ABSTRAK

Sistem rekomendasi memainkan peran penting dalam membantu pengguna menemukan produk yang relevan dan beragam sesuai preferensi mereka. Namun, tantangan seperti masalah *cold start* dan rendahnya keberagaman rekomendasi masih sering dijumpai terutama pada pendekatan tunggal seperti *Content-Based Filtering* (*CBF*) dan *Collaborative Filtering* (*CF*). Penelitian ini bertujuan untuk membangun model *Weighted Hybrid Filtering* yang menggabungkan keunggulan *CBF* dan *CF* guna meningkatkan relevansi dan diversitas rekomendasi. Model dikembangkan dengan pemberian bobot skor prediksi dari kedua pendekatan menggunakan parameter α, dan dievaluasi menggunakan metrik *Precision@10, Recall@10, F1@10,* serta *Intra-List Diversity* (ILD@10). Hasil evaluasi menunjukkan bahwa model *hybrid* dengan $\alpha = 0.9$ mampu mencapai keseimbangan performa terbaik, dengan skor F1@10 sebesar 0.6659 dan ILD@10 sebesar 0.8022. Temuan ini membuktikan bahwa model hybrid mampu mengatasi keterbatasan masing-masing pendekatan tunggal serta memberikan rekomendasi yang lebih akurat dan bervariasi. Pendekatan ini berpotensi diterapkan dalam sistem rekomendasi kuliner untuk meningkatkan pengalaman pengguna secara signifikan.

Kata kunci: *sistem rekomendasi, hybrid filtering, cold start, content-based filtering, collaborative filtering, diversitas*

ABSTRACT

Recommender systems play a crucial role in helping users discover relevant and diverse products tailored to their preferences. However, challenges such as the cold start problem and low recommendation diversity still persist, especially in single-approach models like Content-Based Filtering (CBF) and Collaborative Filtering (CF). This study aims to develop a Weighted Hybrid Filtering model that combines the strengths of CBF and CF to enhance recommendation relevance and diversity. The model is constructed by weighting prediction scores from both approaches using a parameter α, and evaluated using metrics such as Precision@10, Recall@10, F1@10, and Intra-List Diversity (ILD@10). Evaluation results show that the hybrid model with α = 0.9 achieves the best performance balance, with an F1@10 score of 0.6659 and ILD@10 of 0.8022. These findings demonstrate that the hybrid model successfully addresses the limitations of each individual method while delivering more accurate and varied recommendations. This approach holds strong potential for implementation in culinary recommendation systems to significantly enhance user experience.

***Keywords**: recommender system, hybrid filtering, cold start, content-based filtering, collaborative filtering, diversity*