ABSTRACT

SENTIMENT ANALYSIS OF CUSTOMER REVIEWS ON DANA APPLICATION SERVICES USING THE NAÏVE BAYES CLASSIFIER ALGORITHM

by

Rachel Margareth Simamora 20103170

The rapid advancement of information and communication technology has had a significant impact on various aspects of life. One of the prominent impacts is the ease with which people can conduct transactions without the need to physically meet. E-wallets, as a consequence of technology, facilitate seamless financial transactions. Among those e-wallets, DANA has gained popularity and a large user base. This research aims to analyze customer sentiment regarding DANA application services by using Naïve Bayes Classifier algorithm. Data is extracted from customer reviews on Twitter, categorized into positive, negative, and neutral sentiments. By implementing Naïve Bayes Classifier. Sentiment analysis is a valuable discipline for deciphering opinions, emotions, evaluations, and attitudes expressed in written language. By utilizing the Naïve Bayes Classifier, analyzing customer comments about the DANA app on Twitter. Twitter is an ideal platform for sentiment analysis because of its role as a place to vent and express opinions. The results of the researcher's experiments, based on 451 training data and 113 test data points, resulted in an accuracy of precision values of 70%, 97% and 89%, f1- score of 81%, 97%, and 42%, and recall of 98%, 97% and 28%. Also, Naïve Bayes classification is able to produce the highest accuracy of 80%. The results show a reliable level of accuracy in classifying sentiment in the form of positive results 122 tweets, negative 228 tweets and neutral 214 tweets from customer posts.

Keywords: e-wallet, DANA, Naïve Bayes Classifier, sentiment analysis, twitter