ABSTRACT

The "Kabinet Merah Putih", Indonesia's latest cabinet, has drawn public attention due to the addition of new ministries. Sentiment analysis is a process for classifying opinions, emotions, or attitudes towards a subject based on text data. BERT (Bidirectional Encoder Representations from Transformers) is one of the models that can be trained for sentiment analysis. This research aims to analyze the sentiment and understand public perception on X towards the "Kabinet Merah Putih" using the BERT model. This research provides recommendations for the government to evaluate the cabinet's formation based on public perception. The dataset was obtained by scraping 18.307 comments, with 4.472 manually labeled and preprocessed. This dataset was then split into 70% for training, 15% for validation, and 15% for testing. Fine-tuning and hyperparameter tuning were performed on the pre-trained IndoBERTweet model to find the configuration with optimal performance. The best model achieved an accuracy of 83,76% on the test data, performing well in predicting positive and negative sentiments, but experiencing difficulty with the neutral class due to ambiguities like sarcasm. The prediction results were dominated by neutral (51,38%) and negative (42,29%) sentiments while the portion of positive sentiment was very small, at only 6,33%.

Keywords: Sentiment Analysis, BERT, IndoBERTweet, Kabinet Merah Putih