ABSTRACT

Online reviews on platforms such as Google Play Store serve as an important source of feedback for companies to evaluate and improve the quality of their digital services. One application that has received many reviews is BRImo, a mobile banking application developed by Bank Rakyat Indonesia (BRI) that provides various financial transaction services. Reviews of this application reflect diverse positive and negative user experiences that require further analysis to understand user sentiment. This study aims to develop a sentiment analysis model capable of classifying sentiments in Indonesian-language reviews, analyze user sentiments toward the BRImo application based on classification results, and compare the performance of several kernel types in the Support Vector Machine (SVM) method to identify the most suitable kernel for achieving optimal model performance. The dataset used, after the undersampling process, consists of 108 Indonesian-language reviews, comprising 54 positive and 54 negative samples. The Term Frequency–Inverse Document Frequency (TF-IDF) method was employed for feature extraction. Sentiment classification was performed using Support Vector Machine (SVM) with three kernel types tested: Linear Kernel, RBF Kernel, and Polynomial Kernel. The results indicate that the Linear and RBF kernels achieved identical performance, with an accuracy of 0.95, recall of 0.89, precision of 0.89, and f1-score of 0.89. Meanwhile, the Polynomial kernel demonstrated the best performance, achieving an accuracy of 0.96, recall of 0.86, precision of 0.98, and f1-score of 0.91.

Keywords : Sentiment Analysis, BRImo, Support Vector Machine, Kernel, TF-IDF