## **ABSTRACT**

The increasing public awareness of the importance of skincare has driven the increase in sales of beauty products in Indonesia, thus triggering a large number of online reviews that require a Long Short-Term Memory (LSTM) analysis system and Indonesian Bidirectional Encoder Representations from Transformers (IndoBERT) for sentiment analysis of beauty product reviews on the Female Daily platform. This study examines the comparative performance of the models. Data was obtained through scraping techniques from the Female Daily forum, then pre-processed and manually labeled sentiment. LSTM uses Word2Vec feature representation, while IndoBERT utilizes a pre-trained transformer-based model. The evaluation results show that IndoBERT provides better performance than LSTM. LSTM produces an accuracy of 0.86, and an f1-score of 0.8602, while IndoBERT achieves an accuracy of 0.8803 and an f1-score of 0.8801. This difference demonstrates the superiority of IndoBERT's transformer architecture in understanding the complex context of the Indonesian language. This study contributes to the selection of an appropriate sentiment analysis model in the beauty domain based on user reviews.

**Keywords**: beauty product, female daily, indobert, lstm, sentiment analysis, word2vec.