

***SENTIMENT ANALYSIS OF USER SATISFACTION REVIEWS FOR THE
BRKS MOBILE APPLICATION ON GOOGLE PLAY STORE USING
RANDOM FOREST***

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ABSTRACT

User reviews of mobile banking applications on the Google Play Store are an important source for evaluating user satisfaction and service quality. However, the large volume of reviews makes manual analysis inefficient. This study aims to classify user reviews into three sentiment categories: positive, negative, and neutral, using the Random Forest algorithm. The methodology includes web scraping to collect 2,500 reviews, the addition of 49 reviews from the App Store to address class imbalance, and text preprocessing that produced 2,020 clean datasets. Feature weighting was performed using TF-IDF, followed by classification using Random Forest. Model evaluation using a confusion matrix showed an Accuracy of 80.94%, Precision of 79.62%, Recall of 78.76%, and F1-Score of 78.77% on 404 test data. Overall, Random Forest performs well in sentiment classification of mobile banking user reviews.

Keywords: *Sentiment Analysis, Random Forest, Confusion Matrix, Mobile Banking, Classification*