteristics to study. Legislative elections in Indonesia display complex political dynamics, including various political parties, different political platforms, and social and economic issues that influence voter preferences, especially for first-time voters. In this case, first-time voters need a deep understanding of their political environment to make informed decisions (Aprianti, 2023). New voters certainly play a role in bringing new dynamics to the democratic process. From this perspective, novice voters utilise strategic thinking in choosing leaders and political parties that can provide valuable insight into the evolution of democracy in Indonesia (Yendra, 2023).

This research can undoubtedly impact the relationship with studies from a political psychology perspective, where political psychology concepts, such as political motivation, political party identification, and perceptions of political leaders, are involved. It implies understanding factors that can help analyse how strategic psychological variables influence thinking. This research certainly has implications for political education, namely providing valuable input for the development of the political education curriculum in Indonesia by emphasising the importance of learning that encourages a deep understanding of politics as well as the development of strategic thinking skills and their implementation in various fields and various situations and events.

2. Literatur Review

2.1 Strategic Thinking Concept

Strategic thinking is usually the strategy formulation and execution of a business leader or the strategic performance of the business world. Strategic thinking synthesises processes and utilises intuition and creativity to achieve results (Liedtka, 1998). Strategic thinking is associated with a manager's ability to make appropriate, directed, and accurate decisions to achieve his company's or organisation's success (Rahman, 2017).

Strategic thinking is part of the strategic planning process, as much strategic thinking is required to develop a successful strategic plan. So, it is related to cognitive processes to achieve goals. Successful strategic thinking must be rational (Gruning & Krueger, 2022). However, cognitive biases and irrationality also facilitate achieving strategic goals under certain conditions (Gigerenzer, 2023).

According to Leba and Watunglawar (2020), strategic thinking is managing choices through institutional thinking by evaluating alternatives and decisions to find the most suitable one between the institution, its resources and the environment. It is related to a person's ability, including leaders, to move towards goals, build positive interactions between fellow workers, and encourage and mobilise themselves and each other to remain committed to organisational values and agreed policy directions (Watunglawar & Christianity, 2015).

In the management context, according to Watunglawar (2022), strategic thinking is associated with the involvement of two different processes, namely, planning and thinking. Planning involves problem analysis and building systems and procedures while thinking involves synthesis, intuition, innovation, and creativity. Strategic thinking is a way of solving strategic problems that combines a rational and convergent approach with creative and differentiated thinking processes.

2.2 Features of Strategic Thinking

To understand which is a product of strategic thinking and which is not the result of strategic thinking, the following are the characteristics of strategic thinking,

1) His abstractive power is sharp and systematic.
   Thinking hard is an in-depth analysis of each phenomenon and looking for cause-and-effect relationships. Meanwhile, systematic means logical, following a rational sequence of thought patterns, not jumping around or rushing to conclusions before the analysis process is complete (Watunglawar, 2022).
2) The point of view is always complete and comprehensive.
   Have a complete and comprehensive mindset on all products and services. When designing a long-term strategy, the organisation seems to be seen from above so that not only the organisation is seen as a whole but also competitors, customers, stakeholders, suppliers, distributors, potential competitors, and substitute products. Likewise, all macro factors, such as political, economic, social, technological, regulatory, and environmental factors, are also input when considering plans. Thus, in designing a plan, someone must make the best decisions and complete it with anticipatory plans in risk and potential problem analysis. (Leba & Watunglawar, 2020).
3) Can think outside the current paradigm.
   Today's paradigm is different from the future. Therefore, in strategic thinking, it is necessary always to have a critical view and get out of the habit (think outside the box). Even the most extreme ideas are still valid as material for consideration. Creativity that drives innovation is essential.
4) It can be analysed effectively even if the information is incomplete.
   Sharpness in developing assumptions is critical in determining the success of designing plans. Armed with his strategic thinking, the director expresses his dreams of forming a vision and mission packaged into a strategic plan for implementing work directions, targets, policies, or programs.

2.3 Characteristics of Strategic Thinking

Strategic thinking has characteristics. Characteristics are particular traits or characteristics that determine a thought with strategic value. Jeanne M. Lietdka (1998) alludes to five main elements (unique characteristics) in strategic thinking, namely:

1) Holistic Perspective System (Rahardhian, 2022)
   Strategic thinkers must have a complete mental system, mindset, and values to create reason from beginning to end. Strategic thinking is more overall oriented than just focusing on one particular part. Thinkers see a problem from various points of view (perspectives) while seeing and understanding the interrelated relationships between the objects of thought.
2) Focus on goals

Strategic thinking must have clear direction and goals. So that the process remains on the right track (Leba & Watunglawar, 2020)

3) Think at the right time.
The future and the gap between current realities and future goals drive strategy. A strategic thinker is required to connect the past, present and future (Alqershi, 2021).
4) Hypothesis-driven
Strategic thinking is related to the scientific method. Creativity requires strategic thinking to transform existing data into hypotheses ready to be tested scientifically.
5) Intelligent Opportunism
Local intelligence comes from anyone in an organisation and other existing or new strategies that can contribute to new understandings. This method implies the work or creativity of the mind (Rodriguez & Partidario, 2021)

2.4 Stages of Strategic Thinking

The following are stages of strategic thinking that can be an example for us, as mentioned by Watunglawar (2022), as follows:

1) Identify the problem. At this stage, strategic thinkers try to identify issues that arise by looking at the following symptoms. Someone very often assumes that the symptoms are identical to the problem, resulting in the resolution/solution created not being able to solve the problem. This identification process can hold brainstorming or opinion polls.
2) Problem grouping. At this stage, strategic thinkers need to group and classify problems according to the nature or character of the purpose of grouping the issues.
3) Abstraction process. At this stage, strategic thinkers identify crucial problems for each group. Problems identified are analysed to find the factors that cause or trigger the problem.
4) Determining how to solve the problem. After the abstraction stage, one must choose the most appropriate way to solve the identification problem in the first stage. The method or way of solving this problem must be concrete and more specific.

2.5 Tips for Strategic Thinking

There are several TIPS related to strategic thinking, including:

1) Future Thoughts (visionary). Being a strategic thinker means being a visionary. Seeing and understanding the future does not mean only focusing on what will happen in the future but considering what happened in the past and present. This way, one can determine the correct strategy and course of action. Look at your current goals and past changes, imagine what obstacles and challenges you might face, and then develop strategies to overcome those challenges when problems arise. Getting used to this way of thinking can also help you overcome obstacles or problems more quickly. Thus, the progress of an organisation depends significantly on a visionary leader (Watunglawar & Christianity, 2015)
2) Set priorities regarding which ones can wait and which ones will bring the most benefits if completed now.
3) Be aware of personal bias. This means that the need for self-awareness to monitor and question one's ideas is integral to strategic thinking. We must always examine and question our thoughts critically. Be aware that our thoughts or opinions are imperfect; this will not reduce our credibility. Awareness of personal bias can make us think outside the box and develop new ideas.
4) Improve listening skills. We need to understand their different perspectives when interacting and communicating with others. We must open our minds and evaluate

everything we hear. Practice the ability to see things from different angles. Doing this lets you find various solutions and draw the most appropriate conclusions.
5) Understand all the consequences. We must be aware that every choice has its consequences. We must question various sources and opinions and consider the impact of each option.
6) Continuously learn and develop knowledge. We must increase our experience. We also have to improve our understanding. Gaining experience and expertise will help us to think strategically.

2.6 Strategic Thinking: Political Perspective

New voters have strategic thinking if they can understand political issues, consider various options, and make well-formulated decisions in the election context. Beginner voters can think strategically in considering multiple factors that influence decisions, such as personal values, the influence of the social environment, available political information, and future aspirations (Kafka, et al., 2022), (Rompas, 2019).

There are several characteristics of a beginner voter in terms of using a basis for assessing the involvement of strategic thinking: **First**, a beginner voter understands the political process, government system, and the role of voters in democracy. Good political education helps novice voters develop a strong knowledge foundation for making sound political decisions. In his direction, Agus Mellaz (KPU member) said that if novice voters have sufficient knowledge and skills, they can participate meaningfully in organising elections (KPU Public Relations, 2022). **Second**, a novice voter understands the critical issues relevant to the election and analyses their implications for daily life and the future, including considering various approaches and solutions proposed by multiple candidates or political parties. **Third**, a novice voter evaluates and analyses the quality of candidates and political party platforms, including considering track record, proposed policies, and fit with the values and interests of first-time voters. In this context, novice voters ask many questions and think hard to get answers to their literature, so they prefer to use the internet and social media to get answers (Nurazizah, 2022). **Fourth**, build long-term implications of the political choices, including how the decision may affect their lives and society.

Additionally, novice voters must consider public, environmental, economic and social policies. **Fifth**, new voters have within themselves the drive to be actively involved in political processes and activities regarding elections, participation in public discussions, and involvement in political movements or community organisations relevant to their interests. **Sixth**, novice voters develop critical skills in sorting information, identifying bias, and making evidence-based judgments. It is essential for first-time voters not to fall into the trap of biased or manipulative political rhetoric. **Seventh**, novice voters develop a broad perspective to appreciate the diversity of political views and broaden their horizons by listening to various points of view. A broad understanding is essential for voters to avoid being misled and enrich their understanding of complex political issues.

A novice voter must strengthen these concepts and develop better strategic thinking skills in their political decision-making process, enabling them to participate effectively in the democratic process.

2.7 Politics and Legislative Elections

Politics is a process or activity related to group or society decision-making. It involves power struggles, distribution of resources, policy-making, and interactions between individuals, groups, or political entities. Politics can occur at various levels, from local to national and even international. Politics concerns all matters related to government (regulations, government actions, laws, laws, policies), state regulation and control, and how to govern (Nambo &puluhulua, 2005).

Legislative elections are an essential aspect of the political process in which the citizens of a country elect their representatives to sit in legislative bodies, such as parliament or Congress. These elections are usually held periodically, for example, once every few years. Elected legislators make laws, influence policy, and represent the community's interests in legislative forums.

Legislative elections involve several stages, including political campaigns in which candidates compete for the support of voters, voting in which voters choose their preferred candidates, and voting counting to determine who will become legislature members. This process often takes centre stage on a country's political agenda because the results can majorly impact government direction and policy.

The allusion to politics and legislative elections is always related to democracy, political parties, legislature, electoral systems, political campaigns, party manifestos, opinion polls, campaigns, candidate debates and election monitoring. Democracy is a political system where power comes from the people and is exercised by the people through general elections or elected representatives (Rauta, 2014). Political parties pursue specific goals and influence the government through elections and other political activities. Political activities culminate in General Elections, where citizens elect their representatives (legislators) in government or determine other political decisions through a secret vote. Before the election, there is a political campaign phase. At this stage, candidates, political parties, or interest groups make a series of efforts to influence public opinion and gain support in general elections. The type of activity carried out during political times can be an opinion poll. Opinion polls are good because they help citizens determine legislators' understanding and strategic thinking patterns. Another activity held was a campaign. Campaigning is a way in which candidates or political parties attack their political opponents rather than promoting themselves or candidates promote themselves and their vision and programs without attacking their political opponents.

Another influential perspective in political times and legislative elections is campaign financing, candidate debates and election monitoring. Funds also determine the success of legislative candidates (Carolina & Maryanah, 2022). Funding for political campaigns can come from donations from individuals, companies or interest groups. Debate activities are needed because they will be the basis for voters' considerations regarding ready figures with strategic abilities to solve social problems. Lastly is the matter of Election Observers. Monitoring is part of political management. Supervision contributes to a well-running political process to achieve certainty in implementing the values of justice, transparency and integrity. This perspective is very fundamental regarding politics and legislative elections.

2.8 The Role of New Voters in the Political Process

New voters play an essential role in a country's political process. New voters have great potential to shape the political direction of a country with the analytical ability to elect leaders who uphold the eradication of corruption (ACLC-KPK, 2023). It means that leaders will not engage in corrupt practices because they are the generation that will inherit the results of current political decisions. Political parties and candidates will tend to pay attention to issues considered necessary by first-time voters to win their support. Contestants will try to win the hearts of voters (Meliala, 2020). First-time voters bring fresh energy and enthusiasm to the political process. They are open to new ideas and change, which can change political dynamics and bring positive change.

New voters often have a different political perspective than the older generation. The active participation of first-time voters in the political process can bring new or overlooked issues to the fore and bring new focus to essential problems that have not previously received public attention. First-time voters become the main driver or driving force for social change. Because first-time voters are more open to differences and needs, they can influence political policies supporting equality, justice, and human rights.

First-time voters, who have grown up with modern technology and access to a wide range of information, are often agents of change in politics. They are more likely to use social media and digital technology to mobilise support, share information, and engage in political discussions (Tamrin, RS, Arsyad, Umar, & Kurniawan, 2024). The participation of first-time voters is constructive politically in increasing political awareness among the younger generation. By getting involved in elections and other political processes, first-time voters learn about their political rights, the democratic process, and citizen responsibilities. Thus, first-time voters have great potential to influence the political direction of a country and shape a society that is more inclusive, fair and responsive to the needs of its people.

3. Methodology

The study used qualitative research, collecting data from surveys, in-depth interviews, documentation, and content analysis. Surveys use questionnaires to understand the mindset and factors influencing the political decisions of first-time voters. Questionnaires covered political understanding, party preferences, and decision-making factors. In addition to surveys, in-depth interviews were conducted with some first-time voters to better understand their thought processes in determining political choices. New voters must analyse social media content, news articles, and political campaign materials to assess political messages and how they influence their mindset. The researcher's subjective perspective influenced the descriptive analysis of the data, comparing and searching for consistency and concluding findings to address the research issue.

4. Findings and Discussion

4.1 Beginner Voter Profile

New voters in Indonesia vary significantly in terms of social, economic, educational and environmental backgrounds. In general, first-time voters are in the young age range, namely between 17 and 25 years or 22 years (Telaumbanua & Laia, 2022). Novis voters are millennials and Generation Z (Musticho et al., 2023). If it is related to age, first-time voters in Indonesia are generally still in the educational stage, whether in formal education such as high school, college or non-formal education. Most first-time voters have extensive access to technology, especially the internet and social media. They use these platforms to gain political information and form their views.

Regarding socio-political interactions, many factors influence first-time voters by their surroundings, including family, peers, and public figures such as celebrities or political figures. Many first-time voters have no political experience, limited political knowledge, lack of trust in the political system, and lack of concern for the general election process. However, some new voters are active in political activities such as discussions, campaigns or social activities related to political issues.

4.2 Strategic Thinking of New Voters in the Context of Political Elections

The strategic thinking of novice voters in political elections refers to the ability to see holistically, understand complex political dynamics, and plan long-term steps to achieve specific political goals. Therefore, a novice voter must have a deep understanding of the political environment and human resources of political candidates. It involves a comprehensive understanding of political dynamics, including public opinion, social trends, and existing political forces. In political elections, strategic thinking for novice voters involves several vital steps to make informed and focused decisions. Several strategies can help novice voters, such as understanding the basics of politics, including the Indonesian political system, the role and function of government institutions, and critical societal issues. It can be done through reading the news, following political debates, and looking for reliable sources of information.

To make informed decisions, first-time voters must thoroughly research the competing candidates and political parties. This research should examine the candidates' track records, party platforms, and legislative candidates' visions and missions. Additionally, first-time voters should engage in discussions with friends, family, and others to gain additional political insights. They should be selective with information and focus on critical issues to help filter information and evaluate candidates and parties based on how they plan to address these issues. First-time voters need to prioritise the common good in their evaluation. Sharpness is essential in assessing information that tends to be false or unverified, which can influence negative perceptions of political candidates.

Moreover, one has to evaluate decisions. Artinya, dengan melakukan evaluasi, pemilih pemula harus mempertimbangkan pilihannya agar sesuai dengan nilai dan kebutuhan. selanjutnya mereka merekomendasikan pilihan tersebut sebagai pelajaran untuk pemilu berikutnya karena dianggap benar. By using this strategy, new voters can make wiser decisions in choosing legislative candidates who will fight for the interests and values held by new voters..

4.3 Factors that Influence the Political Choices of New Voters

As a beginner voter, you do not have the knowledge and experience. Therefore, it is susceptible to influence. Several factors influence first-time voters, such as family and social environment, education and political knowledge, personality, media technology, personal experience, campaigns and political leadership. We have to understand some factors that influence political choices and voters:

1) Family and social environment significantly influence novice voters (Martani & Suharno, 2022). Parents who already have experience in determining their political choices on specific figures will certainly easily influence novice voters to choose figures who are legislative candidates. Parents in certain areas can forcefully influence their family members, including voters, to select specific legislative candidates. It can also lead to conflict between parents and children (beginner voters) (BBC, 2019). The determination of first-time voters can shift to other legislative candidates because their peers influence them. Good friendships also influence voters' political decisions. New voters make their political choices because they follow the choices or suggestions of their peers.
2) Education and political knowledge are no less important in influencing first-time voters. Political education provides a deep understanding of the political process and the rights and responsibilities of the community, including first-time voters (Taranau, 2024). New voters who are educated and have a good understanding of the political system, public issues, and ideology can help them make more meaningful decisions. Therefore, it is essential to establish an informal political education environment within the family to help form positive thinking in decision-making and political choices regarding candidates for people's representatives.
3) Mass media and information technology (social media, online news sites and other communication platforms) also shape the political perceptions of first-time voters. Mass media is a pillar of democracy (2023). Beginner voters can get various political issues and candidate information to make political choices. New voters with political preferences for specific figures will certainly feel disturbed when they receive information in the media regarding their political decisions. If the information obtained about a legislative candidate is positive, it will confirm his resolve, but if it is negative, it will affect his political considerations and choices.

4) Personality factors and personal values of first-time voters influence political choices. Some first-time voters tend to be conservative and liberal. They have particular social justice, individual freedom, or national security considerations. It is also related to behavioural factors related to candidates and parties (Febriani, 2018), (Hasriani et al., 2015). There is voters' mental and emotional involvement (Hasyim et al., 2020).
5) Personal Experience: Direct experience with the government or political parties can influence a person's political views. For example, experience with public services or negative experiences with the political system can influence a person's political attitudes. It happens when political candidates do not keep promises (Melial, 2020).
6) Political Campaigns and Leadership: Political campaigns and effective political leadership can influence first-time voters. Campaign messages, political rhetoric, and candidates' leadership qualities can shape first-time voters' perceptions and preferences. Political candidates with suitable campaign materials supported by intelligent political rhetoric effectively influence first-time voters to sympathise.

First-time voters tend to be more susceptible to external influences and may not be firm in their political preferences. Therefore, good political education and easy access to accurate information can help them make more informed and politically sustainable decisions.

4.4 Significant Findings Regarding Strategic Thinking of Beginner Voters

New voters are an essential group in the context of democracy, as they have the potential to shape long-term political decisions. Research shows that the strategic thinking of new voters is influenced by their social environment, including factors like family influence, peer pressure, social media, and political culture. Social dynamics play a role in shaping the strategic thinking of new voters, impacting their access to political information. Strong political knowledge helps new voters understand the implications of political decisions and make informed choices based on their values and interests. Effective voter education programs can enhance the strategic thinking abilities of new voters by teaching them about the political system, election processes, relevant political issues, and critical skills like information analysis and argument evaluation. Effective voter education can help new voters develop better strategic thinking skills.

