

## ABSTRACT

*Tokopedia and Shopee are e-commerce that have dominated the market in Indonesia in recent years by being at the top of the e-commerce ranking. Even though reviews on the application have rating parameters such as stars with a range of 1-5, there are also those who just give stars and don't match the review. For this reason, sentiment analysis has many benefits, one of which is to find out whether customers have a good response to the product or not and this can be an input for the future development of the product's business. Because of this benefit, many fields use sentiment analysis, one of which is application providers on Google Play Store to find out the quality of the application by looking at the reviews given on the application.*

*Therefore, to overcome the problems that have been described, sentiment analysis using the Naïve Bayes algorithm and Support Vector Machine using the TF-IDF method is needed. With the TF-IDF method, you can group words based on the results of reviews on the Tokopedia and Shopee applications, the results of the classification will be displayed on the website. In order to overcome the ineffectiveness of the rating system in the form of stars in the Google Play Store application using the Naïve Bayes algorithm and Support Vector Machine with TF-IDF.*

*Based on the results of sentiment analysis stopwords on reviews of the Tokopedia and Shopee applications using the Naïve Bayes algorithm and Support Vector Machine (SVM) with the TF-IDF method, it can be seen that there is a significant difference in performance between the two. The Naïve Bayes algorithm shows a higher level of accuracy in Tokopedia reviews (76%) compared to Shopee (63%). Apart from that, metrics such as precision, recall, and f1-score for each class (negative, neutral, and positive) are also better on Tokopedia while the SVM algorithm also shows higher accuracy on Tokopedia (79%) compared to Shopee (66%), with other evaluation metrics superior to the Tokopedia dataset. Overall, the test results show that Support Vector Machine is superior to Naïve Bayes in terms of sentiment classification performance.*

*Keywords: Sentiment, Naïve Bayes, Support Vector Machine, TF-IDF.*