

ABSTRAK

Perkembangan industri *Event Organizer* (EO) di Indonesia menunjukkan tren yang semakin meningkat, seiring dengan tingginya kebutuhan akan jasa profesional dalam penyelenggaraan berbagai jenis acara. Salah satu tantangan yang dihadapi EO adalah pemilihan *meeting room* yang sesuai dengan kebutuhan spesifik acara. Penelitian ini bertujuan untuk mengembangkan sistem rekomendasi berbasis pengetahuan (*Knowledge-Based Recommendation*) guna membantu EO dalam memilih ruang rapat hotel yang optimal berdasarkan beberapa kriteria, seperti lokasi, kapasitas, paket layanan, harga, fasilitas ruangan. Sistem ini dirancang dengan memanfaatkan metode *knowledge-based filtering* dan pendekatan perhitungan kemiripan menggunakan algoritma *weighted cosine similarity* dan *weighted euclidean distance*. Model diuji dengan menggunakan 350 data sampel ruang rapat hotel. Hasil evaluasi menunjukkan bahwa sistem mampu memberikan rekomendasi yang cukup relevan, dengan nilai *Mean Average Precision* (MAP) sebesar 0,84 dan *Normalized Discounted Cumulative Gain* (nDCG) sebesar 0,90. Nilai-nilai ini menunjukkan bahwa sistem memiliki presisi dan kemampuan pemeringkatan yang cukup baik, meskipun masih terdapat ruang untuk perbaikan dalam hal optimasi peringkat hasil rekomendasi. Secara keseluruhan, sistem ini diharapkan dapat meningkatkan efisiensi proses pemilihan *meeting room*, memastikan kesesuaian dengan kebutuhan pengguna, serta memberikan pengalaman yang lebih baik dalam perencanaan acara oleh *Event Organizer*.

Kata Kunci: Sistem Rekomendasi, Knowledge-Based Recommendation, Event Organizer, Meeting Room, Cosine Similarity, Euclidean Distance

ABSTRACT

The development of the Event Organizer (EO) industry in Indonesia shows an increasing trend, along with the high demand for professional services in organizing various types of events. One of the challenges faced by EO is choosing a meeting room that suits the specific needs of the event. This study aims to develop a knowledge-based recommendation system (KBased Recommendation) to assist EO in choosing the optimal hotel meeting room based on several criteria, such as location, capacity, service packages, price, room facilities. This system is designed by utilizing knowledge-based filtering methods and a similarity calculation approach using the weighted cosine similarity and weighted euclidean distance algorithms. The model was tested using 350 sample data of hotel meeting rooms. The evaluation results show that the system is able to provide quite relevant recommendations, with a Mean Average Precision (MAP) value of 0.84 and a Normalized Discounted Cumulative Gain (nDCG) of 0.90. These values indicate that the system has quite good precision and ranking capabilities, although there is still room for improvement in terms of optimizing the ranking of recommendation results. Overall, this system is expected to increase the efficiency of the meeting room selection process, ensure suitability to users' needs, and provide a better experience in event planning by Event Organizers.

Keywords: Recommendation System, Knowledge-Based Recommendation, Event Organizer, Meeting Room, Cosine Similarity, Euclidean Distance