ABSTRACT

Fintech in the digital era has brought innovation to financial transactions, such as e-wallets. One common need among people is interbank transfers, but high transfer fees often pose a barrier. To address this issue, some e-wallet applications, including Flip, offer interbank transfers without additional administrative fees, making it a beneficial choice for users. However, Flip has some drawbacks, such as frequent transaction failures, difficulties in refund processes, and poor customer service. To determine the extent of user complaints about the Flip app on the Play Store, a research study was conducted using aspect-based sentiment analysis with the Support Vector Machine (SVM) algorithm. The aim was to provide sentiment analysis results on the Flip app, which could serve as a reference for Flip developers to make improvements and innovations to the app, as well as a reference for users to utilize Flip appropriately. The aspects used in this study were speed, security, and cost based on Flip's review data on the Play Store. The SVM model used provided good results in predicting sentiment for each aspect, with accuracies of 0.89 for speed, 0.90 for security, and 0.93 for cost. The GridSearch and simple splitting methods yielded similar and consistent results, while K-Fold Cross Validation provided slightly lower results but still remained a strong approach to measure the model's performance. Overall, aspect-based sentiment analysis using the SVM algorithm was effective and reliable in classifying user reviews' sentiment on the Flip app. Based on word clouds for each aspect of the Flip app, it can be seen that users often mention words related to transactions, transfers, and costs. The cost aspect tends to receive positive sentiment, while dominant negative sentiment is given to the security aspect by users. Therefore, in order to enhance user experience, it is important to focus on providing fast, secure services, and free administrative costs for users.

Keywords: aspect-based sentiment analysis, support vector machine, reviews