

## ABSTRACT

Since its initial release in 2010, Gojek has remained the most used online transport service by Indonesians. Multi-aspect sentiment analysis is a method applied to determine user sentiment towards various specific aspects in their comments. By applying this method, there will be deeper understanding of user views regarding various components of the Gojek service. The method employed was data scraping from web crawling of Google Play Store user reviews and data preprocessing, i.e., cleaning, case folding, tokenizing, stopword removal, normalization, and stemming. A hybrid CNN-LSTM model was employed since it is capable of extracting spatial features using CNN and long-term dependencies using LSTM. The seven most crucial aspects of the Gojek service, i.e., access, time, comfort, information, customer service, availability, and safety, were the central themes of this research. The main objective of this research is to analyze user sentiment across these key aspects using a deep learning-based multi-task approach, in order to gain actionable insights for improving service quality. The performance of the models was evaluated on accuracy as the primary metric, and the experiments attempted three model sizes: 32, 64, and 128 hidden units. Among them, the 64-unit model performed best overall consistently, with both aspect and sentiment classification accuracy being satisfactory. While the 128-unit model achieved slightly better accuracy on some sentiment tasks, it exhibited overfitting. The 64-unit model, however, gave the most balanced results and the best trade-off between model complexity and performance. The findings show the potential of multi-task deep learning approaches to extract valuable insights from user reviews. Such findings can be highly valuable to aid business strategy formulation and service quality improvement, and ultimately greater customer satisfaction, as well as consolidate Gojek's market dominance in Indonesia's online transport business.

**Kata Kunci:** Sentiment Analysis, Multi-Aspect, CNN-LSTM, Gojek, Hybrid Deep Learning