

ABSTRAK

Penelitian ini mengembangkan Sistem Rekomendasi Penulis Potensial berbasis web untuk membantu perusahaan percetakan dan penerbitan dalam mencari penulis yang relevan dengan kategori dan kebutuhan pasar secara cepat dan tepat. Sistem rekomendasi ini dibangun dengan menggunakan pendekatan *Content Based Filtering* dengan metode *Term Frequency-Inverse Document Frequency* (TF-IDF) untuk mewakili judul buku, sinopsis, dan kategori buku bentuk vektor. Metode *Cosine Similarity* dan *Weighted Cosine Similarity* digunakan untuk menghitung tingkat kemiripan dokumen dengan kriteria yang dicari. Sedangkan penerapan *Weighted Cosine Similarity* dilakukan dengan memberikan bobot pada fitur kemiripan teks dan jumlah eksemplar buku terjual untuk meningkatkan relevansi hasil rekomendasi. Hasil pengujian Sistem Rekomendasi Penulis Potensial memiliki rata-rata *Precision* sebesar 83%, *Mean Average Precision* (MAP) mencapai 83% dan rata-rata Hit Rate sebesar 89% . Hal ini menunjukkan sistem rekomendasi mampu mengukur tingkat kemiripan antar dokumen dengan baik sehingga dapat merekomendasikan penulis yang relevan. Hasil pengujian *usability* menunjukkan bahwa Sistem Rekomendasi Penulis Potensial termasuk baik dalam hal : *Efficiency* 72%, *Error Tolerance* 72%, *Ease of Learning* 75% serta cukup dalam hal *Effectiveness* 66% dan *Engagement* 69%.

Kata kunci: Rekomendasi, TF-IDF, *Cosine Similarity*, *Weighted Cosine Similarity*, Penulis

ABSTRACT

This research develops a web-based Potential Author Recommendation System to help printing and publishing companies in finding writers who are relevant to categories and market needs quickly and accurately. This recommendation system is built using the Content Based Filtering approach with the Term Frequency-Inverse Document Frequency (TF-IDF) method to represent book titles, synopsis, and vector book categories. The Cosine Similarity and Weighted Cosine Similarity methods are used to calculate the level of document similarity with the criteria sought. While the implementation of Weighted Cosine Similarity is done by giving weight to the text similarity feature and the number of copies of books sold to increase the relevance of the recommendation results. The test results of the Potential Author Recommendation System have an average Precision of 83%, Mean Average Precision (MAP) reaches 83% and an average Hit Rate of 89%. This shows that the recommendation system is able to measure the level of similarity between documents well so that it can recommend relevant authors. The results of the usability test show that the Potential Writer Recommendation System is good in terms of: Efficiency 72%, Error Tolerance 72%, Ease of Learning 75% and sufficient in terms of Effectiveness 66% and Engagement 69%.

Keywords: Recommended, TF-IDF, Cosine Similarity, Weighted Cosine Similarity, Author

