

Klasifikasi Sentimen Masyarakat terhadap Kenaikan Harga BBM Menggunakan CNN

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Abstract

The policy of changing fuel prices by the government is carried out every year. To this policy, the public gave responses that were categorized as positive, negative or neutral sentiments. The community's response was conveyed through tweets on the Twitter application. Based on the public's response to the policy, sentiment classification can be carried out using data mining classification techniques. Some research has been carried out on classification techniques using deep learning and machine learning methods. In general, deep learning methods get better results, and this research will be approached using the CNN method. The system stages start from crawling data, labeling, and preprocessing which consists of cleaning, case folding, tokenization, normalization, removing stopwords, and stemming, classification using CNN and evaluation using 10-Cross Validation. The dataset used is 17,270. The results obtained show that the developed classification system is quite high with the highest accuracy of 87%, 93% recall, 93% precision, and 90% F1 score. In-depth analysis of the classification results and understanding of sentiment towards rising fuel prices can also provide valuable insights.

Keywords : Sentiment Classification, Fuel up, CNN, SMOTE, K-Fold Cross Validation