

## INTISARI

Pesatnya perkembangan layanan mobile banking menuntut bank untuk menyediakan aplikasi yang stabil dan responsif terhadap kebutuhan pengguna. Bima Mobile, aplikasi milik Bank Jateng, memiliki rating rata-rata 3,8 di Google Play Store dan masih menerima berbagai keluhan, terutama terkait masalah login dan error server. Kondisi ini menunjukkan perlunya analisis terhadap sentimen pengguna sebagai dasar evaluasi kualitas aplikasi. Penelitian ini bertujuan untuk menganalisis sentimen ulasan pengguna aplikasi Bima Mobile dengan mengklasifikasikan opini ke dalam kategori positif dan negatif menggunakan metode Multinomial Naïve Bayes. Data penelitian berupa 5.032 ulasan pengguna yang dikumpulkan melalui teknik web scraping dari Google Play Store. Pelabelan sentimen dilakukan secara otomatis menggunakan IndoBERT, kemudian data direpresentasikan dalam bentuk fitur numerik menggunakan metode TF-IDF dan diseimbangkan dengan Synthetic Minority Over-sampling Technique (SMOTE). Hasil pengujian menunjukkan bahwa model Multinomial Naïve Bayes mencapai nilai akurasi sebesar 93,55% pada data uji. Distribusi hasil klasifikasi menunjukkan bahwa 60,78% ulasan diklasifikasikan sebagai sentimen negatif, sementara 39,22% lainnya termasuk sentimen positif. Evaluasi tambahan menggunakan 10-Fold Cross Validation menghasilkan rata-rata akurasi sebesar 94,04%, yang mengindikasikan performa model yang stabil dan konsisten. Hasil penelitian ini diharapkan dapat menjadi bahan evaluasi bagi Bank Jateng dalam meningkatkan kualitas layanan aplikasi Bima Mobile.

Kata Kunci : Analisis Sentimen, mobile banking, Bima Mobile, Naïve Bayes, Ulasan Pengguna

## **ABSTRACT**

*The rapid growth of mobile banking services requires banks to continuously improve application quality in order to meet user expectations. Bima Mobile, the mobile banking application developed by Bank Jateng, has an average rating of 3.8 on the Google Play Store and still receives numerous user complaints, particularly related to login issues and server errors. This condition highlights the importance of sentiment analysis to understand user perceptions of the application. This study aims to analyze user sentiment toward the Bima Mobile application by classifying reviews into positive and negative categories using the Multinomial Naïve Bayes method. The dataset consists of 5,032 user reviews collected through web scraping from the Google Play Store. Sentiment labels were automatically generated using IndoBERT, after which the data were transformed into numerical feature representations using TF-IDF and balanced using the Synthetic Minority Over-sampling Technique (SMOTE). The experimental results show that the Multinomial Naïve Bayes model achieved an accuracy of 93.55% on the test dataset. The classification results indicate that 60.78% of the reviews were classified as negative, while 39.22% were classified as positive. Further evaluation using 10-Fold Cross Validation produced an average accuracy of 94.04%, demonstrating that the model provides stable and consistent performance. The findings of this study are expected to provide valuable insights for Bank Jateng in evaluating and improving the quality of the Bima Mobile application.*

*Keywords : sentiment analysis, mobile banking, Bima Mobile, Naïve Bayes, user review*