The experience of novice voters participating in politics to discuss political issues, get involved in campaigns, or participate in other political activities will help them develop strategic thinking. Through these experiences, they can better understand how political decisions affect society and strengthen their critical thinking skills. Political campaigns play a significant role in shaping the strategic thinking of first-time voters. Campaign strategies, political messages, and communication influence how first-time voters view candidates and political issues. Effective campaigns build a better understanding of political issues and help first-time voters make more informed and strategic decisions. Understanding these factors can help interested parties, including political parties, civil society organisations, and educational institutions, develop effective strategies to engage and educate first-time voters in the political process.

4.5 Analysis of the strategies used by novice voters in determining political choices

First-time voters, a group participating in the political process for the first time, often consider various factors in determining their political choices. Novice voters use several strategies in making their political decisions, namely:

1) Emotional Approach: Most first-time voters tend to be emotionally influenced by political campaigns. Attractive campaign messages, strong narratives, and the involvement of public figures they admire help influence their political decisions and choices.

2) Information Search: Although first-time voters may be less experienced in politics, they may be inclined to conduct information searches to understand relevant issues and candidates' positions. They can seek information from various sources, including mass media, candidate websites, or discussions with friends and family.
3) Identify with Values and Ideology: New voters can try to understand the underlying values and ideology of a particular political party or candidate. If voters feel those values align with their beliefs or identity, they may be more inclined to support that party or candidate.
4) Influence of Family and Friends: First-time voters often consider the opinions and support of their family, friends, or community members when making political choices. Recommendations and discussions with people closest to them can influence their political decisions.
5) Candidate Character and Reputation: First-time voters may also consider a candidate's character and reputation when making political choices. They can assess candidates' track record, integrity, or personality to assess their suitability as leaders.
6) Local Issues: Issues that have a direct impact on first-time voters' daily lives, such as education, jobs, health, or regional infrastructure, can be determining factors in determining their political choices.
7) Social Media Campaigns: First-time voters are often active on social media, and political campaigns via these platforms can influence their perceptions and political choices. Campaign messages, advertising and endorsements from social media influencers can influence their opinions.
8) Participation in Debates and Forums: Interested first-time voters can participate in political debates or discussion forums to hear the arguments and views of various parties before making a decision.

In considering these strategies, first-time voters must conduct careful research, consider multiple viewpoints, and understand their political choices' implications.

5. Conclusion

Understanding political strategies can influence individual political decisions, particularly among first-time voters in Indonesia's legislative elections. Family influence, education, social media, and political knowledge shape first-time voters' political perceptions and decision-making. Effective voter education programs can enhance the strategic thinking abilities of first-time voters by providing them with knowledge about the political system and critical skills like information analysis and argument evaluation. By understanding the strategies of first-time voters, a deeper insight into the political dynamics in Indonesia can be gained, including factors influencing election results and the importance of strategic thinking for first-time voters.

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BIBLIOMETRIC ANALYSIS: THE RESEARCH DEVELOPMENT OF RETURN ON EQUITY (ROE) IN COMMERCIAL BANKS DURING 2021-2023

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ABSTRACT

This study aims to determine and provide a summary of the literature on the effect of Return on Equity (ROE) on commercial banking using the bibliometric method. The data used in this study are Scopus-based for the period 2021-2023. Data analysis tools use Microsoft Excel software, Mendeley desktop, and VOSviewer. The data collection technique went through several stages including identification, screening, eligibility, and inclusion. The results showed that based on the bibliometric method using VOSviewer, it was divided into seven clusters and 201 topic items. In addition, it shows a significant increase in research over the past three years. This increase is due to support and publication opportunities such as India and Jordan. The implication and contribution of this research is to map the topics that are often researched by researchers so that it can be a reference for future researchers.
Keywords *: Return on equity, Commercial bank, Bibliometric*

1. Introduction

In recent years, there have been a number of cases in the financial health of banks due to economic uncertainty after the COVID-19 pandemic. One of them is Silicon Valley Bank (SVB) from the United States, which filed for bankruptcy in 2023 due to a capital crisis. This case occurred at the beginning of SVB experiencing liquidity problems where clients withdrew US$42 billion in deposits due to maintaining their company's defense until the time of the IPO and private fundraising. Therefore, SVB was undercapitalized and its cash balance became negative by US$958 million. Secondly, SVB's shares declined and it became difficult for SVB banks to find buyers. As a result, SVB failed to secure sufficient capital from other sources. The hasty withdrawal of deposits caused SVB bank to be unable to fulfill its obligations when they fell due (Hasibuan, 2023).

ROE is one of the main benchmarks in assessing the financial health of a company. Commercial banks play a vital role in economic development and the financial condition of banks is an important indicator to measure the economic health of a country. Good bank health indicates a growing and stable economy (Raci et al., 2021). ROE as a key performance measure emerged with the risk management approach that inspired bank capital regulation (Alharthi, 2022). Moreover, ROE plays a positive role in equity planning and development in the long run (Alshiqi & Sahiti, 2021). The rate of return on shareholders' capital (ROE) shows how effective the bank is in generating profits from the capital invested by shareholders (Pham, 2023). Capital adequacy refers to the capital ratio that indicates the availability of capital (Khan, 2022). Indonesia is among the countries with a high level of ESG disclosure. Banks in Indonesia that perform well as measured by ROE and experience positive asset growth indicate that they are growing and getting bigger (Gutiérrez & Wibowo, 2023).

In commercial banking, asset growth is an important indicator of bank health. A bank with growing assets shows that it is able to attract new customers and provide the loans needed by customers. (M.-P. Lu, 2022). With the expansion of digital technology, banks must adapt if they are to continue to compete in the global banking industry. To provide electronic banking services, banks spend huge amounts of capital to develop systems by investing in technological equipment, hiring information technology experts, and training employees to handle electronic banking. This has sharply increased the operating costs of banks, especially in the early stages of implementing electronic banking. Although expenditure on information technology investment is high, banks are able to generate relatively large income to overcome high expenditure (M. P. Lu et al., 2022). This is in line with research (Al-Amarnehet al., 2023) that banks that have online banking services have higher ROE than banks that do not have online banking services. This is also beneficial for banks because it can reduce their operating costs.

Return on equity (ROE) explains the effectiveness of equity utilization and the image of healthy managerial performance for commercial banks (Haddad et al., 2022). However, it should be noted that ROE is only one indicator of the company's financial performance. Therefore, it is important to evaluate company performance from various other aspects such as *Return on Assets (*ROA), *Earning Per Share* (EPS) and others. The purpose of this study is to determine the effect of ROE on commercial banking by using the bibliometric method, providing a comprehensive summary of the literature data used. This research has several implications and contributions. First, this study maps out the topics that are frequently researched by researchers. This mapping helps to identify popular research areas and areas that remain under-researched. Second, it helps to identify research findings that have not been widely used. These findings can be a valuable source of information for future researchers to develop their research. Overall, this study makes a significant contribution to the development of science by providing useful information to researchers invarious fields.

2. Literature Review

2.1 Return on Equity

Profitability is an important part of a bank's financial performance. The level of profitability can be calculated by various methods, where the choice of method depends on the type of profit and assets or capital being compared (Pratama et al., 2016). Thus, maintaining the level of profitability and improving the profitability ratio is important to show optimal bank performance. *Return on Equity* (ROE) is a ratio that measures how effectively a company uses its capital to generate profits. A high ROE indicates that the company is effective in using its capital and generating large profits. Conversely, a low ROE indicates that the company generates low profits from each unit of equity capital (Hawaldar et al., 2022). ROE as an important financial metric that assesses a bank's performance by comparing its net profit after tax with its equity capital. This ratio serves as an important indicator of how effective a bank's main capital is in generating profits, usually expressed as a percentage (Tazriah & Pratiwi, 2023).

2.2 Commercial Bank

Commercial banks is a financial institution that accepts deposits from the public and provides loans for consumption and investment purposes for profit. Commercial banks include both private sector banks and public sector banks. Commercial banks generate revenue through loans, credit card interest, and various fees. For example, an entrepreneur may seek a loan from a commercial bank to start his or her business. As they repay the loan, they are obligated to pay interest, which is a profit for the bank. This mechanism mirrors how commercial banks profit from credit card interest. When businesses repay funds spent on their credit cards, they typically incur interest charges. The main difference between commercial banking and other banking sectors lies in their clientele. Commercial banking primarily serves the financial needs of small to medium-sized businesses, government agencies, and institutions such as educational institutions (Kaplan, 2023).

3. Research Methods

This research uses bibliometric analysis which is the application of statistics and quantitative approaches to research publications. This analysis is used for various purposes, fields, and topics or in certain journals (Firmansyah & Faisal, 2020). The scope of research used is research journal articles on *Return On Equity* at Commercial Banks. Data analysis tools use Microsoft Excel software, Mendeley Desktop and VOSviewer. Data collection techniques go through several stages including identification, screening, eligibility and inclusion (Setiawan et al., 2023).

The first stage is to identify and consider several important factors including keyword search, category, language, period, document type and source.This research uses the initial keyword "*Return on Equity*".In the search category, the researcher focuses on *Business*, *Management* and *Accounting*, *Economics*, *Econometrics* and *Finance*. To avoid language bias, the search language used is English. The time period used is the period 2021-2023, then using articles as the type of document in this study. Data sources were obtained from the internationally qualified Scopus database.

The identification stage found 3,032 publications obtained from keyword searches. Furthermore, the filtering process includes several criteria that are suitable in this study, including using the years 2021-2023 (923 publications), subject areas in Business, Management, Accounting, Economics, Econometrics and Finance (705 publications), Document types only focus on Articles (645 publications), Some of the keywords used are “Bank Performance”, “Bank Size”, “Bank Stability”, “Banking”, Banking Performance", ‘Banks’, ‘ROE’, ‘Return on Equity’, ‘Return on Equity (ROE)’, ‘Commercial Banks’ (206 publications), the type of source used is articles (206 publications) and the grammar uses English because is used internationally and quality.

The feasibility stage includes checking the data to be used and in the last stage consisting of statistical analysis and bibliometric analysis resulted in 201 publications being selected. This study used two bibliometric methods, namely co-authorship and co-occurance. Co-authorship analysis is used to see the level of collaboration between researchers by involving organizations and countries while co-occurance analysis produces the development of return on equity research through the keywords of this study.

4. Research Findings and Discussion

4.1 Annual Publication Growth

Figure 1 shows all 201 publications regarding return on equity (ROE) in commercial banks produced in 2021 until the highest publication in 2023. This shows an increase in publications per year. Based on publication data, the highest subject area categories are Business, Management and Accounting 149 publications and Economics, Econometrics and Finance 136 publications.

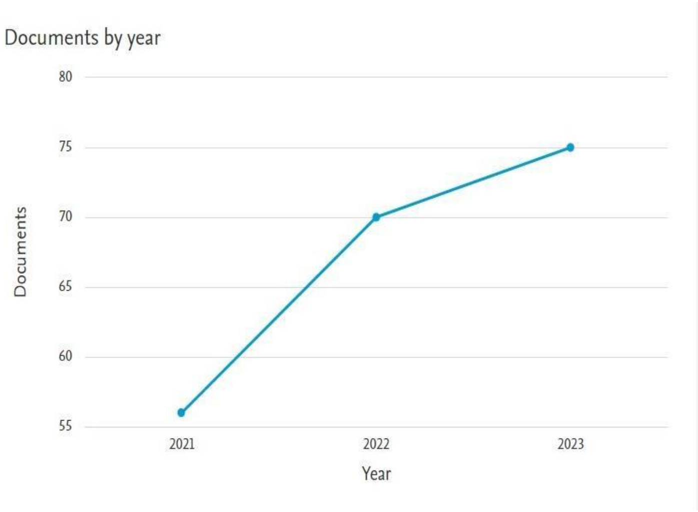

Figure 1. Annual Publication Growth Ouput of *Return on Equity* (ROE) at Commercial Banks

4.2 Publication Distribution by Country/Region

Based on Figure 2, there are several countries or regions publishing about *return on equity* (ROE) in commercial banks. The countries or regions included in the top 5 include India being the first country in terms of publications with a total of 26 documents followed by Jordan with 17 documents, United States with 16 documents, Saudi Arabia with 15 documents and Indonesia with 14 documents. In this publication there are 15 countries contributing to *return on equity* (ROE) in commercial banks with the number of publications ranging from one to 26 documents.

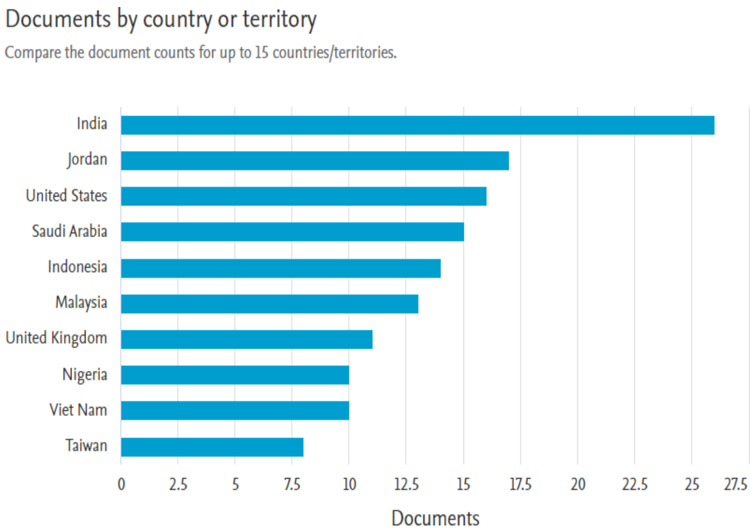

Figure 2. Publications by Country or Region

4.3 Publication by Organization

Based on Figure 3 and table 1, Prince Sattam Bin Abdulaziz University (Saudi Arabia), HSE University (Russia) and Al-Balqa Applied University (Jordan) have contributed greatly to return on equity (ROE) research over the past few years. In addition, there are 2 different organizations in Jordan with a total of 6 publications, indicating that Jordan also has a higher interest in *return on equity* research in commercial banks than other countries. It also recognizes that universities contribute to research on commercial banking.

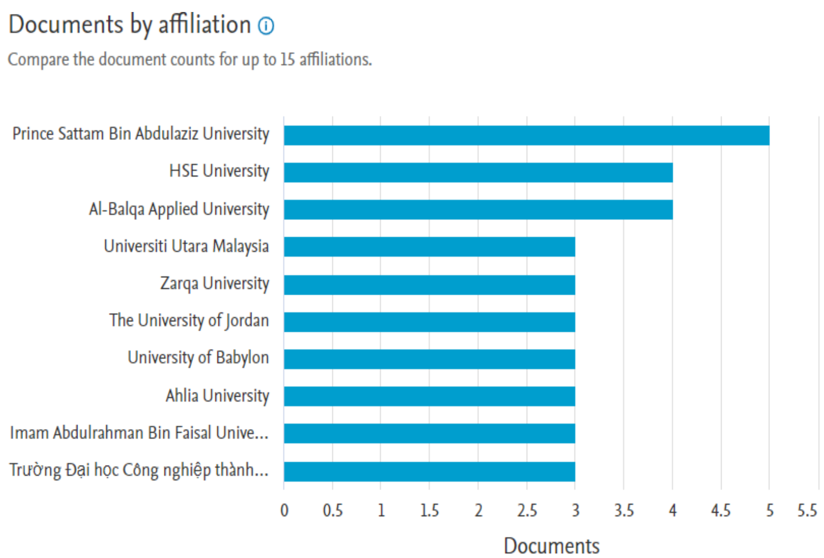

Figure 3. Publications by Organization

Table 1. Top organizations that contribute to *return on equity* research in commercial banks

No	Organization Area	Country	Number of Publications
1	Prince Sattam Bin Abdulaziz University	Saudi Arabia	5
2	HSE University	Russia	4
3	Al-Balqa Applied University	Jordan	4
4	Universiti Utara Malaysia	Malaysia	3
5	Zarqa University	Jordan	3
6	The University of Jordan	Jordan	3
7	University of Babylon	Iraq	3
8	Ahlia University	Bahrain	3
9	Imam Abdulrahman Bin Faisal University	Saudi Arabia	3
10	TrUong Dai hoc Cong nghiep thanh pho Ho Chi Minh City	Vietnam	3

4.4 Author or Researcher of the Publication

Based on Figure 4 based on scopus data introduces 10 authors of publications related to return on equity in commercial banks including Abraham, R. (The Impact of Corporate Governance and Political Connectedness on the Financial Performance of Lebanese Banks during the Financial Crisis of 2019-2021, 2022; The Role of Liquidity Creation in Managing the Covid-19 Banking Crisis in Selected Mena Countries, 2023). Ahmeti, S., Aliu (Financial Performance Evaluation of the Commercial Banks in Kosovo, 2021; The Relationship between Liquidity Risk Management and Commercial Bank Performance: Evidence from the Western Balkans, 2022).Furthermore, M. Altahtamouni, F., Buallay, A., Chouaibi, J., El Khoury, R., El-Chaarani, H., Haddad, H., and Lu, M.P and so on.Overall the author has 2 document publications in the period 2021-2023.

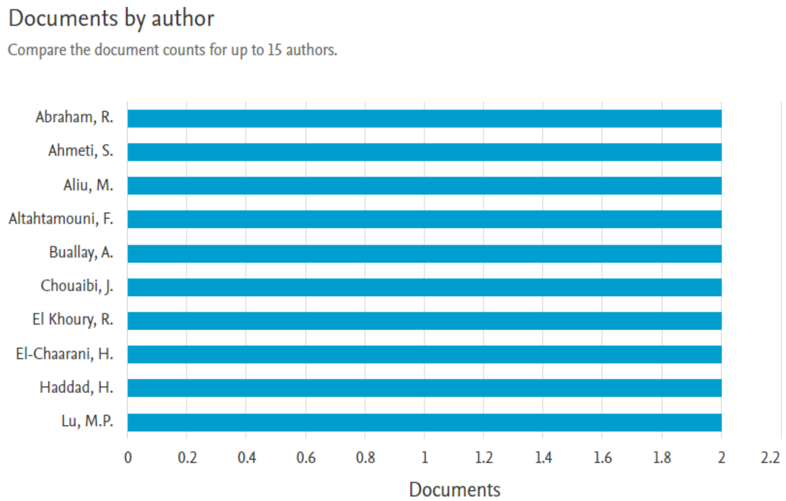

Figure 4. Author or Researcher of the Publication

4.5 *Bibliometric Mapping of Return on Equity (ROE) Research*

Based on Figure 5 presents a graphical representation of the *co-occurrence* network obtained from bibliometric analysis using VOSviewer. According to (Zakiyah et all., 2022) shows *network visualization* in *co-occurrence* network images generated from bibliometric analysis using VOSviewer showing the relationship between the main variables in research on *Return on Equity* (ROE). *Nodes* (spheres) in the figure represent the main variables and *edges* (networks) show the relationships between variables. A group of nodes connected by an edge indicates a correlation or relationship between researchers in research on ROE. Table 2 shows the top 13 keywords related to *return on equity* (ROE) for commercial banks with 7 clusters and various colors. related research is "*Return on Equity*" 121 times with a total strength of 213. This shows that the research topic is broad as it relates to how efficiently a bank uses its shareholders' equity to generate profits.

