

## **ABSTRACT**

*The advancement of technology has led to the emergence of new innovations to facilitate daily activities, one of which is in online transportation services. The number of online transportation service providers has resulted in increasingly fierce competition. One of the online transportation service applications, Maxim, has recently been slowly gaining ground in the ride-hailing market in Indonesia. However, Maxim still unable to balance its position with Gojek, which occupies the top position in Indonesia. This is due to Maxim having shortcomings in various aspects, such as the services provided and the functionality of the application. To identify these shortcomings, sentiment analysis was conducted on reviews submitted by users on the Google Play Store. The methods employed in sentiment analysis included data collection through web scraping, text preprocessing, data labeling, data weighting using TF-IDF, followed by classification using the Support Vector Machine (SVM) algorithm with a Linear kernel. Hyperparameter optimization was also applied using GridSearch across 3 scenarios of data training and testing ratios: 60:40, 70:30, and 80:20. Evaluation was performed using a confusion matrix. The best accuracy result was obtained with a 70:30 ratio model, achieving 89.82% accuracy, 92.66% precision, 94.09% recall, and 93.38% F1 score. The evaluation using the ROC-AUC curve yielded an AUC value of 0.8505. The sentiment analysis results tended to lean towards positive sentiment, indicating a level of user satisfaction with the Maxim application. Based on these sentiment results, developers can ascertain what aspects need to be maintained and improved in the Maxim application.*

*Keywords: Sentiment Analysis, Online Transportation, Support Vector Machine.*