

The rapid growth of the tourism sector in Indonesia has led to an increase in the number of online hotel reviews, creating a need for the hospitality industry to analyze these reviews efficiently to support decision-making. This study performs multi-aspect sentiment analysis on hotel reviews using LSTM and BERT approaches to understand sentiment patterns across six key aspects: cleanliness, location, price, food, facilities, and service. The analysis addresses challenges such as informal language, ambiguous sentiments, and reviews covering multiple aspects simultaneously. Data was collected from the Tiket.com platform and underwent preprocessing steps including data cleaning, case folding, tokenization, normalization, stopword removal, stemming, and balancing using the SMOTE technique. The dataset was split into 70% for training and 30% for testing. The LSTM model achieved the highest accuracy in identifying sentiments for cleanliness 94.93%, location 89.98%, and price 89.95%. In contrast, the BERT model showed superior performance in handling more complex and ambiguous sentiments. The findings of this study have significant implications for both travelers and hotel managers. It helps travelers select hotels that match their preferences, while also assisting hotel managers in improving service quality based on customer feedback, ultimately enhancing the overall customer experience in the hospitality industry, helping improve operational efficiency.

Keywords: Sentiment Analysis, LSTM, BERT, Hotel Reviews, Multi-Aspect