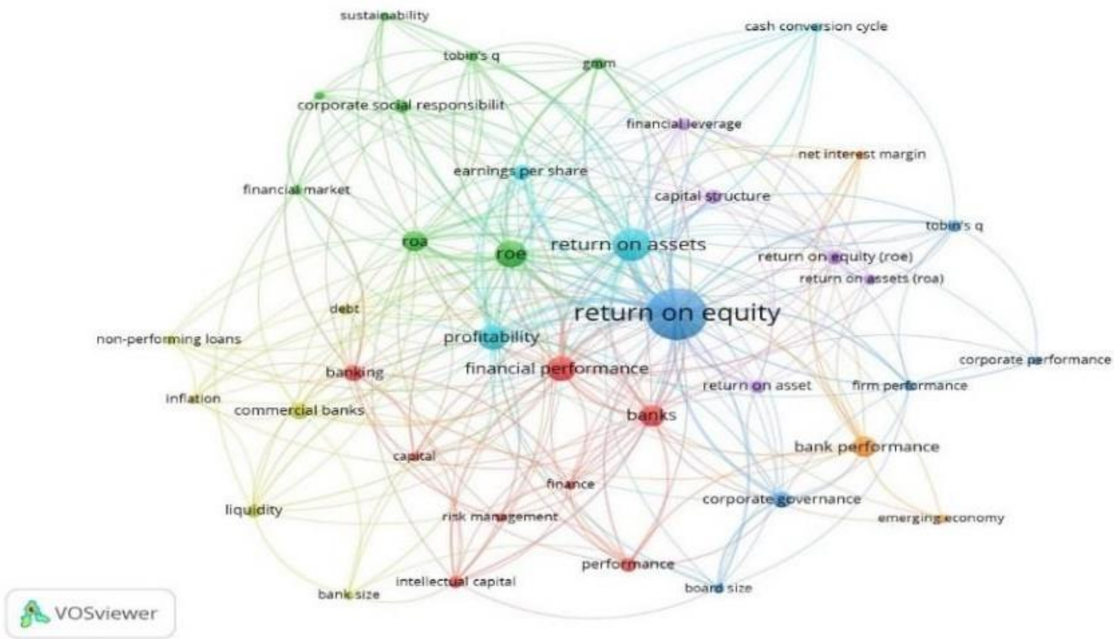

Figure 5. Co-word map of *return on equity* publications in commercial banks

Table 2. Keyword level used

No	Label	Cluster	Links	Total Link Strength	Occurrences
1	Return on Equity	3	38	213	121
2	Return on Assets	6	34	128	46
3	Profitability	6	27	87	29
4	Financial performance	1	25	63	28
5	Bank	1	20	38	22
6	Bank Performance	7	14	21	19
7	Commercial Banks	4	15	19	13
8	Banking	1	19	25	12
9	Earnings Per Share	6	13	35	10
10	Capital Structure	5	16	26	9
11	Gmm	2	13	24	7
12	Debt	4	13	18	5
13	Finance	1	11	14	4

The red cluster describes research on financial performance, banks, banking and finance for commercial banks. Financial performance is a key indicator of the soundness and operational efficiency of commercial banks. Financial performance refers to the financial performance of the bank which includes aspects such as profit, revenue, cost, and liquidity. Financial performance is included as a determinant variable of ROE because ROE measures the company's ability to generate profits using the equity owned by shareholders. Furthermore, banks are financial institutions that accept deposits from the public and provide credit and other financial services to meet the financial needs of individuals, businesses, and governments. Commercial banks are part of financial institutions that have the main objective of earning profitability, which distinguishes them from other types of banks. Banking is the activity or business conducted by financial institutions. Furthermore, finance is related to money management activities such as investment and budgeting. The relationship between finance and commercial banks, for example, for individuals such as providing a place to store money which can be in the form of deposits, savings and current accounts. Finance and ROE have a relationship in analyzing profitability and making financial decisions.

The green cluster describes GMM (*Generalized Method of Moments*) in the context of commercial banks as a statistical method for analyzing the relationship between various factors affecting bank financial performance, including Return on Equity (ROE).

The dark blue cluster illustrates *Return on Equity* is one of the key financial performance indicators used to evaluate the effectiveness of commercial banks in generating profits from shareholders' equity. ROE shows how efficiently a bank uses shareholders' capital to generate net income. The relationship between ROE and commercial banks is significant as ROE reflects various aspects of a bank's financial performance and health. A high ROE can indicate that the bank has a good ability to generate profits and can increase the value of investor capital. Conversely, a low ROE may indicate that the bank has problems generating profits and may potentially impair the value of investor capital.

The yellow clusters describe Commercial banks and Debt. Commercial banks are financial institutions that are managed and oriented towards making a profit from the products and services offered. Debt is the cost of debt as the effective interest rate a company pays on its debt.

The purple cluster describes capital structure, which refers to the composition of long-term funding sources a company uses to finance its assets. The relationship between capital structure and ROE is a metric that measures how much profit a company generates from the capital invested by shareholders.

The light blue clusters represent Return on assets, profitability and Earning per share. Return on assets is a financial ratio that measures how efficient a company is in generating profits from its assets. ROA shows how well a company's management uses its assets to generate net income. In the context of commercial banks, ROA is an important indicator that reflects the efficiency in the use of assets to generate profits. ROA also acts as one of the main determinants of ROE, where ROE can be influenced by the level of leverage used by the bank. Thus, bank management needs to pay attention to ROA as part of the overall strategy to improve financial performance and provide added value for shareholders. Profitability is the ability of a company to generate profits from its business operations over a certain period. It is a key indicator of a company's financial health and operational efficiency. Profitability is a key indicator in assessing the performance of commercial banks and serves as the main determinant of ROE. A higher level of profitability indicates that the bank is effective in generating profits from its assets, which in turn increases net profit and ROE. Bank management needs to focus on improving operational efficiency, risk management, and revenue optimization to achieve high levels of profitability and strong ROE. Earning per share is a financial metric that measures the net income available to common shareholders from each outstanding share. In the context of Return on Equity (ROE), high EPS indicates high net income, which directly increases ROE. Thus, EPS acts as a major determinant of ROE and is one of the key indicators in analyzing the financial performance of commercial banks.

The orange cluster illustrates that bank performance strongly influences Return on Equity (ROE). Factors such as profitability, operational efficiency, risk management, and liquidity all contribute to net profit, which is a key component in the calculation of ROE. Banks that perform well in all these areas will tend to have a higher ROE, reflecting their ability to generate profits from shareholders' equity effectively. Therefore, good performance management is critical to achieving and maintaining a high ROE.

5. Conclusion

Bibliometric analysis is a valuable scientific method for researchers wishing to conduct a review of a diverse and substantial field of research, and its popularity has increased in recent years thanks to the ease of access and evaluation of large scientific data, supported by bibliometric software and databases such as Scopus. We used international publications from Scopus and collected data using the keyword "return on equity," which yielded a total of 3,032 publications. We estimated for three years from 2021 to 2023 and found 923 publications. Next, the researchers applied inclusion and exclusion criteria based on subject areas such as business, management, accounting, economics, econometrics, and finance, which resulted in a total of 705 publications. The next step was to apply criteria related to document type to articles on ROE, which resulted in a total of 645 publications, and specific keywords related to ROE and commercial banks and in English, which resulted in a total of 206 publications.

Based on the analysis and discussion, it can be concluded that the research on ROE in commercial banks indexed in Scopus has grown during the period 2021 to 2023. The maximum research was recorded in 2023 with 75 publications out of a total of 201 publications. The five countries or regions with the most publications are India, Jordan, the United States, Saudi Arabia, and Indonesia. The most cited journal was Prince Sattam Bin Abdulaziz University (Saudi Arabia) with 5 publications, followed by HSE University (Russia) and Al-Balqa Applied University with 2 organizations in Jordan. In total, the contributing authors to this study have 2 publications. These results confirm that research on ROE in commercial banks remains an interesting topic. For future research, it is recommended to add keywords for better research results and to search and analyze more articles from other journals to get a more representative sample. The implication and contribution of this research is to map the topics that are often researched by researchers, so that it can be a reference for future researchers.

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THE INFLUENCE OF GREEN PRODUCT, GREEN ADVERTISING, GREEN KNOWLEDGE ON PURCHASING DECISIONS WITH BRAND IMAGE AS AN INTERVENING VARIABLE

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ABSTRACT

Environmentally, friendly businesses at this time are needed to suppress existing environmental problems. Companies must market environmentally, friendly products so as not to add to environmental problems. The purpose of this study is to analyze the influence of green products, green advertising, green knowledge on purchasing decisions with brand image as an intervening variable. This study used a quantitative type of research. Data collection techniques using questionnaires. data analysis techniques using SEM PLS. The results show that green products, green advertising, green knowledge have a significant influence on consumer financing decisions. Brand image is also an intervening variable that indirectly influences green products, green advertising, green knowledge on purchasing decisions
Keywords: *Green Product, Green Advertısıng, Green Knowledge, Purchasing Decisions, Brand Image*

1. Introduction

Environmental problems that have occurred in recent years have become a growing issue in the world community, such as environmental pollution, climate change, forest destruction and global warming (Dewi and Rahanatha, 2022). Environmental problems are not only the problem of acid rain, the greenhouse effect, air and water pollution which are already at dangerous levels as well as fires and deforestation which threaten the atmosphere on earth. consumers choose *green product* regarding awareness of several products and the level of concern which is sometimes still low.

One real action to reduce environmental problems is to maintain *environmental movement* or the environmental care movement (Nozari et al., 2021). *Environmental movement* resulting in increased demand *green product*. *Green product* is a product that is made and designed in such a way that it can be repaired, recycled and reused so that it does not have a negative impact on the environment (Sharma, 2021). Request *green product* The increasing number of companies encourages companies to develop and produce more environmentally friendly products (Asyhari and Yuwalliatin, 2021).

Development *green product* aimed at offering alternatives to products that use chemicals, and reducing pollution and waste. *Green product* also designed to reduce excessive natural resources in the production process and minimize adverse environmental impacts during the production process (Yuliana, 2022). A purchasing decision will be influenced by several factors, one of which is the product being sold (*green product*) (Hidayah et al., 2022). Then, to be able to increase consumer purchasing decisions for these products, advertising is needed that can attract consumers to buy and increase awareness of environmental concerns, namely by conducting*green advertising*.

Green products is a product that is not harmful to humans and the environment, does not waste resources, does not produce excessive waste and does not cause cruelty to the ecosystem (Saleem et al., 2021). According to Yuliana (2022), green product is an environmentally friendly product made by marketers to be friendly to health and the environment. A product that is designed and processed in a way to reduce the effects that can pollute the environment, both production, distribution and consumption.

Green knowledge needed by the community regarding products or activities that can have an impact on the environment by educating the community about issues and phenomena that are currently occurring. People understand the impact of using environmentally friendly products. According to Wulandari and Miswanto (2022), the emergence of the problem of large amounts of waste makes people care about the state of the environment and find out about the environment, so that *green knowladge* drive action before they make a purchase of the product.

Consumers who are aware and care about environmental sustainability are called brand awareness *green*. Brnad image believes that environmental problems have occurred and must be resolved immediately with concrete steps and they also have various information to keep the earth lasting and sustainable. Information held by *green consumer* is part of consumer knowledge *green product* which is used as a decision-making basis for purchasing green products. Knowledge of*green product* or*green product knowledge* owned by *green consumer* is the basis for assessing environmental attributes and benefits *green product* when making purchasing decisions (Saleky &Souisa, 2019).

Brand Image will gradually increase its product knowledge by actively seeking related information*green product* from various sources. Consumers who have higher levels of knowledge are related *green product* the higher their understanding regarding the functions and attributes of environmental protection*green product* (H. Wang et al., 2019). Finally, a brand image that cares (*care*) with environmental sustainability will choose and decide to buy *green product*. The following is some previous research that analyzes the influence *green product, green advertising, dan green knowledge* to the purchase decision.

Study of Zameer and Yasmeen (2022) obtained information on the results of this research using SEM PLS analysis. The research results showed that partially **Green** Product *significant influence on purchasing decisions. Results of research carried out* Mustika (2022) has a research objective to describe *green advertising* and the influence it has on purchasing decisions.. Research by Nguyen-Viet, (2023) results show that partially *green product knowledge, green advertising, green product* positive and significant effect on purchasing decisions. Research conducted by Shi et al., (2022) results show that partially advertising, price strategy has a positive and significant influence on purchasing decisions *green product.* Research by Tan et al., (2019) results show that green products, green knowledge, price are the most influential variables in determining young people's purchasing decisions.

Cosmetics as beauty products are items that are often bought and chosen by female consumers in particular. Cosmetic products are unique products, because in addition to this product has the ability to meet basic needs (especially women) for beauty as well as a means for consumers to clarify their identity in society. One of the popular cosmetic businesses among the public is The Body Shop brand. The Body Shop is a global cosmetics and beauty company that draws inspiration from nature and produces products that lean on ethical values. The Body Shop is also a pioneer international cosmetics company that calls for cosmetic standards for humans by eradicating animal testing. The importance of the meaning of the environment realized by the European community is the main reason for the presence of The Body Shop. As much as 95% of The Body Shop products sold in Indonesia are imported directly from the UK. Some of the accessories products are local products from small entrepreneurs and individual craftsmen in Bandung, Salatiga, and Baduy. The Body Shop products are divided into several categories, namely Wellbeing, Make-up, Bath and Body, Skin Care, Men's, Home Fragrance.

2. Literature Review

2.1 Green Product

Green product Firmansyah et al., (2019) stated that a product does not cause damage to the environment and natural resources, and does not cause pollution. Hidayat (2020) reveals its creation *green product* should consider environmental aspects in life so as to minimize negative impacts on natural conditions. *Green product* developed from increasing problems regarding global warming, pollution and waste. Therefore, consumers translate environmental problems into a strong commitment to buying environmentally friendly products (Bhutto et al., 2019). *Green Product* harmless to human health, the atmosphere and the environment. The most widely held beliefs regarding *gre product*is that the products produced will be healthier and always pay attention to environmental safety (Purnama $ Putu, 2019).

Green product is a product that has benefits for consumers and also has social benefits felt by consumers, such as being friendly to the environment (Nekmahmud et al., 2022). *Green product* or environmentally friendly products Zameer and Yasmeen (2022) express a product that is designed and processed in a way to reduce the effects that can pollute the environment, both in production, distribution and consumption.

Green product describes products that protect or enhance the natural environment, energy conservation, and reduction or elimination of toxic agents, pollution, and waste (Tan et al., 2019). According to Kautish and Sharma (2019) categorize *green product* into four types. The first type is that the product does not contain elements that are harmful when consumed, and the product can help preserve the environment without producing pollution. The second type is efficiency in energy use, where *green product* More economical than other conventional products. The third type is products made from raw materials that provide recycling functionality; and the fourth type is a product whose production process technology is environmentally friendly.

2.2 Green Advertising

Pittman et al., (2022) revealed that green advertising is a form of green product promotion media) both through electronic media (television) and print media. The main role of advertising is to strengthen brand awareness and brand confidence: announcing the existence of a product or persuading customers by saying that the product has various advantages (Nguyen-Viet, 2023). If this works well then customers will make good purchases by switching brands (*switcing brand*) or stay with the same brand (*remaining*).

Shi et al. (2022) explained tthe function of advertising is:

a. Product awareness and knowledge
b. Preferences and likes (*liking*) regarding the product which will later form an attitude of liking the product (*favorable attitudes*)
c. Convince and purchase (*conviction and purchasing*) which will eventually lead to a purchase action.

Meanwhile, Mehdikhani and Valmohammadi (2022) stated that there are two functions of advertising which are directly related to the classical psychological model which divides behavior into three components or dimensions:

a. The cognitive component is intellectual, mental or rational statements
b. The affective component is an emotional statement or feeling

Issues regarding the environment have increased and made it an advertising theme for various products and services, even the green movement (*the green movements*) has become a very important social movement in this century. Several national polls conducted show consistency in the high level of public concern for the environment.

2.3 Green Knowledge

Product knowledge is all the understanding and information that consumers have regarding product characteristics such as product brand, product specifications, product type, product price, and product class (Wang et al., 2019). In this research,*green product knowledge* refers to subjective knowledge which is consumers' understanding of the environmental attributes and environmental impacts of green products (Lin et al., 2018).

Knowledge about the environment or green knowledge, green attitude or attitudes that can be taken to prevent environmental damage, and *environmental concern* within oneself which can be a driving factor in community action to reduce environmental damage. *Environmental concern* provide awareness in solving problems related to the environment. Research conducted by Winda and Ketut (2020) explained that environmental concern is a form of responsibility in dealing with environmental problems not only to improve the quality of the organization but also to increase consumer loyalty. Motivation is the initiation and direction of behavior and motivation lessons are actually lessons about behavior.

2.4 Brand Image

Brand Image is a representation of the overall perception of a brand and is formed from information and past experiences with that brand (Hien et al., 2020).*Brand Image* related to attitudes in the form of beliefs and preferences towards a brand (Agmeka et al., 2019). Consumers who have a positive image of a brand are more likely to make purchases (Mao et al., 2020). Kottler (2016) defines *brand image* as a set of beliefs, ideas and impressions that a person has towards a brand.

In concept *Brand Image* Consumer attitudes and actions towards a brand are largely determined by*brand image* is a requirement for a strong brand (Büyükdağ, 2021). Therefore *brand image* is an association *brand* are interconnected and create a series in consumers' memories. *Brand image* which is formed in the minds of consumers (Zhang et al., 2020). Consumers who are accustomed to using *brand* certain brands tend to have consistency with the brand image. *Brand image* is related to the association with the brand because when brand impressions that appear in consumers' memories increase due to the increasing number of consumer experiences in consuming or purchasing the brand (Islam and Hussain, 2022).

Brand image positive ones can be associated with consumer confidence in positive brand values, and a willingness to continue purchasing the brand. It also functions to influence consumer interest in future brand promotions and guarantee consumer immunity to promotional activities from competing brands (Fan, 2019). In formation *Brand Image* Consumers more often buy products from well-known brands because they feel more comfortable with familiar things, there is an assumption that well-known brands are more reliable, always available and easy to find, and have undoubted quality, so better-known brands are more often purchased. consumers choose over unknown brands (Evgeniy et al., 2019).

Based on several theories put forward by the experts above, it can be concluded that *brand image* is the consumer's perception of a good sharia brand which can be obtained based on information about the facts that then use the product, so that the impression that emerges is relatively long-term which is formed in the mind of the consumer to choose the product. Indicator*brand image* according to (Astuti et al., 2021) includes impressions of product quality, service, use or benefits, risks, price offered, image of the company. Meanwhile, according to Boateng (2021) explains that indicators*brand image* consists of three parts, namely*corporate image, user image, product image.* In this research, indicators are adopted *brand image* includes:

a. Have a good impression of product quality
b. Have a good impression of product prices
c. Have a good impression of the image

3. Research Methods

The type of research used in this study is quantitative research.. Population is a combination of all elements in the form of events, things or people who have similar characteristics seen as a research universe (Ferdinand, 2014).The population in this research was consumers who purchase products at The Body Shop Semarang located at Citraland Mall and DP Mall Semarang. Sampleis a subset of a population, consisting of several members of the population. This subset was taken because in many cases it is not possible to examine all members of the population, therefore a representative called a sample was formed (Ferdinand, 2014).

The sampling technique is to use *Probability Sampling*, that is, all elements in the population have an equal chance of being selected for the sample. The sampling technique uses *Accidental Sampling*, The sampling technique is based on provisions, namely who has deliberately purchased products at The Body Shop Semarang. This research will use *Structural equation modeling* (SEM), the recommended sample size is between 100 and 200 respondents (Ghozali, 2018).So the sample size used was 150 respondents with details of 50% of the sample taken at The Body Shop Citraland and 50% of the sample at The Body Shop DP Mall.

Data collection techniques are techniques or methods used to collect data according to the problem being studied. The data collection technique used in this research is using questionnaires. A questionnaire is a data collection technique that is carried out by giving a set of questions or written questions to respondents to answer. The distribution of the questionnaire consists of closed and open questions (Ferdinand, 2014).

