Tweet Sentiment Analysis Ahead of the 2024 Presidential Election Using the Naive Bayes Classifier Method

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ABSTRACT

This study aims to analyze sentiment from Twitter/X user tweets related to the 2024 Presidential Election (Pilpres) using the Naïve Bayes Classifier (NBC) method. In today's digital era, social media has become one of the main sources of information for understanding public opinion on political issues. The Naïve Bayes Classifier was chosen due to its effectiveness in classifying text based on probabilities and word associations.

Data was collected through a crawling technique using keywords related to the 2024 Presidential Election, covering various aspects such as support for candidates, political criticism, and election-related issues. Through this process, a total of 4,818 tweets were obtained, consisting of 1,579 positive tweets, 1,432 negative tweets, and 1,807 neutral tweets.

The sentiment analysis process was carried out through several stages, including data preprocessing, model training using Naïve Bayes, and evaluation of classification results. The findings indicate that the developed model achieved an accuracy of 77%, precision of 77%, recall of 76%, and an F1-score of 77%. The evaluation was conducted by splitting the dataset into 80% training data and 20% testing data from the total of 4,818 tweets.

Keywords: Sentiment Analysis, Twitter/X, Naïve Bayes Classifier, 2024 Presidential Election, Crawling Data, Machine Learning.