ABSTRACT

One effort that's been considered quite effective in overcoming the COVID-19 pandemic in an effort to suppress health problems due to the coronavirus is the provision of vaccines. Vaccination raises concern among the public because it has mild side effects. Responses to these concerns are usually expressed on social media, the majority of the community provides responses and opinions on concerns related to vaccination through social media, one of the social media used as an option to convey these responses and opinions is Twitter.

This study aims to identify the words that appear most often, right each opinion that appears into the category of positive and negative sentiments, and find out influential Twitter accounts related to the COVID-19 vaccination program. The method used is sentiment analysis assisted by three machine learning algorithms, namely Naive Bayes Classifier, Decision Tree and K-Nearest Neighbors, then Word Cloud analysis and Social Network Analysis.

The results of the classification based on emotions formed 5 expressions of fear, sadness, surprise, joy, and anger. The majority is dominated by anger emotions, meaning that the majority of the public's response to the COVID-19 vaccination program was identified by R Studio as a form of anger. The Naive Bayes Classifier model gives an Accuracy result of 84.75 percent, the Decision Tree model gives an Accuracy result of 85.08 percent and KNN gives an Accuracy result of 87.48 percent. The Social Network Analysis method produces actors who play an important role in the network, it is known that the actor is user @jokowi.

Key word: vaksinasi, *sentiment analysis, social network analysis.*