Analysis Techniques in research included data processing, processingdata organization and results discovery. The analytical technique used in this research is analysis *Structural Equation Modeling* (SEM) with AMOS software. Analytical techniques are used to interpret and analyze data. In accordance with the model developed in this research, the data analysis tool used is SEM (*Structural Equation Modeling),* which is operated through the IBM SPSS AMOS 24 program (Ghozali, 2018). Ghozali (2018) explains that SEM is a combination of separate statistical methods, namely factor analysis (*factor analysis*) as well as simultaneous equation models (*simultaneous equation modeling*). Hypothesis testing is processed using SEM (*Structural Equation Modeling*) with the AMOS 4 program.

4. Research Result

Based on the results of research and data processing, the following hypothesis test results can be obtained.

Table 1 Hypothesis Test Results

No.	Hypothesis	Estimate	S.E.	C.R.	P	Results
H1	Green Product → Purchase Decision	0.224	0.080	2.806	0.005	Significant Positive
H2	Green Advertising → Purchase Decision	0.254	0.083	3.068	0.002	Significant Positive
H3	Green Knowledge → Purchase Decision	0.392	0.097	4.061	0.000	Significant Positive
H4	Green Product → Brand Image	0.233	0.082	2.827	0.005	Significant Positive
H5	Green Advertising → Brand Image	0.300	0.081	3.682	0.000	Significant Positive
H6	Green Knowledge → Brand Image	0.234	0.097	2.422	0.015	Significant Positive

The results of data processing show the coefficient value*re gression weight* of 0.224. Mark *regression weight* with a positive value indicateed that the product is environmentally friendly or better *green product* from The Body Shop, the higher the purchasing decisions that occur. Meanwhile, in the tests carried out on Hypothesis 1, a value was obtained *critical ratio* of 2.806 which fulfills the rule of thumb, namely greater than 1.96, and the probability value is 0.000, which also meets the rule of thumb, namely less than 0.05. Based on these three values, then H_0 rejected and H_1 acceptable, that is, it means that *green product* has a positive and significant effect on purchasing decisions for The Body Shop in Semarang City. The findings in this study are also supported by research conducted by Okadiani et al. (2019) which states that *green product* has a positive and significant influence on purchasing decisions. There is a concentration regarding the products produced to build a certain image, namely *green product* which are presented through environmentally friendly products, products that can be recycled, and products that are good for health can provide distinct advantages in increasing consumer preferences to make purchasing decisions on certain brands or in this research, The Body Shop.

The results of data processing are the coefficient values *regression weight* positive value or more than zero, namely 0.254. This value shows that it is getting better *green advertising* which is done by The Body Shop in the eyes of consumers, the higher the purchasing decision will be. Meanwhile, rate *critical ratio* amounting to 3.068 which is greater than 1.96 accompanied by a probability value of 0.002 which is smaller than the required significance level of 0.05, indicating that there is a significant influence in the relationship between the variables studied. Based on this data, there is acceptance of the hypothesis and significance, both of which are in accordance with the practical rules that are used as a reference. Therefore, the conclusion that can be drawn in testing this hypothesis is H_0 rejected and H_1 declared accepted. With the acceptance of H_1 or a competing hypothesis, then the hypothesis proposed in this research is true and is stated as a research finding, namely *green advertising* has a positive and significant effect on purchasing decisions for The Body Shop in Semarang City. The findings in this research state that *green advertising* has a positive and significant effect on purchasing decisions, in line with research conducted by Mustika (2022).*Green advertising* which is part of the strategy *green marketing* carried out by a brand, including The Body Shop, as an effort to communicate further about the products and campaigns carried out through advertising in order to stimulate purchasing decisions of consumers who are interested and care about the environment, which is also proven in the findings of this research.

The results of data processing provide coefficient values *regression weight* in testing the correlation between *green knowledge* with the purchase decision of 0.392 or positive value. Positive coefficient value *regression weight* This gives an idea that the direction of the hypothesis which is proven to be in accordance with the direction of the hypothesis being built is positive or getting better *green knowledge* consumers have about The Body Shop, the higher its contribution will be in influencing purchasing decisions. Apart from the coefficient value *regression weight* which indicates a positive influence in this hypothesis, there is also a value *critical ratio* and a probability that meets the rule of thumb where C.R 4.061 (>1.96) and P 0.000 (<0.05) indicate that this hypothesized correlation is significant. Thus it can be concluded that H_0 rejected and H_1 accepted that stated *green knowledge* has a positive and significant effect on purchasing decisions for The Body Shop in Semarang City. Research conducted by Yuliana (2022) also supports the findings in the research, namely that there is a positive and significant influence resulting from *green knowledge* on purchasing decisions. Consumer knowledge regarding brands, types, specifications, prices and benefits of products that carry an environmentally friendly concept also contributes to increasing stability in making purchasing decisions. With the role of*green knowledge*, consumers can create and filter wiser alternatives in an effort to select products that have a lower environmental impact than products from other brands. *Green knowledge* can also influence consumer purchasing decisions through its contribution in helping consumers become aware of environmental issues around them, developing preferences for environmentally friendly products, influencing perceptions of a brand and the reputation of the company that houses it, encouraging lifestyle changes, and helping targeted consumers. to realize the long-term benefits offered by environmentally friendly products.

The results of data processing show the coefficient value *regression weight* of 0.233. Mark *regression weight* with a positive value can indicate a positive relationship, the better the product is environmentally friendly or *green product* from The Body Shop, you will be able to improve even more *brand image* at The Body Shop itself. Apart from that, in testing Hypothesis 4 a value was obtained*critical ratio* of 2.827 which fulfills the rule of thumb, namely greater than 1.96, and the probability value is 0.005, which also meets the rule of thumb, namely less than 0.05. Therefore, by referring to these three values, it can be stated that H_0 rejected and H_1 accepted *green product* positive and significant effect on *brand image* at The Body Shop Semarang City. The findings in this research are also supported by similar research conducted by Azizah (2022) which states that *green product* has a positive and significant influence on *brand image*. Through strategy *green product* This is done by launching products that are synonymous with being environmentally friendly, recyclable and good for health, which can improve the image of the brand that remains in the minds of consumers. By implementing the strategy *green product* can help brands to frame positive consumer perceptions regarding value consistency or*value* which reflects the brand's commitment to sustainability and environmental responsibility, differentiates the brand from similar competitors, increases consumer trust, and enlarges the brand's appeal.

The results of data processing are the coefficient values *regression weight* positive value or more than zero, namely 0.300. This value shows that it is getting better *green advertising* which is done by The Body Shop in the eyes of consumers will be even higher *brand image* that is awakened in the minds of consumers. Meanwhile, in data processing, values are also obtained *critical ratio* amounting to 3.682, which is greater than 1.96, accompanied by a probability value of 0.002, which is also smaller than the required significance level, namely 0.05. These two values are used as an assessment of whether the resulting influence is significant or insignificant. So based on this value, the conclusion that can be drawn in testing this hypothesis is H_0 rejected and H_1 declared accepted. With the acceptance of H_1 or a competing hypothesis, then the hypothesis proposed in this research is correct as a research finding, namely *green advertising* positive and significant effect on *brand image* The Body Shop in Semarang City. This research produced findings in the form of *green advertising* positive and significant effect on*brand image* which is in line with Purnama's (2019) research. These findings prove that the implementation *green advertising* Through The Body Shop's advertising related to environmental issues, it is able to provide knowledge, form attitudes towards products, and increase trust in products, all three of which are dimensions that can measure how *brand image* can be framed positively.

Results of data processing that has been carried out previously. The results of data processing provide coefficient values *regression weight* in testing the correlation between *green knowledge* with *brand image* of 0.234 or positive value. With a positive coefficient value *regression weight* This then shows that the direction of the hypothesis which is proven to be in accordance with the direction of the hypothesis developed in this research is positive or getting better *green knowledge* consumers have about The Body Shop, the higher their contribution to improving *brand image* the positive. Besides the coefficient value *regression weight* which describes the positive influence in this hypothesis, there is also value*critical ratio* and a probability that meets the rule of thumb where C.R 2.422 (>1.96) and P 0.015 (<0.05) indicate that this hypothesized correlation is significant. Thus this research rejects H_0 and accept H_1 that is *green knowledge* positive and significant effect *brand image* The Body Shop in Semarang City. In order to support the results of this research, research was also collected which contributed findings in the form of a positive and significant influence from *green knowledge* to*brand image.* This research as supporting research was carried out by Jinan et al. (2022). By applying*green knowledge,* Brands can show their commitment to sustainability which can strengthen the brand image in the eyes of consumers. Apart from that, with *green knowledge* which consumers already own or understand will help brands to provide advantages in the form of differentiation and innovation that are guided by sustainability and environmental issues that differentiate them from other similar competitors. Therefore, in this research it has been proven based on data that *green knowledge* can improve or maintain a positive brand image in the minds of consumers and potential consumers.

5. Conclusion

Based on the data obtained and the results of the analysis that has been carried out, the following conclusions can be obtained

a. The results showed that green products have a positive and significant effect on purchasing decisions. This means that the better the Green Product, the more Purchasing Decisions will be improved.
b. The results showed that green advertising has a positive and significant effect on purchasing decisions. This means that the better the Green Advertising, the more Purchasing Decisions will increase.
c. The results showed that green knowledge has a positive and significant effect on purchasing decisions. This means that the better the Green Knowledge, the more Purchasing Decisions will increase.
d. The results showed that green products have a positive and significant effect on brand image. This means that the better the Green Product, the more Brand Image will increase.
e. The results showed that green advertising has a positive and significant effect on brand image.
f. The results showed that green knowledge has a positive and significant influence on brand image. This means that the better the Green Advertising, the more Brand Image will increase.

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PROFESSIONALISM, INTERNAL CONTROL SYSTEM, INNOVATION, AND PERFORMANCE OF REGIONAL GOVERNMENT IN INDONESIA

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ABSTRACT

Research on government performance is growing, but research on the professionalism of State Civil Apparatus (ASN), internal control systems, and innovation on local government performance is still rarely conducted. This research was conducted to determine the influence of ASN professionalism, internal control systems, and innovation on the performance of local governments in Indonesia. This research used secondary data with a purposive sampling method. The sample used was 490 district/city governments in Indonesia in 2021. The results of this research are that ASN professionalism, internal control systems, and innovation have a positive influence on government performance. This research implied that by knowing the effect of ASN professionalism, internal control systems, and innovation on performance, regional governments can carry out evaluations so that they can make better policies, strategies, and implementation to create government administration that is efficient, effective, beneficial to the public and regional development and motivate local governments to provide the best for the public.

***Keywords**: government performance, professionalism, internal control, innovation.*

1. Introduction

The government is a steward which must provide the best service for the public (principal) and be accountable for the activities that have been carried out. As a form of accountability to the public, the government makes government performance report based on the Government Agency Performance Accountability System (SAKIP). In 2021, the district/city governments that received a SAKIP score of "Good (B)" and above were 66.54% and none achieved the highest score of "Very Satisfactory (AA)" as shown in Table 1. Performance accountability has an important role, especially for evaluation and improvement as an effort to improve performance and realize effective, efficient, and accountable government. Solomon and Rahmayanti (2023) stated that performance accountability improves the implementation of bureaucratic reform. Pribadi (2021) stated that performance accountability positively affects public satisfaction.

Table 1. Details of SAKIP scores "Good (B)" and above for district/city governments in 2021

District/City Government Population	Predicate				Total	%
	AA (Very Satisfactory)	A (Satisfactory)	BB (Very Good)	B (Good)		
508	-	12	54	272	338	66,54%

Source: Kemen PANRB (2022)

One of the key factors for successful government administration is human resources or State Civil Apparatus (ASN). The quality of ASN can be seen from its professionalism (Oliveira et al., 2023). From the performance report data of the State Civil Service Agency

(BKN) in 2021, the score of the ASN Professionalism Index (IP ASN) nationally is 44.60 (very low category) even though to achieve a high ASN IP category, a value of 81 and above is required. In addition, nationally in 2021, the small number of ASN (3,853,199 people) compared to the total population in Indonesia (272,682,500 people) or 1.41% makes ASN have to work harder to provide for the needs of the public (BKN, 2022). Research on the effect of ASN professionalism on government performance using IP ASN is still rarely conducted. Previous research mostly used questionnaires and literature reviews, such as Jumas et al. (2023) stated that ASN professionalism affects the success of the procurement of goods and services to improve government performance. Oliveira et al. (2023) that ASN professionalism plays a role in improving government performance and reducing corruption. Langgeng and Mega Fitrya (2023) that ASN professionalism affects performance accountability. Other research by Anggraini and Syofyan (2020) and Wardayati et al. (2022) stated that the performance of the Financial and Development Supervisory Agency (BPKP) auditors is not influenced by professionalism, whereas BPKP auditors are internal monitors of government performance.

Apart from ASN professionalism, the internal control system is also closely related to realizing efficient and effective government, reliable financial reporting, protecting assets, and compliance with regulations. To see the maturity of the implementation of the Government Internal Control System (SPIP), it can be seen from the SPIP maturity level (BPKP Regulation No. 5 of 2021). Based on BPKP data in 2021, the highest SPIP maturity level was at level 3 obtained by 231 district/city governments or 45.57% of the total 508. The role of SPIP is important in government as has been researched by Saleh and Rahadian (2023) a less strong internal control system is the cause of local governments failing to get an unqualified opinion on their financial statements. Yudanto and Pesudo (2020) also stated that SAKIP is positively influenced by SPIP, but it is different from Setiawan et al. (2022) that the weakness of the internal control system has no impact on local government performance accountability.

Other factors that support government performance is regional innovation. Innovation is made to support government performance to get better, meet the needs of an increasingly diverse public, and face the changing times that are increasingly fast and sophisticated. To see the implementation of regional innovation and as evaluation material, regional innovation is assessed using the Regional Innovation Index (IID) (Minister of Home Affairs Regulation No. 104 of 2018). In 2021, according to data from the Ministry of Home Affairs (Kemendagri), the number of district governments that received the highly innovative predicate was 71 and the number of city governments was 12. Meanwhile, 234 district governments and 60 city governments received the innovative predicate (Ministry of Home Affairs, 2022). Quite many district/city governments have made innovations but their implementation does not always run smoothly. These obstacles such as leadership, infrastructure, budget, organizational culture, policies, and public mindset (Faozanudin, 2020). Yunita (2017) stated that by innovating, government outcomes and outputs can increase rapidly thereby improving government performance. Mahpudin (2022) that innovation increases public trust and satisfaction through improving public services. Zulkifli (2020) that public service innovation affects government performance. Meanwhile, Lukman (2021) stated that there are thousands of regional innovations but many are only applied in a short time. This failure made improvements in governance ineffective. Adyawarman (2021) stated that there are still many obstacles to implementing innovation in the Batang district government and this creates criticism that reduces the value of the government.

Considering the importance of ASN professionalism, internal control systems, and regional innovation in improving government performance, this research was conducted to add to the literature and provide information, and evaluation for local governments to pay more attention to these matters. This research can also be a source for the government in making policies, strategies, and improvements to create better government performance and the benefits are increasingly felt by the public.

2. Literature Review

2.1. Stewardship Theory

Stewardship theory according to Donaldson and Davis (1991) states that managers as stewards are not concerned with personal interests but focus on the interests and goals of the organization. The application of stewardship theory is very appropriate in the public sector because the government (steward) is a public servant (principal), as in the research by Yudanto and Pesudo (2020), Yusmina and Siswantoro (2023), and Jatmiko (2020). Local governments are tasked with managing resources from the public which are the owners of resources and strive to provide the best service for public satisfaction. In addition, the principal which is the trust giver also has the right to the steward as the trust holder to be held accountable for the activities carried out for the use of these resources (Yusmina and Siswantoro, 2023).

As accountability and a means of seeing the success or failure of the implementation of activities carried out by the government, local government performance is measured. To support the performance of local governments so that local government services are increasing, reducing fraud, and making governance more effective and efficient which ultimately achieves the goal of public satisfaction and local governments becoming good stewards, professional ASNs are needed, a mature internal control system and regional innovation.

2.2. Local Government Performance

Local government performance is the achievement of measurable output/outcomes from activities carried out by regional governments concerning the funds that have been used (Presidential Regulation No. 29 of 2014). Before bureaucratic reform, government performance measurement was only measured by comparing inputs and outputs and focused on budget absorption by comparing targets and realization. But nowadays, government performance measurement is not only done by looking at the outputs but also by looking at the outcomes (Mardiasmo, 2018). Whether the output has functioned or is useful as it should be, especially for the public.

To see these performance achievements, local governments are required to make performance reports every three months and every year. This report contains a summary of the implementation of the government's duties or performance in using the budget entrusted to it to produce something useful for the benefit of the public (Presidential Regulation No. 29 of 2014). The annual performance report will later be paired with the annual financial report as a form of accountability for the use of the Regional Government Budget (Government Regulation No. 8 of 2006). The performance report is prepared based on the Government Agency Performance Accountability System (SAKIP), a systematic series used continuously containing data, conclusions, and reports as accountability for government performance (Presidential Regulation No. 29 of 2014).

To see the extent of government performance accountability, a Government Agency Performance Accountability (AKIP) evaluation was carried out. This evaluation consists of elements of planning, measurement, performance reporting, and internal performance accountability evaluation (Minister of PANRB Regulation No. 88 of 2021). From the results of this evaluation, it will be seen which government have implemented SAKIP well and which government still needs improvement. The evaluation results or SAKIP index consists of 7 predicates consisting of AA (very satisfactory), A (satisfactory), BB (very good), B (good), CC (sufficient/adequate), C (poor), and D (very poor).

The AA predicate means that performance has been carried out in all work units and the measurement is up to the individual level. Predicate A means that results-oriented government change has been realized and performance measurement has reached the echelon 4 level.

Predicate BB means that performance accountability has been implemented very well in 2/3 of the work units and up to the echelon 3 level. Predicate B means that one-third of the work units have carried out performance accountability well, especially the main work units, with little improvement, and performance measurement has reached the echelon 2 level. Predicate CC means that performance accountability is quite good but there are still many improvements that are not fundamental. Predicate C means that SAKIP is not yet reliable and still needs fundamental improvements at the central level. Predicate D means that SAKIP is not reliable, it still needs a lot of fundamental improvements. The higher the SAKIP index value means that the government's performance has been managed well, governance is realized, and the government becomes more efficient. (Minister of PANRB Regulation No. 88 of 2021).

This is in line with the research of Kahar et al. (2023) stated that the SAKIP evaluation results are used to see bureaucratic performance in local government. Irwansyah et al. (2022) stated that the results of the SAKIP evaluation show how well local governments perform on the funds it manages. Hasibuan and Khomsiyah (2020) showed that high accountability leads to increased public supervision so that the government performs better.

2.3. ASN Professionalism

Professionalism is a person's ability to carry out professional duties based on their skills, knowledge, and expertise (Langgeng and Mega Fitrya, 2023). In carrying out their work, ASNs are required to be professional because ASNs are one of the keys to successful government performance. ASN acts as a public servant, a supporter of government activities, and an implementer of government policies (Minister of PANRB Regulation No. 38 of 2018). The quality of ASN is measured through the ASN Professionalism Index (IP ASN) which consists of the elements of qualification, competence, performance, and discipline (BKN Regulation No. 8 of 2019). Qualification is seen from formal education, competence is seen from non-formal education and training, performance is seen from the achievements, benefits, and behavior of ASN, and discipline is seen from the history of disciplinary punishment. IP ASN consists of 5 categories, namely very high (score 91-100), high (81-90), medium (71-80), low (61-70), and very low (below 60). The higher of the IP ASN value means that the ASN is more professional in carrying out its duties.

