ABSTRACT

Covid-19 is a type of virus that can be transmitted to humans through droplets, when in contact with droplets, non-specific initial symptoms appear, such as fever, cough, anosmia, shortness of breath which can then recover spontaneously or take a long time. Covid-19 was discovered in Wuhan, China in December 2019 and has spread rapidly to various parts of the world. The increase in the number of covid has made the government hold a covid vaccine, in which this vaccine and covid are often the subject of discussion among the public, especially Twitter social media users. Twitter is an application that aims to communicate and exchange messages with fellow Twitter users. Researchers took data from Twitter as many as 15,740 response data from the public. However, not many people also respond favorably to vaccines. The results of the analysis of community responses yielded the best accuracy of 88%. This can determine the accuracy of public responses about vaccines by using data mining implementation using the C4.5 Decision Tree algorithm. Public responses to predict responses about the covid vaccine into the Positive, Neutral and Negative categories. From this covid vaccine research, the highest accuracy result is 88%. From the results of the responses on Twitter regarding the vaccine, the precision results are 73.33% and recall 72.66% resulting in an f1-measure of 73%, in addition to the f1-measure, in this study, applying K-Fold Cross Validation and producing an accuracy value of 73 ,85% of the percentage obtained, the model is classified as sufficient. The results of this study are expected to provide useful information for stakeholders, especially the Health Department in making decisions for the COVID-19 vaccine.

Keywords— Decision Tree Algorithm C4.5 , Covid-19, Sentiment Analysis