

ABSTRACT

The development of digital technology in Indonesia has brought significant changes in various sectors, including the government sector through the implementation of e-government. The success of e-government implementation is reflected in Indonesia's relatively good ranking in the UN E-Government Survey. One of the applications that supports e-government is Jamsostek Mobile (JMO), the official application from BPJS Ketenagakerjaan, designed to provide information related to social security programs. As technology continues to develop, the quality of services in applications like JMO becomes crucial to maintaining service stability and improving user satisfaction.

This study aims to analyze the service quality of the JMO application through eight key dimensions: Responsiveness, Service Reliability, Ease of Use, Competence, Access, System Reliability, Timeliness, and Security. The analysis was conducted using text classification and topic modeling methods, based on reviews collected from the Google Play Store from January 1, 2024, to December 31, 2024. The IndoBERT model, a variant of Bidirectional Encoder Representations from Transformers (BERT), was used to analyze sentiment in user reviews. At the same time, topic modeling was performed to identify the most positive and negative dimensions.

The results of the study showed that 58% of user reviews had a positive sentiment, while the remaining 42% were negative. The dimension of service reliability received the highest positive sentiment, reflecting user satisfaction with the fulfillment of promised services, accuracy, and timeliness. In contrast, the dimension of responsiveness received the highest negative sentiment, reflecting user complaints about slow responses and confirmations regarding the social security services they received.

Topic modeling identified the main topics in the reviews based on dimensions with the highest positive and negative sentiments. In the service reliability dimension, positive topics focused on user satisfaction with the ease and benefits of the services provided. On the other hand, in the responsiveness dimension, negative topics predominantly related to complaints about the inability of customer service to provide solutions to users' issues.

This study is expected to provide valuable insights into user sentiment regarding the JMO application and identify areas of service that need improvement.

Keywords: Service quality, e-government, Jamsostek Mobile, text classification, topic modeling, sentiment analysis, BERT