ABSTRACT

Digital wallets like DANA and GoPay are increasingly popular payment tools. This study analyzes user sentiment toward these platforms using Naive Bayes and Support Vector Machine (SVM) methods, optimized with Particle Swarm Optimization (PSO). Data was collected from user reviews on Google Play Store and X. The results show that PSO improves the performance of both methods. For DANA, Naive Bayes saw a 2% precision increase, while SVM improved recall by 8%, precision by 4%, accuracy by 5%, and f1-score by 1%. For GoPay, Naive Bayes recorded a 2% increase in precision and a 1% rise in f1-score, while SVM improved recall, accuracy, and precision by 1% and f1-score by 4%. SVM showed higher accuracy than Naive Bayes, with a 7% difference for both platforms. Sentiment analysis revealed more positive sentiments for both wallets, focusing on reliability, responsiveness, user-friendliness, personal needs, and efficiency. DANA's positive sentiments emphasized feature benefits, ease, and security, while negatives involved application reliability and fund security. GoPay's positive sentiments centered on efficiency and security, while negatives highlighted reliability and customer communication issues.

Keywords: Sentiment Analysis; DANA; GoPay; Particle Swarm Optimization