ABSTRACT

Artificial intelligence (AI) has been a significant shift in information and communication technology over the last ten years. By the beginning of 2023, the AI industry had made significant progress with the introduction of ChatGPT by OpenAI. The use of AI was not only limited to the telecommunications sector, but also extended to the banking, manufacturing, services, and even government sectors. On July 25, 2023, OpenAI released ChatGTP as an Android application, attracting global attention. Data for this research was taken from Google Playstore, a social media platform used to share unstructured data such as text, videos, and images over the Internet.

The aim of the research is to find out the main user sentiment and topics related to the quality of Android ChatGPT application service, by analyzing User-Generated Content (UGC) on Google Playstore based on user experience. The research method used in this study was sentiment analysis with the RoBERTa algorithm and topic modelling using LDA. After learning the comparison of Naive Bayes, SVM, and RoBerta algoritms. It produced the ROBERTa algoritm with the highest accuracy of 72% for dimension classification and 94% for sentiment classification. Positive sentiment was 86.17% and Negative sentiment was 13.83%. The dimensions used to measure service quality are Content Quality, Engagement, Reliability, Usability and Privacy.

The findings in this study show that the quality of the Android ChatGPT app service is mostly positive in the dimensions of Engagement, Reliability and Content Quality, whereas the Privacy and Usability dimensions have a negative view of the application service quality. And the modelling topic focuses on the exploration of positive and negative sentiment. On the positive sentiment that discusses the information given by a satisfying application, the features of darkmode and the user-interface display that provides user ease, user engagement with an application, a reliable application, an application that provides awake privacy. At the negative sentiment there are the dimensions of Privacy and Usability, with the knowledge about the quality of service that emerges from the user experience ChatGPT Android application can evaluate and provide better service quality especially on the privacy and usability dimensions.

Keywords: ChatGPT, *Artificial intelligence, service quality, sentiment analysis, topic modelling, RoBERTa*