

ABSTRACT

The implementation of the Covid-19 vaccination in Indonesia has received various pro and contra opinions from the public. One of the vaccines provided by the Indonesian government is Astrazeneca. The Astrazeneca vaccine used to be controversial amongst the public regarding its halalness and safety. Nowadays, Twitter has become a platform for users to express concerns and opinions about the Covid-19 vaccine. In this study, data collection taken from Twitter was carried out using the snsrape library with a total of 3105 tweets obtained from the period May 1, 2021 to June 30, 2021. The dataset that had been collected was then preprocessed to optimize the data. After passing the preprocessing stage, the data were labeled using a lexicon-based dictionary which resulted in 1275 tweets with a positive opinion label and 1830 tweets with a negative opinion label. This study aims to examine the performance of Naïve Bayes and Support Vector Machine by adding a weighting technique using TF-IDF (Term Frequency-Inverse Document Frequency). The evaluation results show that the Support Vector Machine has better performance with 87.27% accuracy, 90.41% precision, 77.34% recall, and 83.37% f1-score. compared to Naïve Bayes with 76.81% accuracy, 72.4% precision, 70.7% recall, and 71.52% f1-score.

Keywords: *Sentiment analysis, Astrazeneca Vaccine, Naïve Bayes, Support Vector Machine, Twitter*