

**Komparasi Metode *Naive Bayes* Dan SVM Untuk Sistem Rekomendasi
Produk Kuliner UMKM Berdasarkan Analisis Sentimen Publik Pada Video
Review Youtube**

*(Comparison of Naive Bayes and Support Vector Machine Methods for a Culinary
MSME Product Recommendation System Based on Public Sentiment Analysis of
YouTube Review Videos)*

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ABSTRACT

This study aims to compare the Naive Bayes and Support Vector Machine (SVM) methods for developing a recommendation system for MSME culinary products based on public sentiment analysis of YouTube review comments. The comparison was conducted because both methods have different characteristics in processing informal, short comments that often contain more than one evaluative aspect within a single comment. The developed system was designed to identify sentiments across five culinary aspects, namely taste, price, service, facilities, and portion, with positive and negative polarities, so that the analysis results could be used as a basis for recommending MSME culinary products. This study applied several stages, including comment collection, text preprocessing, aspect-based labeling, TF-IDF feature extraction, and multilabel classification using the One vs Rest (OvR) approach with SVM and Naive Bayes methods. The evaluation results using an 80:20 train-test split showed that SVM outperformed Naive Bayes. In the global sentiment evaluation, SVM achieved an accuracy of 70.53%, whereas Naive Bayes obtained an accuracy of 66.91%. In addition, SVM demonstrated more stable performance in aspect-based evaluations. Therefore, SVM was selected as the primary method to support the recommendation system in this study. The entire process was integrated into a web-based system developed using the Laravel framework to provide a recommendation system that can be used in a practical and structured manner.

Keywords: *Comparison, Naive Bayes, SVM, recommendation system, culinary MSME, sentiment analysis, YouTube.*