ABSTRACT

Twitter is a social media platform that many people use to express thoughts, interests and opinions on many things. These opinions certainly have varying values, some are positive, negative, or neutral. These views and opinions can be used as a data source to assess sentiment on a topic on Twitter. Currently the world is being hit by the Covid-19 pandemic, a disease caused by the spread of viruses from human to human so that human movement and activities are limited, with the aim of breaking the chain of spread of the covid-19 virus among humans. Restrictions on human activities affect all aspects of people's lives including education. Teaching and learning activities change from offline to online learning, where interaction is done through the screen by utilizing technology. Online learning regulations set by the government is a new thing that is felt by the majority of students in Indonesia, thus giving rise to a variety of opinions and views expressed by students through social media tweeters. Students in particular shared their comments on social media Twitter about the continuity of online learning during the pandemic. Therefore, researchers want to conduct sentiment analysis to find out the tendency of students' comments on new regulations in learning during the pandemic in Indonesia, whether positive, negative, or neutral.

In conducting sentiment analysis to determine twitter users' responses to online learning during the pandemic, researchers used classification algorithms that have a high level of accuracy, researchers compared 3 classification algorithms namely, classification algorithms Naïve Bayes, K-Nearest Neighbor (K-NN) and C4.5. The stages carried out in this study are by means of prepocessing data, data processing, classification, and evaluation. The resulting model is tested and evaluated by looking at accuracy, precision, recall, and F1-Measure values. After comparing the three algorithms obtained the highest accuracy that is 60.80% by using the classification algorithm K-Nearest Neighbor (K-NN). Accuracy results obtained using TF-IDF feature extraction of 60.80%, specificity of 40.73%, recall (sensitifity) of 72%, and F1-Measure of 38.43% Sentiment analysis obtained in this study shows that twitter users in Indonesia give more neutral comments.

Keywords: Twitter, Covid-19, Online Learning, Sentiment Analysis, Classification.