Abstract

Sentiment trend analysis is a technique used to analyze an opinion expressed in the form of text within a certain time unit to see the trend of a topic whether in a positive or negative based on the grouping of sentiments. The sentiment trend analysis process with the topic of Large-Scale Social Restrictions in the city of Jakarta is carried out using the SVM and TF-IDF methods for term weighting and Grid Search for hyperparameter optimization and curve, bar diagrams to see the resulting trends. After testing by following the test scenario, it shows that by eliminating stopword removal and using all other preprocessing, including case folding, data cleansing, tokenization, and lemmatization, will affect the accuracy of the classification process carried out which provides the most optimal accuracy of 87.33% which indicates the accuracy of the data classified correctly. After getting a model with the most optimal accuracy, it will then be used for trend classification on predictive data. Where it is obtained that the positive trend dominates overall compared to the negative number which only occurs on 4 days out of a total of 19 days as a whole. So, public sentiment towards the DKI Jakarta government's policy in enforcing the PSBB received a positive response from the community. Even though at some points (day shifts) there is a slight increase, this is not too conspicuous or not sharp and does not occur significantly compared to the downward trend. Where it can be seen that the trend slowly immediately started to decline from the first day of September 10, 2020, to September 28, 2020. The trend increased only on the 13th, then slightly increased on the 21st and 24th until September 25, 2020. Where this increase is not too sharp.

Keywords: SVM, TF-IDF, *Sentimen Analysis, Grid Search, Cross Validation*