

ABSTRACT

Twitter is a social media that is used to convey opinions, exchange information, upload videos and photos. On social media, twitter, the exchange of information is fast becoming an advantage, so it is often used to convey news and opinions in the form of issues that occurred during the era of government at that time. The effects and benefits of sentiment are such that research on analytical sentiment is growing rapidly. There are several stages in this research including the stages of data collection, data cleaning, feature extraction, data classification using the Support Vector Machine method and topic modeling using the Latent Dirichlet Allocation method. In this study, we will classify sentiments and model the topic of society on issues that occurred when Joko Widodo became president which was taken through the social media Twitter. With this system, it can help analyze opinions based on people's perspectives on social media twitter. This system will classify opinions circulating on twitter, which will later be categorized into positive and negative sentiment categories.

The results of this research took data on twitter taken from 23 September 2018 to 15 December 2020 as many as 1200 data in the form of 600 negative data and 600 positive data. It conclusion, this sentiment classification system and topic modeling works using the Support Vector Machine and Latent Dirichlet Allocation methods. In this study, accuracy was 86.39%, precision was 85.75%, recall was 85.86%, and F1 score was 85.79% with a total of 3236 features. Meanwhile, for topic analysis using Latent Dirichlet Allocation, it got a perplexity value of 7.0693 for positive sentiment and 7.2897. on negative sentiment.

Keywords: *Text Classification, Support Vector Machine, Topic Modeling, Latent Dirichlet Allocation, Twitter.*