Research on the role of ASN professionalism in improving government performance was conducted by Langgeng and Mega Fitrya (2023) stated that ASN professionalism affects improving government performance through increasing performance accountability. Oliveira et al. (2023) stated that professionalism reduces the level of corruption and supports improved government performance. Jumas et al. (2023) stated that ASN professionalism in procuring goods and services helps government performance improve because the implementation of government procurement becomes more effective and efficient. This means that the higher the professionalism of ASN, the higher the government's performance. Based on this, the hypothesis of this research is as follows:

H1: ASN professionalism has a positive effect on local government performance

2.4. Internal Control System

The internal control system is all continuous actions taken to ensure that organizational objectives are achieved effectively and efficiently, financial reports are reliable, protecting assets, and compliance with applicable regulations (Government Regulation No. 60 of 2008). In government, this system is called the Government Internal Control System (SPIP). SPIP must be carried out by every government so that accountability, efficiency, effectiveness, and transparency in state financial management are achieved (Government Regulation No. 60 of 2008). To assess the maturity or suitability of SPIP implementation, every year a SPIP maturity assessment is conducted. This assessment focuses on three components, namely goal setting, structure and process, and goal achievement (BPKP Regulation No. 5 of 2021). The SPIP maturity level consists of 5 levels, namely level 1 (pioneering), 2 (developing), 3 (defined), 4 (managed and measurable), and 5 (optimum). The higher the SPIP maturity level means that the government is increasingly able to define its performance, able to achieve government goals with relevant and integrated strategies, perform effectively control, and be able to adapt to change. The minimum level expected to be achieved by local governments is level 3 (BPKP, 2022).

In government implementation, SPIP is the main focus because with SPIP accounting fraud can be prevented (Hidayati et al., 2022), the quality of financial statements increases (Heinrich and Probohudono, 2023), and can help local governments obtain an unqualified audit opinion (Saleh and Rahadian, 2023). In addition, with the mature implementation of SPIP, government performance accountability will also increase (Rahmasari and Setiawan, 2022) and (Yudanto and Pesudo, 2020). This means that the more mature the SPIP implementation, the more government performance will improve. Therefore, the hypothesis of this research is as follows:

H2: The internal control system has a positive effect on local government performance

2.5. Regional Innovation

As a continuous improvement effort, the government needs to make improvements and changes. These efforts are carried out by making innovations. Regional innovation is any form of renewal, which consists of innovations in public services, governance, and other fields related to local government affairs (Government Regulation No. 38 of 2017). Regional innovation is not only related to the use of information and communication technology (digital) but can also use manual tools that have standard operating procedures (non-digital) (Regional Innovation R and D Center, 2021). To see how innovative government institutions are and to spur government creativity in creating innovations, an assessment is carried out in the form of a regional innovation index (IID). The criteria required for the IID are that it is partially/completely renewed, is beneficial to the community and the region, does not impose or limit the community, is a regional authority, and can be applied in other regions (Government Regulation No. 38 of 2017). The regional innovation index categories consist of highly innovative (score 60-100), innovative (30-59.99), less innovative (0.01-29.99), and cannot be assessed (0) (Regional Innovation R and D Center, 2021). Highly innovative means that the local government has successfully applied innovation and its impact is useful for regional progress.

Innovation has many benefits in government, as has been researched by Mahpudin (2022) innovation can increase public trust and satisfaction because public services become faster, easier, and cheaper. Zulkifli (2020) stated that innovation affects government performance. Yunita (2017) also stated that with innovation, government outcomes and outputs can increase rapidly and improve government performance. This means that by innovating, the government will be encouraged and motivated to be more creative and the results of these innovations can improve government performance. Therefore, the hypothesis of this study is as follows:

H3: Regional innovation has a positive effect on local government performance

3. Research Methods

This research uses quantitative methods with secondary data. Data were obtained from the Kemen PANRB, the BKN, the BPKP, the Ministry of Home Affairs, and the BPK. Sample selection was carried out using a purposive sampling method, namely only district/city governments that have complete data on the measurement of all variables. From the total population of 508 district/city governments throughout Indonesia, a sample of 490 district/city governments was obtained. The data used in this study is 2021 because the SPIP maturity measurement refers to the latest regulation, BPKP Regulation No. 5 of 2021 which came into effect in 2021 and the ASN professionalism index in 2022 changed to the BerAKHLAK index whose measurements are different (Kemen PANRB, 2023).

The dependent variable in this study is local government performance as measured by the SAKIP score. Meanwhile, the independent variables are ASN professionalism measured by the ASN professionalism index, the internal control system measured by the SPIP maturity level, and regional innovation measured by the regional innovation index. In addition, this study uses the control variables of regional financial dependency and regional assets. Operational definitions and variable measurements are available in Table 2. This study uses multiple linear regression analysis tools processed using SPSS 26 because it tests the relationship and direction of the relationship between the dependent variable and two/more independent variables at once and because the data used is cross-section data. Before conducting multiple linear regression testing, descriptive statistical tests and classical assumption tests were carried out. The regression equation of this study:

$$LCGP = \alpha + \beta 1PROF + \beta 2GICS + \beta 3INOV + \beta 4FCDP + \beta 5ASET + e \quad (1)$$

Notes:

LCGP = local government performance
α = constant
β1,2,3,4,5 = coefficient of determination
PROF = ASN professionalism
GICS = internal control system
INOV = regional innovation
FCDP = regional financial dependence
ASET = regional assets
e = error

Table 2. Operational Definition and Variable Measurement

Variable	Measurement	Scale	Source
Dependent variable			
Local Government Performance (LCGP)	SAKIP index (Minister of PANRB Regulation No. 88 of 2021)	Ordinal	Ministry of State Apparatus Utilization and Bureaucratic Reform (Kemen PANRB)
Independent variable			
ASN Professionalism (PROF)	ASN Professionalism Index (IP ASN) (Minister of PANRB Regulation No. 38 of 2018 and BKN Regulation No. 8 of 2019)	Ratio	State Civil Service Agency (BKN)
Internal Control System (GICS)	SPIP maturity level (BPKP Regulation No. 5 of 2021)	Ordinal	Financial and Development Supervisory Agency (BPKP)
Regional Innovation (INOV)	Regional Innovation Index (IID) (Government Regulation No. 38 of 2017)	Ratio	Ministry of Home Affairs (Kemendagri)
Control variable			
Regional financial dependence (FCDP)	Transfer revenue / total revenue (Zukhri, 2020)	Ratio	Supreme Audit Agency (BPK)
Regional assets (ASET)	Natural logarithm of total assets (Kahar et al., 2023)	Ratio	Supreme Audit Agency (BPK)

Source: Own editing

4. Research Findings and Discussion

Based on the results of descriptive statistical tests in Table 3, it is known that for regional performance, 46 district/city governments have a minimum SAKIP score of 2 (predicate C/poor) and 12 district/city governments have a maximum SAKIP score of 6 (predicate A/satisfactory). The average local government has a SAKIP score of 3.75 with a standard deviation of 0.86. This shows that the average district/city government obtained a SAKIP predicate of B (good), which means that one-third of the work units (especially the main work units) have carried out performance implementation well, but still need a little improvement.

For ASN professionalism, the Puncak Jaya district government (Papua) was the institution that obtained the lowest ASN IP score (17.18/very low) and the Padang Panjang city government (West Sumatra) obtained the highest score (74.05/moderate). The average value of IP ASN is 40.37 and the standard deviation is 10.32. This means that the average professionalism of ASNs in the district/city government is in the very low category. Based on the BKN Performance Report in 2021, one of the contributing factors is the low competency element. This is because institutions or employees do not make changes to competency data in the system, have difficulty obtaining education and training certificate documents, and some seminars do not issue certificates.

In the internal control system, the minimum value of SPIP maturity is 1 (pioneering) obtained by 10 district/city governments and the maximum value is 3 (defined) obtained by 238 district/city governments with an average of 2.47 and a standard deviation of 0.54. This indicates that the average district/city internal control system is at level 2 (developing), which means that institutions have been able to make quality performance plans, but performance achievement strategies and controls have not been implemented effectively.

For regional innovation, the minimum value of the regional innovation index is 0.00 (cannot be assessed) in 17 district/city governments and the maximum value is 84.19 (very innovative) obtained by the Banyuwangi District Government (East Java). The mean value is 35.77 and the standard deviation is 18.99, which means that the average district/city government is in the innovative category.

The control variable of regional financial dependency is measured using the regional dependency ratio which compares transfer income with total regional income (Zukhri, 2020). The minimum value of 0.32 was obtained by the Badung District Government (Bali) and the maximum value of 1.00 was obtained by the Mamberamo Raya District Government (Papua). The average value of 0.84 and standard deviation of 0.10 means that on average, many district/city governments still depend on funds and assistance from the central or provincial governments in the administration of their government.

Another control variable, regional assets, is measured using the natural logarithm of total regional assets. The minimum value of regional assets is 793,316,941,979.53 owned by the Pariaman City Government (West Sumatra) and the maximum value is 47,023,936,026,338.00 owned by the Surabaya City Government (East Java). Average assets of 3,777,227,167,508.59 and standard deviation of 4,543,963,364,122.28.

Table 3. Descriptive Statistics (N=490)

Variable	Minimum	Maximum	Average	Standard Deviation
Dependent Variable				
LCGP	2	6	3,75	0,86
Independent Variable				
PROF	17,18	74,05	40,37	10,32
GICS	1	3	2,47	0,54
INOV	0,00	84,19	35,77	18,99
Dependent Variable				
FCDP	0,32	1,00	0,84	0,10
ASET	793.316.941.979,53	47.023.936.026.338,00	3.777.227.167.508,59	4.543.963.364.122,28

Source: Researcher data

Before carrying out the multiple linear regression test, a classical assumption test is carried out. As a result, the regression model in this study has met the requirements of the classical assumption test, namely normally distributed, free of multicollinearity and heteroscedasticity. The autocorrelation test was not carried out because this research data uses cross-section data. The relationship (correlation) between variables is shown in table 4.

Table 4. Correlation Matrix

	LCGP	PROF	GICS	INOV	FCDP	ASET
LCGP	1.000					
PROF	0.379* (0.000)	1.000				
GICS	0.424* (0.000)	0.294* (0.000)	1.000			
INOV	0.448* (0.000)	0.368* (0.000)	0.322* (0.000)	1.000		
FCDP	-0.475* (0.000)	-0.311* (0.000)	-0.341* (0.000)	-0.423* (0.000)	1.000	
ASET	0.341* (0.000)	0.198* (0.000)	0.316* (0.000)	0.313* (0.000)	-0.702* (0.000)	1.000

Note: significance level 0.05 *

Source: Researcher data

The multiple linear regression test results are shown in Table 5 which produces the regression equation:

$$LCGP = 4.719 + 0.013PROF + 0.358GICS + 0.009INOV - 2.361FCDP - 0.025ASET + e$$

Table 5. Multiple Linear Regression Test

Variable	**PROF**	**GICS**	**INOV**	**Sig.**	**Description**
Constant	4.548 (0.063)	6.554 (0.006)	5.478 (0.023)	4.719 (0.041)	
PROF	0.021* (0.000)			0.013* (0.000)	Positive
GICS		0.479* (0.000)		0.358* (0.000)	Positive
INOV			0.014* (0.000)	0.009* (0.000)	Positive
FCDP	-3.231* (0.000)	-3.375* (0.000)	-2.944* (0.000)	(-2.361)* (0.000)	Negative
ASET	0.036 (0.625)	-0.040 (0.587)	0.009 (0.905)	-0.025 (0.719)	Not significant
R^2	0.371				
Adjusted R^2	0.365				
F test	57.168			0.000	

Note: significance level 0.05 *

Source: Researcher data

The adjusted R^2 value of 0.365 means that the dependent variable is explained 36.5% by the independent variable, while the rest by variables outside the study. The F test result of 0.000 means that the local government performance variable is jointly influenced by the variables of ASN professionalism, internal control system, regional innovation, regional financial dependence, and regional assets.

The results of the ASN professionalism t-test show a probability value of 0.000 less than 0.05 with a coefficient value of 0.013. This means that ASN professionalism has a positive effect on local government performance, supporting the first hypothesis. The higher the professionalism of ASN, the higher the performance of the local government. High professionalism means that ASNs have high education, competence, and knowledge to support the implementation of their duties, and performing well, behaving well, and being disciplined helps the implementation of better government and public services thereby ultimately improving government performance. These results are in line with research by Langgeng and Mega Fitrya (2023) that ASN professionalism improves the performance of public institutions through increased performance accountability, Oliveira et al. (2023) that professionalism reduces the level of corruption and improved government performance, and Jumas et al. (2023) stated that ASN professionalism in the procurement of goods and services improves government performance by making the procurement of goods and services more effective and efficient. Meanwhile, research by Anggraini and Syofyan (2020) and Wardayati et al. (2022) contradict these results which stated that the performance of BPKP auditors is not influenced by professionalism, where whether or not the implementation of government performance is supervised by BPKP as an internal government supervisor.

The probability value of the internal control system of 0.000 below 0.05 with a coefficient of 0.358 means that the internal control system has a positive effect on local government performance, this supports the second hypothesis. The more mature the implementation of the internal control system, means that local governments are increasingly able to make performance planning appropriately, create appropriate performance implementation and control strategies, and adapt to changes so that agency goals and government performance can be achieved effectively and efficiently. These results are in line with the research of Hidayati et al. (2022), Heinrich and Probohudono (2023), and Saleh and Rahadian (2023) that with a strong internal control system, accounting fraud can be prevented, the quality of financial statements increases, and helps local governments obtain unqualified audit opinions. Research by Rahmasari and Setiawan (2022) and Yudanto and Pesudo (2020) showed that the implementation of mature SPIP would improve government performance accountability. Meanwhile, Setiawan et al. (2022) are not in line with these results, that the weakness of the internal control system has no impact on the accountability of local government performance.

The results of the regional innovation test show that the probability value of 0.000 is less than 0.05 with a coefficient of 0.009. This means that the third hypothesis is accepted, that regional innovation has a positive effect on local government performance. With more and more local governments innovating, it will further improve local government performance. Improvements and changes made by local governments through innovations in public services, government governance, and other innovations that support local government administration will help government implementation become more efficient and effective, and the results can be felt directly by the public and the region. This result follows Mahpudin's research (2022) stated that innovation increases public trust and satisfaction through improved public services because they become faster, easier, and cheaper. In addition, research by Zulkifli (2020) and Yunita (2017) also stated that by innovating, institution outcomes and outputs will increase rapidly and improve institution performance. This result is not in line with Lukman's research (2021) that many innovations have been carried out in the regions, but many are only applied for a short time so improvements in governance are ineffective. In addition, Adyawarman's research (2021) also stated that there are many obstacles in the implementation of innovation, which results in criticism from the public and lowers the value of the government.

The test results of the regional financial dependence control variable show a significance value of 0.000 less than 0.05 with a coefficient of -2.361. This means that regional financial dependence has a negative effect on local government performance. The higher the level of regional financial dependence, the lower of local government performance. The more local governments rely on funds and assistance from the central or provincial government, making local governments less creative, initiative, and struggle to generate their local revenue, making changes to improve public services and local government performance (Nugraheni and Adi, 2020). Local governments are considered unable to carry out their resource management authority, making their performance poor (Qowi et al., 2017). The large amount of funds received from the central government can also lead to potential corruption due to less strong direct supervision from the central. These results are in line with Qowi et al. (2017) that local government performance is negatively affected by the level of central government dependence and Lestari et al. (2019) that government performance accountability is negatively affected by the level of regional dependence. This result contradicts with Noviyanti and Kiswanto (2016) that dependence on the central government positively affects the financial performance of local governments, Nugraheni and Adi (2020) and Aulia and Rahmawaty (2020) showed that transfers from the central have no effect in improving regional financial performance due to the non-optimal use of these funds.

For the regional asset control variable, the test results obtained a significance value of 0.719 more than 0.05 with a coefficient of -0.025. This means that regional assets do not affect local government performance. The size of regional assets does not affect improving local government performance. This is because regional assets have not played a significant role in improving government performance (Nugroho and Prasetyo, 2018). The use of regional assets is not optimal, asset security is not optimal, and there are idle assets that, if used properly, can generate high regional income and improve public services to be more effective and efficient. This is in line with research by Nugroho and Prasetyo (2018) and Noviyanti and Kiswanto (2016) that government financial performance is not influenced by size proxied by total assets. Contrary to research by Kahar et al. (2023) that assets have a positive effect on performance, Setiawan et al. (2022) that local government size (total assets) has a positive effect on government accountability, and Nugraheni and Adi (2020) that government size (total assets) positively affected government financial performance.

5. Conclusion

This research aimed to examine the effect of ASN professionalism, internal control system, and regional innovation on local government performance. The results of this study are that ASN professionalism, internal control system, and regional innovation have a positive effect on government performance. For control variables, regional financial dependence has a negative effect on government performance and regional assets do not affect government performance. High ASN professionalism, mature internal control, and regional innovation can support ASN in carrying out its government duties, making public services better, effective, and efficient, preventing fraud and anticipating risks that will occur, and being adaptive to change so that government performance is getting better.

Recommendations for the government to improve its performance are to increase ASN professionalism, SPIP maturity, and regional innovation. Enhancing performance through ASN professionalism is carried out by increasing the number of training and study assignments, giving ASNs opportunities to take part in training and study assignments, providing clear rewards and punishments, and using electronic presence. Improving performance through SPIP maturity is carried out by increasing the socialization and implementation of integrated SPIP which includes elements of SPIP, risk management, APIP capability, and corruption control, increasing the role of APIP as supervisors and consultants. Improving government performance through innovation is carried out by providing rewards for ASNs which provide the best innovations that are beneficial to local government and the public, facilitating and supervising the implementation of innovations.

The implication of this research is to theoretically improve empirical studies regarding the influence of ASN professionalism, internal control systems, and regional innovation on local government performance. For its practical implications, this research is used as material for local governments to further improve this and make better policies, strategies, and implementation to create efficient, effective government governance, and benefit the public and regional development.

The limitation of this research is that the SPIP maturity indicator adjusts the latest regulation, namely BPKP Regulation No. 5 of 2021 and the ASN professionalism indicator uses Minister of PANRB Regulation No. 38 of 2018 which is valid until 2021 because in 2022 the ASN professionalism index changes to the BerAKHLAK Index with different measurements (Kemen PANRB, 2023). For future research, it can increase the research period and use other variables that affect government performance. In addition, samples of ministries/institutions and provincial governments can be used to enrich research on local government performance.

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THE ROLE OF PERCEIVED SUPERVISOR SUPPORT ON LOYALTY AND PERFORMANCE OF KSP ARTHA MULIA *YOGYAKARTA* EMPLOYEES

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ABSTRACT

Improving employee performance is always a concern because of its ongoing impact on the overall performance of the organization. The role of supervisor support is considered crucial in building worker loyalty. The presence of loyal workers is expected to contribute to the improvement of organizational achievements. This study aims to determine the impact of perceived supervisor support on employee performance through the mediation of job loyalty at KSP Artha Mulia Yogyakarta. A total of 36 respondents were involved in this survey, whose data were taken by census using a questionnaire instrument. This research is quantitative, with multiple linear regression data analysis and sobel test. The results showed no significant direct effect of perceived supervisor support on employee performance. Perceived supervisor support has a significant effect on employee loyalty, but loyalty was not found to affect performance. Thus, the influence of supervisor support on performance through job loyalty was not confirmed. Supporting supervisors who have concern for the psychological and economic well-being of subordinates can be done by organizations when they want to maintain the loyalty of their workers.
Keywords*: employee performance, perceived supervisor support, work loyalty.*

1. Introduction

Employee performance is the main foundation for organisational development. The level of productivity, creativity, and dedication of employees directly affects the organisation's ability to achieve common goals. By having a competent and high-performing team, organisations can face complex challenges and adapt quickly to environmental changes. In today's digitalized world, developing and managing employee performance is a vital strategy for an organisation's long-term success. By prioritising employee performance, organisations can build a dynamic and progressive work culture, which in turn will drive growth and innovation. Research findings conducted at a multinational company state that high employee performance can increase customer satisfaction and company profitability (Napier, Knight, Luo, & Delios, 2023).

