

Abstract— User review analysis plays an important role in understanding customer perceptions of the services and features provided on online transportation applications. This study aims to conduct aspect-based sentiment analysis of user reviews on the Gojek application on Google Play Store using a combination of Bidirectional Encoder Representations from Transformers (BERT) and Bidirectional Long Short-Term Memory (BiLSTM) methods. These methods were chosen for their ability to deeply understand word context through natural language representations and effectively capture sequence patterns in text data. A multi-aspect approach was used to evaluate three main aspects: app performance (app performance and stability), services (transportation services and others), and pricing (promotions or discounts). The data used in this study consists of user reviews taken from the Google Play Store in Indonesian. This study is expected to produce a model capable of classifying sentiment based on these aspects into Positive, Negative, or Neutral categories with high accuracy. The data used consists of 10,000 reviews and 3 aspects (Performance, Services, and Price). Based on the test results obtained, the BERT-BiLSTM method achieved an accuracy of up to 0.98. The results showed that the performance of the BERT-BiLSTM was improved compared with other similar models.

Keywords— *Sentiment Analysis, Multi-Aspect, BERT, BiLSTM, Gojek.*

