

ABSTRACT

The economic growth of Indonesia in the second quarter of 2022 was quite impressive, reaching 5.4%. However, in the fourth quarter of 2022, the projected economic growth of Indonesia is expected to experience a significant decline compared to the previous two quarters. This economic downturn is influenced by changes in stock prices, including those of Grab's stock. Therefore, sentiment analysis is needed to understand the relationship between stock price changes and public sentiment on Twitter related to Grab. The Support Vector Machine (SVM) classification method is used in this analysis. Evaluated comments will be classified as either positive or negative. The classification process includes data preprocessing, TF-IDF weighting, and the implementation of the Support Vector Machine algorithm, including handling data imbalance. The data is divided with a ratio of 70% for training and 30% for testing. The performance evaluation of the Support Vector Machine classification model resulted in an accuracy of 87%, precision of 90%, recall of 91%, and an F1-score of 91%. The correlation analysis between stock and comments using the lambda test showed a p-value of 0.562 with a correlation coefficient of 0.045. The results indicate that there is no significant relationship between stock price changes and public sentiment.

Keywords: Grab, Support Vector Machine Classification, Sentiment Analysis, Correlation Analysis, Lambda Test