Employee performance can increase if it is influenced by leadership support factors. Leadership support felt by individuals can increase their enthusiasm for the organisation so that they can maximise their performance results. Like Apple CEO Tim Cook, who distributed large bonuses to employees as a form of appreciation for the contribution of Apple employees in maintaining the company's performance amid the challenges and uncertainties facing the technology industry and emphasising that employees are valuable assets for the company and leadership support for welfare is a top priority in Apple's work culture (Saputra, 2022). Whereas in service organisations such as KSP Artha Mulia Yogyakarta, where performance results greatly affect the progress of the organisation, the importance of leadership support is also highly emphasized. Employees who feel support from leaders tend to be more motivated and high-performing, which in turn will have a positive impact on achieving organisational goals

(Astuti & Meiyanto, 2020). However, there are problems in the KSP Artha Mulia Yogyakarta organisation, with services that are still problematic and causing complaints from customers. Dissatisfaction with service improvements as a result of complaints can also still be found. Likewise, the achievement of employee targets should still be optimised to encourage overall company performance. This study tries to analyse the phenomenon of employee performance at KSP Artha Mulia Yogyakarta by looking at the role of supervisory support and job loyalty as antecedents.

Work loyalty indicates the tendency or desire to stay with the organization. A more in-depth view sees loyalty as related to adherence to shared work values (Coughlan, 2005). Employee loyalty has moral significance for employees, and organizations should communicate their recognition and reward policies to employees to foster loyalty (Schrag, 2001). Loyalty encourages employees to work harder, persevere in difficult situations, and achieve better results. High loyalty increases employee retention, reduces turnover, and strengthens the relationship with the organization. Work loyalty is an important factor in creating a stable, productive, and sustainable work environment, which has an impact on overall organisational performance results.

Previous research from Tarcan, Erigüç, Kartal, Koca, and Karahan (2021) found that perceived supervisory support has a significant effect on employee performance and work loyalty. In their research, Faris and Pakpakah (2022) found that work loyalty has no significant effect on employee performance, while Kim, Vinh, and City (2020) found that work loyalty has a significant effect on employee performance. There are inconsistencies in the findings of previous research, thus providing an opportunity for researchers to further examine and measure whether the work loyalty variable can have a mediator role in the relationship between perceived supervisor support and employee performance in the research setting at KSP Artha Mulia Yogyakarta.

2. Literature Review

2.1. Perceived Supervisor Support

Perceived supervisory support is one of the most important aspects of the relationship between employees and supervisors (Kartika, Kaihatu, Adiwijaya, & Nugroho, 2017). Support from supervisors helps strengthen employees' positive attitudes towards the organisation, which in turn increases work engagement, motivation, and employee performance (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Perceived supervisor support is the level of employee confidence in the concern given by supervisors for their welfare and contribution to the organisation (Kartika et al., 2017). Thus, it can improve employees' psychological well-being and help create a more productive and sustainable work environment (Eisenberger et al., 2002).

2.2. Work Loyalty

Job loyalty is the dedication of an employee to use all his skills, abilities, and thoughts to achieve company goals while maintaining confidentiality and avoiding behaviour that can harm the company as long as they still work there (Hasibuan, 2013). In addition, loyalty also includes employee loyalty to work, position, and the company as a whole (Kim et al., 2020). This loyalty is reflected in the employee's commitment to protect and defend the organisation, both inside and outside the work environment, from threats or attacks from irresponsible parties (Kimpah, Ibrahim, & Raudeliuniene, 2017).

2.3. Employee Performance

The success of a company often depends on a solid organisational structure, which is based on the performance of each team member. Employee performance can be seen in the quality and quantity of the responsibilities carried out by employees (Robbins, & Judge, 2013). The existence of employees who show superior performance is crucial in an effort to achieve the company's mission and goals and maintain the company's competitiveness. Performance is seen in the process and achievement of a person in carrying out their duties in a certain period, as seen in the results of the work achieved compared to work standards, targets, or criteria that have been previously set and agreed upon. Performance is the behaviour shown by workers related to the achievements produced according to their role in the organisation (Yani, 2012). Performance must be associated with important tasks and the fulfilment of formal requirements for their responsibilities (Cheng et al., 2020).

2.4. Hypothesis Development

2.4.1. The Effect of Perceived Supervisor Support on Work Loyalty

Employees who feel their supervisor's support for their well-being and contributions will have higher self-confidence and feel valued at work. This can create a strong emotional bond between the employee and the organisation, which encourages loyalty at work. Support provided by supervisors can also help build positive relationships between employees and supervisors, creating a harmonious and productive work environment. Employees who believe in their supervisors are more likely to show loyalty to the organisation by remaining committed to their roles and making positive contributions in the workplace. The results of research by Anjali and Anand (2014) show that perceived supervisory support has a significant positive effect on employee loyalty.

H1: Perceived supervisory support has a significant positive effect on work loyalty.

2.4.2. The Effect of Work Loyalty on Employee Performance

Employee loyalty is the tendency to stay with the company they work for, even when faced with the opportunity to move to another company. It shows a strong commitment to the organisation, as employees are ready to defend and support the company from external interference or attacks. This loyalty is the result of an emotional investment in the company's vision, values, and goals, which drives employees to remain dedicated to helping the company achieve long-term success. By nurturing employee loyalty, companies can build a solid culture, increase workforce retention, and improve the overall performance of the organization. Employee loyalty is a key element in creating a stable and productive work environment, which in turn supports the overall growth and success of the company. In the research of Kim et al. (2020), Wardhani, Annisa, and Elfarina (2023), Gusnanto, Pembangunan, and Budi (2023) Ja, Suyono, and Elisabeth (2024), Putra, Yusuf, and Hardianto (2024) it is proven that work loyalty has a significant effect on employee performance.

H2: Work loyalty has a significant positive effect on employee performance.

2.4.3. The Effect of Perceived Superior Support on Employee Performance

Supervisory support that employees feel will have an impact on optimising their performance, resulting in good performance. Supervisory support creates an inclusive and supportive work environment where employees feel supported and valued. As a result, employees become more engaged in their work and are more likely to achieve set targets. Perceived supervisory support can create a positive and collaborative work environment. Supervisors who provide support are usually also more open to ideas and input from their subordinates, thus creating an inclusive and constructive work atmosphere. In their research, Saleem and Amin (2013), Anjali and Anand (2014), Lewicka, Glinska-Newes, Morrow, and Gorka (2018), Tarcan et al. (2021), showed that perceived supervisory support has a significant positive effect on employee performance.

H3: Perceived superior support has a significant positive effect on employee performance.

3. Research Methods

This research was conducted at KSP Artha Mulia Yogyakarta, with a population of 36 employees. Data were collected by census using a questionnaire instrument. The collected data were processed using linear regression and the Sobel test. Researchers used a 1–5 Likert scale (from strongly disagree to strongly agree) on the questionnaire instrument. The measurement of the variable perceived supervisor support from Eisenberger, Huntington, Hutchison, and Sowa (1986) consists of 16 statement items, for example, the statement "My supervisor appreciates my contribution to the welfare of our department" and the statement "If my supervisor could hire someone to replace me at a lower salary, he would do so." Measurement of work loyalty variables from Dutta and Dhir (2021) which consists of 9 items, one of which is the statement "I obey orders and instructions" and the statement "I work hard to complete tasks," Measurement of employee performance from Pradhan and Jena (2017) consists of 8 items, one of which is the statement "I can complete the amount of work given to me correctly" and the statement "I am able to do more than one job."

4. Research Findings and Discussion

4.1 Characteristics of Respondents

The characteristics of the respondents are shown in Table 1, the majority of whom are female, as many as 24 (66.7%) people. Respondents have an employment status dominated by non-permanent employees, as many as 20 (55.6%) people. Respondents have a marital status, the majority of whom are not married, as many as 28 (77.8%) people. The majority of respondents are <30 years old, as many as 30 (83.3%) people, and this age group still needs leadership support in carrying out their job duties to guide and direct them in facing challenges and gaining more experience. Although this age is relatively young, the organisation expects this young group to move quickly and advance the organization. Young workers are expected to be better able to adapt to the use of technology in the office. The majority of respondents have worked for <2 years, as many as 20 (55.6%), with the majority of their last education being SMA or equivalent, as many as 18 (50%) people.

Table 1. Characteristics of Respondents

Category	Description	Total	Percentage
Gender	Male	12	33.3 %
	Female	24	66.7 %
Employement Status	Non-permanent	20	55.6 %
	Permanent	16	44.4 %
Marital Status	Unmarried	28	77.8 %
	Married	7	19.4 %
	Widow/widower	1	2.8 %
Age	< 30 years	30	83.3 %
	31-39 years	6	16.7 %
Last education	High School/Equivalent	18	50.0 %
	Diploma (D1/D2/D3/D4)	4	11.1 %
	S-1	11	30.6 %
	S-2	3	8.3 %
Tenure	< 2 years	20	55.6%
	2-5 years	14	55.6%
	6-10 years	2	38.9%

Source: primary data processed, 2024.

4.2 *Validity and Reliability Test*

Validity test items can be declared valid if r count> r table (0.2785). Data testing shows r count employee performance (0.431–0.624), work loyalty (0.361–0.673), and perceived supervisor support (0.313–0.734) > 0.2785, so the item is said to be valid. Reliable is fulfilled if the Cronbach's alpha value is> 0.60. In Cronbach's alpha for perceived supervisory support (0.903), work loyalty (0.829), and employee performance (0.806), the value is > 0.60, or the instrument is declared reliable (Table 2).

Table 2. Validity Test

Variable	Cronbach's Alpha Based on Standardized Items
Percieved Supervisor Support	0.903
Work Loyality	0.829
Employee Performance	0.806

Source: primary data processed, 2024.

4.3 *Classical Assumption Test*

The results of the classical assumption test data (Table 3) concluded that there was no multicollinearity (VIF < 10; tolerance > 0.10). There is no heteroscedasticity (Glejser test, p> 0.05), and the normality test can also be fulfilled (Kolmogrov-Sminorv test, Monte Carlo Sig. (2-tailed). > 0.05).

Table 3. Classical Assumption Test

Model		Multicollinearity		Monte Carlo Sig. (2-tailed)	Heteroscedasticity	
		Tol.	VIF		T	sig
Percieved Supervisor Support	Work Loyalty	-	-	0.153	-0.173	0.863
Work Loyalty	Employee Performance	0.646	1.548	0.200	-1.359	0.183
Perceived supervisor support		0.646	1.548		1.672	0.104

Source: primary data processed, 2024

4.4 *Hypothesis Test*

Testing H1 (Table 4) shows that perceived supervisory support has a significant influence on work loyalty at KSP Artha Mulia Yogyakarta, with a sig value of 0.000 <0.05. This finding confirms Anjali and Anand (2014) research, which states that perceived supervisory support has a significant positive influence on work loyalty. Perceived support from superiors and organisations makes employees feel valued, increases motivation, and maximises work results. When employees feel that their superiors support, care for, and understand their needs, they tend to be more emotionally attached and committed to work and the organization. The loyalty variable has the lowest mean value (0.351) on the statement "I am respected by other employees," while the highest mean value (0.673) is on the statement "I can express ideas freely."

Table 4. Hypothesis Test

	Model	Dep.	Unstandardized Coefficients		Stand. Coeff.	t	Sig.
			B	Std. Error	Beta		
H1	Perceived supervisor support	Work loyalty	0.294	0.068	0.595	4.316	0.000
H2	Work Loyalty	Employee Performance	-0.128	0.203	-0.133	-0.629	0.534
H3	Perceived supervisor support		0.117	0.100	0.248	1.168	0.251

Source: primary data processed, 2024

Testing H2 (Table 4) shows that work loyalty does not significantly affect employee performance at KSP Artha Mulia Yogyakarta because the sig value is 0.534 > 0.05. This finding does not confirm the findings of Kim et al. (2020), which show that work loyalty can affect employee performance. Employee work results are not only determined by the level of loyalty to work. Even though an employee has a high level of loyalty to the company, this does not guarantee that the quality of his work will match the needs of the organization. Other factors, such as individual abilities, motivation, and support provided by the organisation, also play an important role in determining the level of performance of an employee. In addition, a supportive work environment, a fair reward system, and opportunities for self-development can also influence intrinsic and extrinsic motivation and individual performance without depending on the level of loyalty to the job. This insignificant finding provides an opportunity for future research to analyse the causes in more depth. The employee performance variable had the lowest mean (0.431) on the statement "I always work well with my coworkers," while the highest mean (0.624) was on the statement "I can complete the work beyond the specified time.”

Testing H3 (Table 4) shows that perceived supervisory support does not have a significant influence on employee performance at KSP Artha Mulia Yogyakarta because the probability value is 0.251 > 0.05. This finding does not support the findings of Tarcan et al. (2021), which show that organisational support can have a significant effect on employee performance. Perceived supervisory support is an individual's subjective perception of the level of support they receive from their supervisor, so the level and type of perceived support may vary between individuals, depending on the relationship with the supervisor and their interpretation of the supervisor's behavior. It is suspected that there are other factors not covered by this study that further influence employee performance. The perceived supervisory support variable has the lowest mean value (0.312) on the statement "My supervisor is proud of my achievements." While the highest mean (0.737) is on the statement "If given the opportunity, my supervisor will take advantage of me.”

4.5 Sobel Test

The mediation test resulted in a one-tailed probability value of 0.266 > 0.05, which means it is not supported (Figure 1). The work loyalty variable does not act as a mediator in the relationship between perceived supervisory support and employee performance at KSP Artha Mulia Yogyakarta. This finding is interesting because employee performance is not influenced by work loyalty and perceived supervisory support, but perceived supervisory support can strengthen work loyalty. It is suspected that there are other factors that are more dominant in influencing employee performance, such as intrinsic and extrinsic motivation factors, that can affect how well employees do their jobs. In addition, technological developments and market dynamics can also affect employee performance without being directly related to the level of loyalty to work.

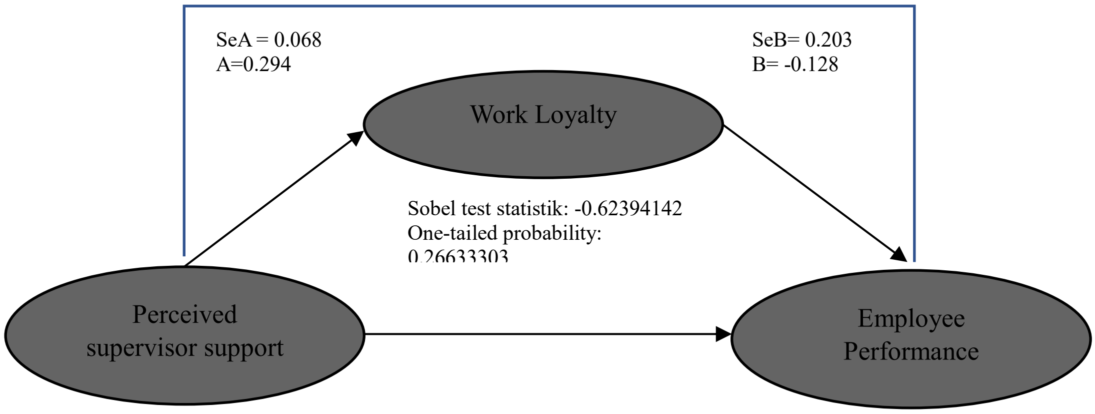

Figure 1. Mediation test
Source: primary data processed, 2024.

5. Conclusion

This research conducted at KSP Artha Mulia Yogyakarta aims to examine the effect of perceived supervisory support on employee performance through work loyalty mediation. The research shows that although supervisory support does not have a significant direct influence on employee performance, it has a significant influence on work loyalty. These findings provide important insights for organisational management to understand the dynamics of the relationship between supervisors and employees and develop appropriate strategies to increase overall employee loyalty. Encouraging leaders to appreciate the performance of their followers can be meaningful for building feelings of being valued and maintaining work loyalty. Work loyalty does not affect employee performance, so it does not mediate the effect of perceived supervisory support on employee performance. Future researchers need to take an approach by including other variables to predict employee performance. Motivation, social support, and the work environment can be involved in estimating the antecedents of employee performance.

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THE FUTURE OF CSR/SUSTAINABILITY IN INDONESIA: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

As a part of the United Nations, Indonesia is participating in sustaining the world by enacting several regulations regarding Corporate Social Responsibility (CSR). Research publications on CSR/sustainability show the CSR/sustainability implementation and reflect how academicians view CSR/sustainability. Based on systematic literature review methods (Snyder, 2019) this study is trying to assess the advancement of CSR/sustainability In Indonesia, its antecedents and consequents, and the agenda for the next research. This study highlights the scholar's perspective on CSR/Sustainability implementation through articles published in Indonesian journals which are listed on SINTA (Science and Technology Index), the prominent research database in Indonesia. Furthermore, this study provides the direction for the future of CSR/Sustainability in Indonesia. Publications on CSR/Sustainability in Indonesia from the year 2008 to 2019 indicate that CSR/Sustainability is perceived as an additional task for the business to do rather than as a strategy for the whole business.
Keywords*: CSR, Sustainability, Systematic Literature Review*

1. Introduction

The issues of environmental damage and global climate change have globalized and impacted all countries in the world. In recent years, demonstrations regarding climate change concerns and rising global temperatures have strengthened. For example, a demonstration in Paris in 2018 (www.voaindonesia.com/a/demonstrasi-di...perlimate-/4563638.html), in England also occurred and carried out by school-age children (https://www .bbc.com/indonesia / world-47263543). Dr. Ir. Arifin Rudiyanto, M.Sc, Chairperson of the ICCTF (Indonesia Climate Change Trust Fund) Board of Trustees, in his remarks at the end of the 2017 report, stated that the Government of Indonesia had launched a Low Carbon Development Planning (PPRK). Presidential Regulation No. 59 of 2017 concerning the Implementation of Achieving Sustainable Development Goals is also showing the government's commitment that the implementation and achievement of the Sustainable Development Goals launched by the United Nations should be carried out in a participatory manner involving all development actors, both the Government, Civil Society Organizations (CSOs), the private sector, academics, and so on (https://www.sdg2030indonesia.org).

Indonesia and India are two countries in the world that seriously make CSR a law (CSR Magazine, April 2017). The large population and potential damage that might appear to sustain human life is the reason why Indonesia and India need to manage CSR through regulation. The World Population Report 2018 (http://www.worldometers.info/world- population / population-by-country /) places India second and Indonesia fourth in the rank of country population in the world. The government itself may not be able to take care of and manage poor people in their countries. Mobilizing and managing existing business potential to assist government tasks as a partner capacity becomes a workable solution.

