ABSTRACT

Sentiment analysis is an important method to understand public views and opinions on a particular event or entity. In the context of the 2024 presidential election in Indonesia, sentiment analysis becomes crucial to understand public support and opinions. In this study, we used the Support Vector Machine (SVM) method to perform sentiment analysis on public comments on YouTube related to the 2024 presidential election. The analysis process starts with data preprocessing, including steps such as tokenization, normalization, stop words removal, and stemming. Next, the data is divided into 70% for training and 30% for testing. We conducted a grid search to determine the best parameters for the SVM model, such as kernel and parameter C. The labels analyzed consist of positive, negative, and neutral sentiments, representing public sentiment towards presidential candidates. The results of the study indicate that the SVM model is able to classify sentiment comments with satisfactory accuracy after performing grid search for the best parameter determination. The Anies and Prabowo models show very good performance with high precision, recall, and F1-scores for all sentiment labels, around 94%, 92%, and 93% for Anies, and around 96%, 97%, and 96% for Prabowo. Meanwhile, the Ganjar model has lower performance with precision around 83%, recall around 80%, and F1-score around 81%.

Keywords: president election; sentiment analisys; Support Vector Machine; youtube; vader lexicon, grid search