Abstract

The policy of increasing fuel prices has been carried out frequently in recent years, due to the instability of international price fluctuations. This study uses sentiment analysis to examine fuel price increases and their impact on public sentiment. Sentiment analysis is a data processing method to obtain information about an issue by recognizing and extracting emotions or opinions from existing texts. The method used is Word2vec Continuous Bag of Words (CBOW) and Skip-gram. Testing uses different vector dimensions in each architecture and uses a CNN-BiLSTM deep learning hybrid which performs better on sizable datasets for sentiment categorization. The results showed that the CBOW model with 300 vector dimensions produced the best performance with 87% accuracy, 87% recall, 89% precision and 88% F1 score.

Keywords: CNN-BiLSTM, Hybrid deep learning, Sentiment analysis, Twitter, Word2vec.