In the Indonesian context, CSR practices are regulated through a number of regulations. They are (a) the law of the Republic of Indonesia number 40 of 2007 concerning limited liability companies, (b) the law of the Republic of Indonesia number 25 of 2007 concerning investments, (c) the law of the Republic of Indonesia number 22 year 2001 concerning oil and gas, (d) the Law the Republic of Indonesia Number 13 Year 2011 concerning Handling the Poor, (e) the Government Regulation (PP) Number 47 of 2012, (f) the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 13 of 2012, and (g) the Decree of the Minister of BUMN Per-05/MBU/2007 regarding the Community Development Partnership Program (PKBL). Those regulations indicate that the Indonesian government assumes that corporate social responsibility is urgently required.

People view CSR and sustainability are equal. Dyllick and Muff said that CSR is structurally an element of sustainability (Dyllick & Muff, 2015). Several companies report CSR practices as business sustainability reporting (Sustainability Reporting.) CSR magazines in Indonesia also use the term Sustainability Reporting (https://majalahcsr.id/). This study uses the terms CSR and Sustainability interchangeably for the following discussion.

The global business networks contribute to the increasing demands of stakeholders on companies both international and national in the territory of the Republic of Indonesia. Year after year the number of Indonesian companies reporting CSR is increasing (Widyadmono, 2014). This indicates the compliance of businesses to follow the rules that apply in the jurisdiction of Indonesia.

The increase in the number of CSR reports raises questions about the existence of other objectives beyond fulfilling the demands of the law. Nasution & Adhariani (2016) for example, found that CSR reporting in Indonesia was more likely to be symbolic rather than substantive. What is meant by symbolic in this case is that the CSR/sustainability of the company has not yet arrived at its substance. Kumarasinghe et al. (2018) found that companies in Japan that reported more aspects of workers, human rights, product safety, and health had higher financial and market performance. The company also adopts sustainability ranging from reasons for business benefits, scientific reasons, to morality reasons (Landrum, 2017).

The sustainability performance of companies in Indonesia is the lowest among Japan, India, and South Korea (Laskar & Gopal Maji, 2018). Indonesian CSR magazine reports that only 30% of companies listed on the Jakarta Stock Exchange (IDX) make Sustainability Report (SR) https://majalahcsr.id/sustainability-report-sr-di-indonesia-sepi-peminat/. The EPI (Environmental Performance Index, 2018) ranking also shows that Indonesia is ranked 133 out of 180 countries in the world.

The low performance of corporate sustainability in Indonesia could come from the weak conceptualization of sustainability. Furthermore, the lack of confidence in the relationship of CSR practices with sustainability makes managers carry out activities just to meet the regulatory requirements. Here is the call for scholars to develop the CSR/sustainability concept and framework through the publication of scientific papers.

People in the world that is increasingly aware of the deterioration of the environment due to the exploitation of nature and other resources for business purposes only (profit) demand a change in the way the business operates and treats other stakeholders besides shareholders. Several researches have evidenced that companies prioritize more on short-term objectives, namely the welfare of shareholders (Nasution & Adhariani, 2016); (Widyadmono, 2014) rather than the long-term objective. This pendulum of interest must be shifted (Segrestin et al., 2019).

The concept of corporate sustainability arises in the developed countries. Scholars contribute a lot in developing the concept, measurement, and impact of adopting the concept of sustainability for business (Windolph et al., 2014, Høgevold & Svensson, 2012), Lindbergh et al., 2016). International journals such as Journal Cleaner Production, Journal of Business Research and Current Opinion in Environmental Sustainability are just a few examples of many international journals that raise the issue of business sustainability. In Asian countries such as Japan, India, and Malaysia, scholars' contributions were beginning to emerge. Amini (Amini & Bienstock, 2014) claimed that countries need scholars' contributions to develop and apply the concept of business sustainability. The legal review study conducted (Chang, 2018) in Indonesia, concluded confidently that CSR regulations in Indonesia had not been effective in solving social and environmental problems facing Indonesia. Meanwhile, the Sustainable Development Goals that are proclaimed, aimed to have real impacts such as preserving the environment, reducing poverty, and increasing welfare. This should trigger Indonesian scholars to rethink the direction and future of sustainability in Indonesia to have a real impact on the environment and society.

The study of the development of corporate sustainability in Indonesia is important to explore the contribution of scholars to the issue of business sustainability. So far, no scholars have researched business sustainability in a wider context. First, this study will provide an overview of the development of business sustainability studies in Indonesia. Second, this study provides an overview of the factors associated with business sustainability from the perspective of academics. Third, this study also shows a research gap that requires further study in the future.

We define three problem statements to capture the direction of developing CSR/Sustainability studies in Indonesia. How is the development of business sustainability research in Indonesia (numbers, theories, and methodologies used)? What are the antecedent and consequent factors of business sustainability in the sustainability research publications in Indonesia? Which research agenda can scholars do in the future to build a better world?

2. Literature Review

2.1. Sustainability

Sustainability has now become a general term in everyday conversation in the current business context. From the very beginning, many writers referred to this term in the Brundtland report, 1987 (Vos, 2007; Montiel & Delgado-ceballos, 2014; dan Dentchev et al., 2018). In its development, this term entered into other fields and elicited many different definitions according to the context (Vos, 2007).

Organizations adopt the concept of sustainability into business operations because they believe it will help reduce business risk and increase business profitability in the long run. Not surprisingly, many companies have begun to study and adopt it in various forms. They start with merely fulfilling the regulations and the others engage in to anticipate the benefits of this sustainability practice. Several companies in Indonesia have also started to practice sustainability in Indonesia, such as PT Pupuk Kalimantan Timur, PT Pertamina Hulu Energi ONWJ (PHE ONWJ), Star Energy Geothermal Wayang Windu Ltd.

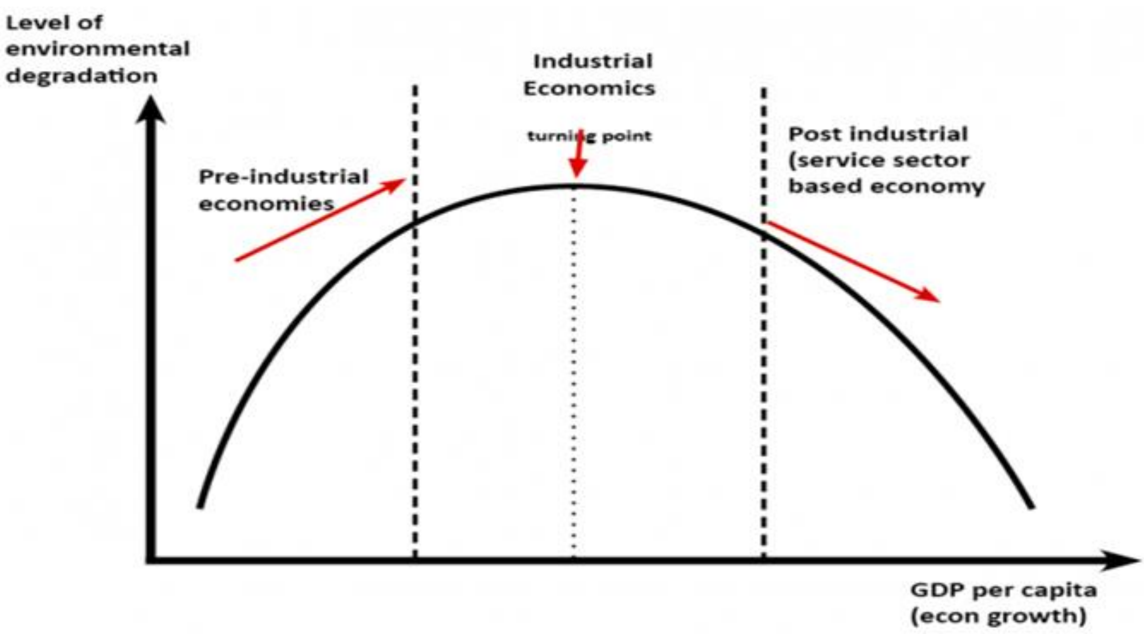
2.2. Sustainability in Indonesia

Two institutions that endorse the concept of sustainability in Indonesia are the National Center for Sustainability Reporting (NCSR) and KEHATI Sustainable and Responsible Investment (SRI). NCSR Indonesia is an affiliate of NCSR International which carries the Global Reporting Initiatives (GRI).

Sustainability studies using GRI can be found in many countries, for example in the Asian region (Laskar & Gopal Maji, 2018), and Europe (Nagel et al., 2017). This shows the community's acceptance of the approach developed by GRI in guiding reporting sustainability. The SRI KEHATI Index is the original Indonesian index developed by the KEHATI Foundation and PT Indonesia Stock Exchange (IDX). This index provides information publicly about the company that is considered to consider many aspects of its business relating to environmental concerns, corporate governance, community involvement, human resources, human rights, and business behavior with business ethics that are accepted at the international level. SRI KEHATI is based on the assumption that investors are willing to pay a premium for shares of companies that care about the environment. Meanwhile, a study of investor reactions (see Lindananty & Soedarman, 2015) found that there was no difference in abnormal returns on company shares before and after the announcement of the SRI KEHATI index.

Indonesia as the country with the highest economic growth in Southeast Asia, shows an increase in GDP per capita from $ 807 in 2000 to $ 3,877 in 2018 (https://www.worldbank.org). This increase does not come as "free". Some costs arise related to economic growth. Ekins (1997) says that this growth is paid for by environmental degradation. EKC (Environmental Kuznets Curve) explains the relationship between economic growth and environmental gradation, as stated in graph 1. Kuznet's idea is justified when it is associated with economic growth especially in developing countries like Indonesia.

Graph 1. Economy Growth and environment degradation



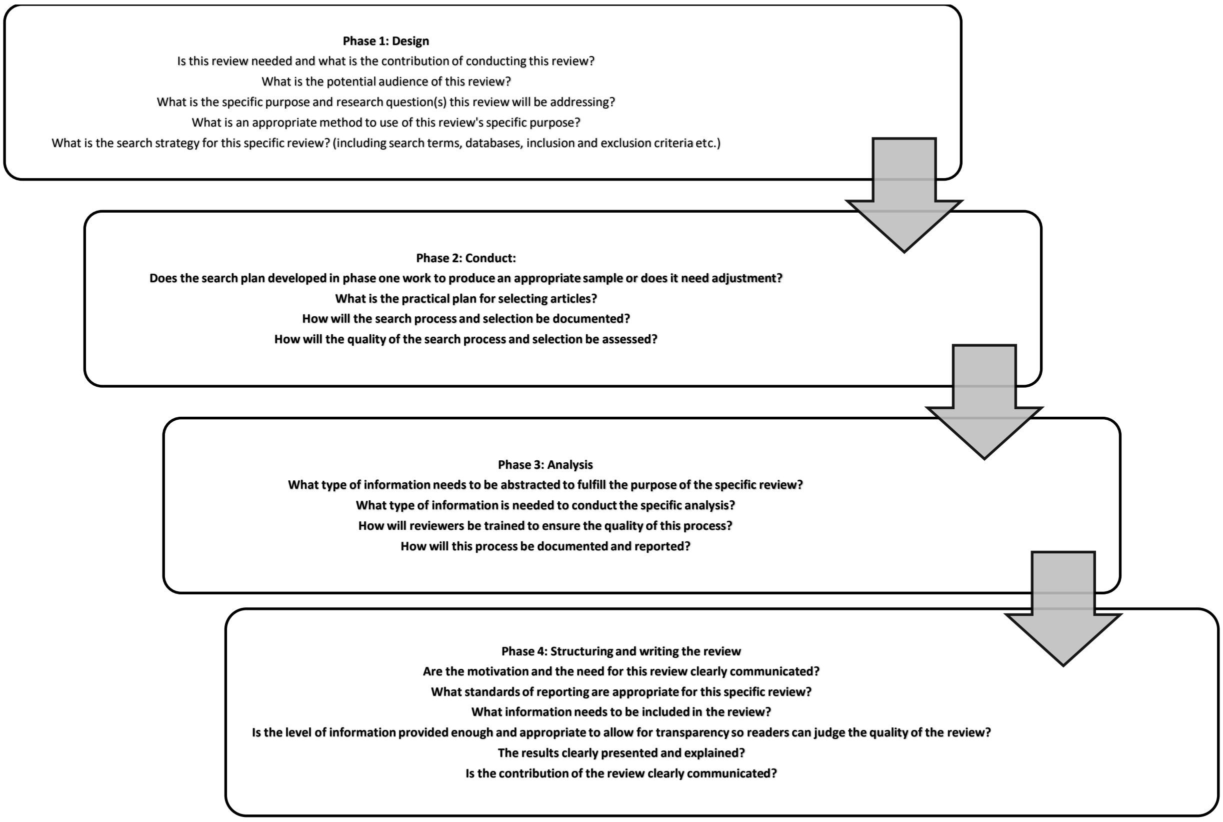
Source: https://www.economicshelp.org/blog/14337/environment/environmental-kuznets-curve/

2.3. *Research Publication on Business Sustainability in Indonesia*

The Ministry of Research, Technology and Higher Education (Ristekdikti) as a regulator in the field of education conducts an assessment of each journal to ensure the quality of research publications in them and announce them to the public. The certification period of accredited is valid for five years and will be re-assessed for the next year. These journals are classified based on an index with the name SINTA (Sience and Technology Index). This index classifies journals into SINTA 1 - SINTA 6. Sinta (Science and Technology Index) provides access to citations and expertise in Indonesia. (http://sinta2.ristekdikti.go.id/about).

2.4. *Research Framework*

This study will be the first study to explore academic research published in Indonesia based on SINTA. To answer the formulation of the problem raised, the researcher used the systematic literature study method as suggested by Snyder (Snyder, 2019). Several researchers have applied literature study as research method (see (Hamidi & Gabrielsson, 2014), (Egri & Ralston, 2008), (Montiel & Delgado-ceballos, 2014) and (Gideon Jojo Amos, 2018). This study uses a systematic approach because this approach is the most appropriate to be able to answer the description of the problem form as stated by Snyder (2019).



Graph 2. Research Framework

3. Research Methods

This research is a study that uses the method of literature review with a systematic approach to see the development of business sustainability in Indonesia (Snyder, 2019) and (Fisch & Block, 2018). In the context of its classification, this study is included in qualitative research. To answer the stated research problem, we use business sustainability articles published in economics journals that are accredited by the Ministry of Research and Technology of Higher Education. All articles published in accredited journals have received reviews from competent reviewers so that they will be theoretically appropriate and the methodology used are verified. Overall the number of journals included in the SINTA category is 3,925 journals from various fields of study. In the economic category, there were 280 journals recorded.

This study sources the articles from SINTA (scientific and Technology Index). For each SINTA (1-6), we pick 10 journals based on its impact score. We did this to ensure that all articles would have such a high impact and provide a broad picture of sustainability research in Indonesia. Thus a total of 60 journals will be the source of articles for this study. The keywords used to find the intended article are "CSR” and “sustainability". Based on these keywords, the researcher gets an article that will be the object of a literature review study.

4. Research Findings and Discussion

4.1 Phase 1: Design

The quality of CSR in Indonesia is considered low because of its symbolic (Nasution & Adhariani, 2016) and cosmetic (Chang, 2018) in nature. Meanwhile, CSR/Sustainability is a part of the world's efforts to preserve the environment, reduce poverty, to increase the wealth of society. The direction and the future of CSR/Sustainability in Indonesia is becoming an urgent agenda to ensure the impact it has on the environment and society.

The research problems for this study are: (a) How is the advancement of CSR/Sustainability in Indonesia (in terms of the number of articles published, theories used, and methods applied in the research) (b). What are the antecedents and consequents of CSR/Sustainability in Indonesia? (c) What are the research agendas for academician to do in the next future in developing the better place to live at?

4.2 Phase 2: Conduct (access on 15 Mei 2020)

As designed in the research design, data was obtained from journals included in the SINTA (Science and Technology Index) database which is the main database recognized by scholars in Indonesia. The determination of publication articles as the research samples in this study begins with access to the SINTA website (http://sinta.ristekbrin.go.id/journals) on 15 February 2020. The process of separating economic journals from a total of 4,985 needs to be carried out to provide a focus in the economic field. This separating process is done by selecting journals that fall into the economic category in each SINTA category and covers all years of publication. The results are shown in table 1.

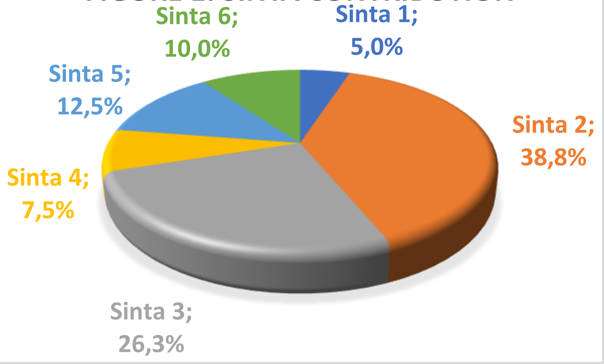
Tabel 1
Category of Economic Journal

No	SINTA Category	Amount of journal	Economic Subject
1	SINTA 1	61	1
2	SINTA 2	770	78
3	SINTA 3	888	65
4	SINTA 4	1548	86
5	SINTA 5	1174	42
6	SINTA 6	167	10

(Source: http://SINTA2.ristekdikti.go.id/.)

Given that the topic of CSR / Sustainability is a topic that has been around for quite a long time, then in each SINTA category 10 major journals were chosen based on the impact scores displayed on the http://SINTA.ristekbrin.go.id/ page. Thus there will be 60 journals that are expected to provide sample articles. After tracing with the keyword "CSR” and “Sustainability", only 25 journals contain articles that can be used for this research. From this process found 155 articles. In the process of searching for articles is conducted by reading the abstracts from each article, 80 articles were found that are relevant to this research. Figure 1 shows the contribution of each SINTA category in this study.

FIGURE 1. SINTA CONTRIBUTION



70% of the sample articles come from journals that fall into the SINTA 1, SINTA 2 and SINTA 3 categories. It can be stated that this research sample came from such a high quality journals in Indonesia with good reputation.

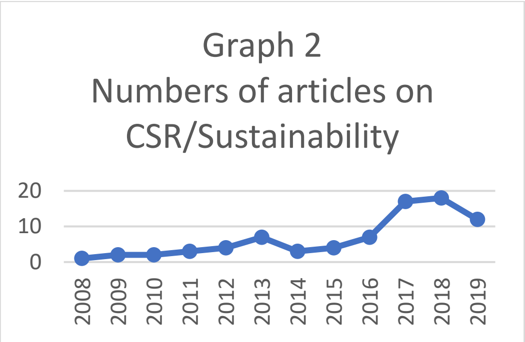
4.3 Phase 3: Analysis

The information that are needed to answer the problem were found through depth reading of those articles.

Research problem #1: How is the advancement of CSR/Sustainability in Indonesia (in terms of the numbers of articles published, theories used, and methods applied in the research).

Number of article on CSR/Sustainability

Graph 2 displays the number of publications in SINTA. Starting from 2008, the number of publications on the topic of CSR / Sustainability increased until 10 years later the number seemed to decrease. Our Access on February 15, 2020, at the begining of the year, made only a few articles can be found for 2019. When we consider the trend since 2017, it appears that publications will continue to increase because there are still many fields that have not been explored yet.



Theories applied in the CSR/Sustainability research

Theory is the main basis for understanding phenomena and discussing research findings conducted by researchers. Zikmund (Zikmund, et al, 2009, p. 39) clearly says that theory helps researchers to understand events by providing a systematic method for assessing and evaluating why events occur. Understanding and predicting are the two main objectives of the theory.

