

ABSTRACT

The advancement of information technology has increased public demand for goods delivery services. One company operating in this sector is Lalamove, which currently has low popularity in Indonesia. This low popularity is reflected in public opinions shared on social media, particularly on the X platform, which serves as a primary channel for users to express their experiences with Lalamove's services.

This issue is important to investigate as social media opinions can reflect customer perceptions and satisfaction levels. Sentiment analysis results can serve as a reference for the company to improve service quality and brand image. To date, there has been limited research analyzing public sentiment towards Lalamove in Indonesia.

This study conducts sentiment analysis on public comments from the X platform using the Multinomial Naive Bayes algorithm. The data was collected from January to December 2024 and processed through several stages including text preprocessing, term weighting using TF-IDF, and model evaluation using K-Fold Cross-Validation and Grid Search for alpha parameter optimization. Model performance was evaluated using accuracy, precision, recall, and F1-score metrics.

The results show that $K=10$ provided the best performance with an average accuracy of 80.31%, precision of 0.8163, recall of 0.8031, and F1-score of 0.8057. An alpha value of 1.5 was selected as the optimal parameter due to its consistent performance across folds. These findings are expected to serve as a valuable reference for Lalamove in formulating strategies to enhance its service quality and brand reputation.

Keywords: *Sentiment analysis, Lalamove, Multinomial Naive Bayes, X, TF-IDF, K-Fold Cross-Validation.*