

Abstract

Information on moving the Indonesian capital from Jakarta to East Kalimantan certainly raises the pros and cons conveyed by the Indonesian people through the Twitter social network. However, the pros and cons comments are of course varied, accompanied or not accompanied by arguments or even completely unrelated to the topic under discussion. User limitations in filtering out that information will certainly make it difficult for the public or even the government to analyze the information contained in the tweet. Therefore, a system was built that could classify tweets automatically into three classes, namely non-arbitration, argument and unknown. The method used in this research is Multinomial Logistic Regression (MLR). MLR is a generalization method of Logistic Regression and is used to classify 3 or more classes. Before the classification process is carried out, the tweet must be preprocessed in order to make the tweet clear of all existing noise. Feature extractions used in this study include unigram, bigram and trigram. In this study, there are 12 test scenarios and comparison methods, namely Artificial Neural Network (ANN). Of all the test scenarios the best results for the MLR method are SRU with an accuracy of 41,30%, while for the ANN method namely the RU scenario with an accuracy of 45,10%.

Keywords: *multinomial logistic regression, artificial neural network, backpropagation*
