

## ABSTRACT

This study aims to analyze product review sentiment for the online store Rava.ID to provide strategic recommendations for product and service improvements. This research utilizes IndoBERT and RoBERTa algorithms, which are proven to excel in understanding the context and meaning of Indonesian text. Consumer reviews were collected from the Shopee platform using web scraping methods, then processed through text preprocessing stages such as tokenization, stemming, and removal of irrelevant words.

The study identifies the distribution of review sentiments (positive, neutral, negative) and classifies them based on seven dimensions of product quality: aesthetics, durability, ease of use, features, performance, reliability, and service. The analysis employs the Aspect-Based Sentiment Analysis (ABSA) method to determine sentiment polarity for each product dimension.

The research results show that positive sentiment dominates reviews with a percentage of 56.3%, followed by negative sentiment at 41.3%, and neutral sentiment at 2.5%. However, a high percentage of negative reviews indicates critical areas that require improvement. In evaluating algorithm performance, IndoBERT showed an accuracy of 72.6% and an F1-Score of 66.9%, slightly superior to IndoRoBERTa which achieved an accuracy of 72% and an F1-Score of 69.4%. Aspect-based sentiment analysis identifies service, aesthetics, and performance as the main factors that drive negative sentiment in product reviews. These insights provide a significant basis for Rava.ID to improve product quality, marketing strategy, and overall customer experience, with strategic recommendations focused on improving delivery efficiency, customer service responsiveness, accuracy of product descriptions, and consistency of material quality and neatness of seams.

**Keywords:** Sentiment Analysis, IndoBERT, IndoRoBERTa, ABSA, E-commerce, Rava.ID