

Abstract

Opinions and complaints expressed through tweets can be processed to determine the sentiments contained within those tweets. In this study, sentiment analysis is conducted using machine learning. The use of machine learning facilitates data collection and processing, which saves time and cost. The data classification process in this research involves tweets containing positive and negative sentiments regarding government policies, specifically the increase in fuel prices. The classification methods used in this study are Convolutional Neural Network (CNN) and Support Vector Machine (SVM) as the benchmark. Tweet data is collected using a crawling method. The research results, evaluated using Confusion Matrix, show that the SVM algorithm achieves a relatively high accuracy of 85% when using 510 max features and an 80:20 ratio, compared to the CNN algorithm, which achieves its highest accuracy at 74% using 300 max features and an 80:20 ratio. In terms of cross-fold validation, the CNN achieves an average accuracy of 78% with k=10, while SVM achieves 87%