In CSR/Sustainability research in Indonesia, legitimacy and stakeholder theory are the two dominant theories used, consecutively 31,25% and 28,75%. Some researchers use 3 theories at once, legitimacy, stakeholder and agency or signaling theory. The other theories that are used although not dominant are Agenda Setting Theory, business ethics, business sustainability, entity theory, ethics in Islam, good corporate governance, contingency, "Pro-social and Attribution Theory, Value-Expectancy and Hierarchy of Effect Models ", regulation, resorce based theory, social exchange theory, social identity theory, social political theory, Corporate Sustainability Theory, Social Contract Theory. These variety of theories applied shows how researchers trying to explain the CSR/Sustainability in Indonesia.

Research Methods for CSR/Sustainability research in Indonesia

In CSR/Sustainability research in Indonesia, the concept of sustainability refers to the GRI concept. All empirical research in Indonesia uses a sustainability index created based on GRI. This index makes it easy in the context of producing research because of its availability. There is not much debate about the concept of sustainability in research in Indonesia. Meanwhile, in the global context the concept is still in questioned. The concept of sustainability is actually still very vague (Walter Alfredo Salas-Zapata and Sara Milena Ortiz-Muñoz, 2018). There are many ambiguities (Bolis et al., 2014). The difficulty of understanding the concept of sustainability encourages people to adopt the popular one within the academic community, namely GRI (Global Reporting Initiatives).

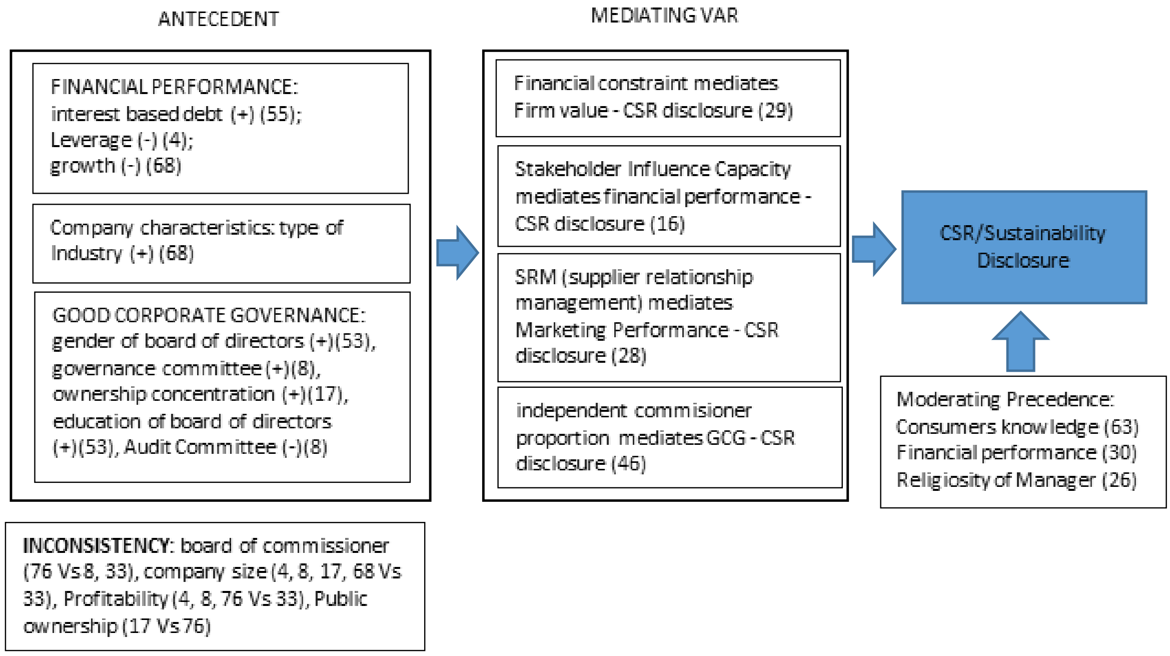
The research approach mostly used in studies published in Indonesia is quantitative approaches (76%), followed by qualitative (20%) and mixed methods (4%). Researchers with quantitative approaches apply a variety of statistical tools used. Multiple regression technique is the most widely used, then simple regression, different tests, Structural Equation Model (SEM), Moderated Regression Analysis (MRA), Ordinary Least Square (OLS), Partial Least Square (PLS), logistict regression and Manova. Chen and Li (1998) suggest that the popularity of Multiple Linear Regression is caused by (1) its ease of implementation; (ii) Multiple Linear regression has a solid theoretical foundation; (iii) diagnostic tools are available for examination of the model; (iv) standard errors are available for assessing their significance; and (v) easy output.

Content analysis is the most widely used in qualitative approach. Other techniques that we found are descriptive qualitative, Historical Study, inductive logic, legal research, and phenomenology.

The sectors that get the most attention in studies in Indonesia are Manufacturing, banking, and mining. CSR/Sustainability in Indonesia is closely related to the implementation of regulations in the manufacturing and mining sectors, because this sector is directly impacted the environment. The Banking Sector, which has received much attention from studies, shows that researchers are trying to explore the relationship between CSR/Sustainability and financial performance in sectors that are directly related to the society.

The antecedents variables found in the publications can be categorized into three major groups, Financial Performance, Company Characteristics, and Good Corporate Governance (GCG). From the financial performance category, Wahidah et al., (2017) found that bad debt interest has a significant positive effect on CSR / Sustainability disclosure. Meanwhile Harjanti et al. (2018) examined the impact of growth on CSR / Sustainability. They found that Growth had a significant negative effect on CSR / Sustainability. Sudarmanto & Rio Amanda (2018) used leverage as a predictor for CSR / Sustainability Disclosure. Their research found that leverage significantly negatively affected CSR / Sustainability Disclosure. Other researchers used company characteristics (Rizka & Romi, 2018) to see its effect on CSR / Sustainability Disclosure. They found that only the type of industry had a positive effect on CSR / Sustainability Disclosure.

Figure 2. Antecedents of CSR/Sustainability



The last category is Good Corporate Governance (GCG). Few researchers examined the effect of GCG as antecedents on CSR/Sustainability (see (Rizka & Romi, 2018) (53); (Muhammad & Mulyaningsih, 2017) (8) and (Yulius Kurnia & Daves, 2019) (17)). They use financial performance, company characteristics and Good Corporate Governance as variables that cause variations in CSR / Sustainability disclosure.

In Indonesia, GCG variables that show significant positive influence are the gender of the board of directors and the education of the board of directors (Rizka & Romi, 2018)(53), governance committee (Rizka & Romi, 2018) (8), ownership concentration ((Rizka & Romi, 2018) (17). While the audit committee variable was found to have a significant negative effect on CSR / Sustainability Disclosure (Muhammad & Mulyaningsih, 2017)(8).

Inconsistency of influence was found on the board of commissioner variable which was found to have a positive effect (Wulantika, 2013)(76) different from the negative influence (Muhammad & Mulyaningsih, 2017)(8) and (Lia Uzliawati et al., 2015) (33). Company size variable (Sudarmanto & Rio Amanda, 2018)(4), (Muhammad & Mulyaningsih, 2017) (8), (Yulius Kurnia & Daves, 2019)(17) and (Harjanti et al., 2018) (68) have significant positive effect on CSR / Sustainability Disclosure. On the different side, (Lia Uzliawati et al., 2015) (33) found a negative influence. Profitability variable are also inconsistent (Sudarmanto & Rio Amanda, 2018) (4), (Muhammad & Mulyaningsih, 2017)(8), and (Wulantika, 2013)(76) differ from the findings of (Lia Uzliawati et al., 2015) (33). Public ownership variables that were found to have a positive effect on CSR / Sustainability Disclosure (Yulius Kurnia & Daves, 2019) (17) differ from the findings of (Wulantika, 2013)(76).

In addition to the direct influence, some researchers have begun to develop the possibility of a mediating role that can influence CSR/Sustainability Disclosure. Among of these are financial constraint variables that mediate between firm value and CSR/Sustainability Disclosure (Ronald et al., 2019)(29), stakeholder influence capacity (SIC) which mediate financial performance and CSR / Sustainability Disclosure (Prawita, 2019) (16), SRM (supplier relationship management) which mediates Marketing Performance and CSR / Sustainability Disclosure (Nyarku & Oduro, 2019)(28) and the independent variable of commissioner proportion mediates GCG - CSR disclosure (Djoko et al., 2013)(46).

Three articles analyzed the moderation variables: consumers knowledge (Nurhayati et al., 2016)(63), Financial performance (Mukhtaruddin et al., 2019) (30) dan Religiosity of Manager (Hamidu et al., 2018)(26).

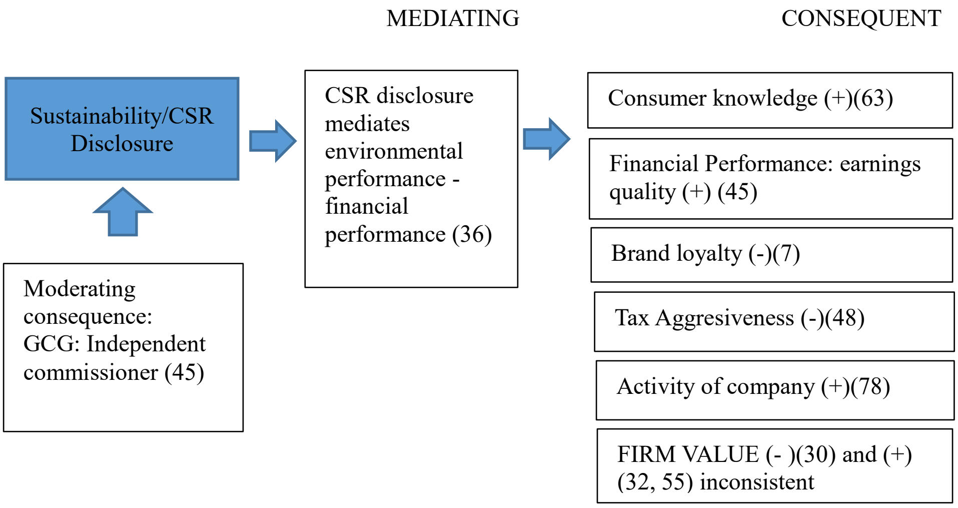
Consequent Variables of CSR/Sustainability Disclosure

This consequence variables indicate that CSR / Sustainability Disclosure may affect other objects. Research in Indonesia presents several other objects related to CSR / Sustainability Disclosure, namely consumer knowledge (+) (Nurhayati et al., 2016)(63), financial performance: earnings quality (+) (Fauziah & Marissan, 2014)(45), brand loyalty (-) (Zulianti & Ramadania, 2014) (7), tax aggresiveness (-) (Luke & Zulaikha, 2016)(48) and Activity of company (+) ((Awalia et al., 2015)(78). Inconsistent finding is in firm value variable (-) (Mukhtaruddin et al., 2019)(30) and (+) (Darmawan et al., 2018)(32), (Wahidah et al., 2017) (55).

Considering the antecedents and consequences of CSR / Sustainability Disclosure, it appears that most researchers in Indonesia view CSR / Sustainability Disclosure as the final result rather than viewing CSR / Sustainability Disclosure as a triger for other objects. Using the plot of (Porter & Kramer, 2006) that considers CSR as part of a business strategy, it seems there needs to be a shift in the perspective of CSR in research in Indonesia to emphasize CSR / Sustainability as an independent variable that affects the objectives of the business in a narrow or broader way. Researcher should consider sustainable development, as conveyed in the

Brundlant report (Keeble, 1988) that sustainable development is intended to preserve the environment, reduce poverty and improve people's welfare.

Figure 3. Consequent of CSR/Sustainability



Research finding Inconsistency

Research in Indonesia also shows inconsistencies in findings. Board of commissioners were found to have a positive effect on CSR / Sustainability Disclosure (Wulantika, 2013), while (Muhammad & Mulyaningsih, 2017) and (Darmawan et al., 2018) found the negative effect of board of commissioners. Company size as a factor influencing CSR / Sustainability Disclosure is also inconsistent. For example (Sudarmanto & Rio Amanda, 2018), (Muhammad & Mulyaningsih, 2017), (Yulius Kurnia & Daves, 2019), and (Harjanti et al., 2018) found that company size had a positive effect on CSR / Sustainability Disclosure while (Lia Uzliawati et al., 2015) found a negative effect. Inconsistency is also found regarding the public ownership. (Yulius Kurnia & Daves, 2019) found a positive effect of public ownership on CSR / Sustainability Disclosure, while (Wulantika, 2013) found a negative effect.

The inconsistencies in research in Indonesia provide a way for future researchers to re-verify the inconsistencies, for example by changing the type of industry or increasing the time span of research used.

CSR in Indonesia based on the perspective of Hancock who offered three perspective of CSR/sustainability (Hancock, 2004, p. 7) is more inclined to the realist perspective, but there are some researchers who try to draw to the Utopian perspective. For examples, they (Utama et al., 2019; Irsadunas et al., 2018) conduct research related to Islamic business ethics.

Qualitative Research

With various approaches used in research published in Indonesia, we could structure the publications from a global to practical context appears. Starting with defining the concept of sustainability, Shaharir & Alinor (2013) developed a definition of sustainability as "is the state where present physical, social, political, economic, knowledge, spiritual-religious and the survival of language and culture are achieved and at the level of discipline without sacrificing related resources and all creatures created by God so that future generations can enjoy happiness in this life and in the next world, at the very least as good as this generation. "When compared with the definition commonly cited by researchers (Keeble, 1988), it appears that this definition breaks down and expands aspects that must be considered, including spirituality-religion.

Further qualitative research on sustainability in Indonesia provides the corridor of implementing CSR/Sustainability. For example, Naraduhita & Sawarjuwono (2012) examine whether sustainability is more nuanced in law or voluntary based. Sinaga (2019) asserted in a research related to the legal basis of sustainability. Meanwhile, Marina & Imam Wahjono (2017) provide ethical corridors in carrying out sustainable programs. The context of spirituality-religiosity is emphasized in the research of (Utama et al., 2019), (Mohamad & Mukhazir, 2008), and (Mohamad & Mukhazir, 2008). They included Islamic spirituality and religiosity in their research, relating to waqf, principles (hablun min'Allah) and (hablun min'an-nas).

On a practical level, Anggraeni & Djakman (2018), Aviyanti & Kaluge (2019), and Trianaputri et al., (2018) conducted research whose conclusions were related to the disclosure of sustainability. Sustainability disclosure is low in Indonesia, the difference in disclosure between large-scale companies compared to medium and small companies, and sustainability research which tends to be descriptive.

Problem Statement #3 What are the research agendas for academician to do in the next future to develop the better place to live at?

Sustainability in the future will become an important topic for both practitioners and scholars. Research in Indonesia has found several factors that are antecedents and consequences of CSR / Sustainability. Some of them have obtained empirical evidence, while some still seem inconsistent which deserves the attention of scholars in the future. Among these are antecedent factors such as board commissioner, company size, profitability and public ownership and for consequent factors is firm value. Research related to these factors will encourage businesses to improve governance so that they will be able to be sustainable business and finally have an impact on the firm value.

Considering that most businesses in Indonesia still use a narrow perspective on CSR, which is limited to meeting regulations and is cosmetic in the nature, scholars need to encourage businesses to expand their responsibilities not only because of fulfilling the regulations but also to contribute to environmental protection, develop communities, maintain resources, and doing philanthropy (Jamali & Mirshak, 2007, p 245).

The other research agenda relates to the dominance of researchers in Indonesia who tend to use the secondary data published by companies. The company disclosures regarding CSR activities are voluntary based. There is a tendency for companies to report good or bad things but appear to be good. In the realm of accounting, the term window dressing is known. If many companies do window dressing on CSR / Sustainability disclosures, there is a big possibility of inconsistency of research findings such as those found by Carey (Carey et al., 2017).

4.4 Phase 4: Structuring and writing the review

Based on the previous phase (analysis), we found that research on CSR/Sustainability is still growing in Indonesia. Theories and statistical techniques used in the research vary in its implementation depending on the perspective of the researcher. The antecedents and consequents of CSR/Sustainability reflects the tendency that CSR/Sustainability is perceived as the end goals of a company. Meanwhile the existence of CSR/Sustainability is trying to help to save the world from the environmental disasters because of the company operation, reduce the poverty in the world, and improve the people's welfare. We need to shift the paradigm of CSR/Sustainability in Indonesia from legal and cosmetics in nature into the systematic CSR/sustainability that would encourage business to integrate it in its business strategy and measure its impact on the basis of environment, the poor reduced and the welfare of the people.

GRI standard is not enough to reflect the sustainability of a business, because the standard merely measure if a company report containing the items described in the standard. Furthermore, the tendency to do window dressing in terms of reporting the CSR/Sustainability will cause a misleading for the decision maker (manajer, investor, government, and the other stakeholders). Using the offer of (Oshika & Saka, 2017) regarding the measurement of CSR/Sustainability (added value and financial stability) will provide more objective sustainability state of a company.

Good corporate governance mechanism ensure that the whole business process including CSR/sustainability will work better. Based on the previous analysis, there is still inconsistent findings regarding the ownership composition. The use of ownership composition as moderating variable in the relation between CSR/sustainability and firm value will ensure that the sustainable company will lead to such a sound firm value.

5. Conclusion and Limitation

5.1. Conclusion

CSR/Sustainability is an interesting field of study in Indonesia for the past 10 years. By conducting this study, academics can think further to deepen and sharpen CSR/Sustainability in a broader context. From the analysis and discussion carried out, several things can be concluded based on the problem stated.

5.1.1. Publication of Business sustainability in Indonesia (numbers, theories and methodologies used)? In terms of the number of articles published in journals registered with SINTA, the number has continued to increase over the past 10 years. The theoretical study used to discuss the phenomenon of CSr / Sustainability is dominated by legitimacy theory and stakeholder theory. While the most research methods are quantitative (76%), qualitative (20%), and mixed methods (4%). The most commonly found statistical tools are multiple regression for quantitative research and content analysis for qualitative research. The industries that get the most attention are manufacturing, banking and mining / mining.

5.1.2. Antecedents and consequences of business continuity in which sustainability research publications in Indonesia. The antecedent factors of CSR / Sustainability can be categorized into three major groups, namely financial performance, Good Corporate Governance (GCG) and company characteristics. Mediating variables used are financial contraint, stakeholder influence capacity (SIC), SRM (supplier relationship management), and independent commissioner. The moderating variables involved in the study are consumer knowledge, financial performance, and the religiosity of managers.

5.1.3. The consequent variables of CSR / Sustainability are consumer knowledge, financial performance, brand loyalty, tax aggressiveness, activity of company. The mediating variable used is CSR disclosure, while the moderating variable included is Good Corporate Governance.

5.1.4. Which research agenda can academics do in the future to build a better world? Future research agendas that can be formulated are:

a. Doing a research on the relation between csr/sustainability (using the Oshika and Saka's Key Performance Index) and the firm value.
b. Doing a research that positions GCG mechanism as moderating variable in the relation of CSR/sustainability and firm value.
c. Doing a research using company size as the control variable in the relation of CSR/Sustainability and firm value.

5.2. Limitations

To get a comprehensive picture of CSR / Sustainability research in Indonesia, the selection of journals that are the source of articles that are limited to 10 journals in each SINTA category eliminates the opportunity for CSR/Sustainability articles published in journals that are not included in the top 10 of each SINTA category. Adding the numbers of journal in each SINTA category will enhance the depth of the analysis.

Not all articles expressly convey research methods and operational definitions of research variables. This makes it difficult to draw general conclusions from the entire sample of articles used.

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