ABSTRACT

This study explores the relationship between guest perceptions and the financial performance of Ati Tentrem Guesthouse by applying Aspect-Based Sentiment Analysis (ABSA). Indonesian-language reviews posted on Traveloka, Tiket.com, and Google Maps from 2021 to 2024 were scraped, cleaned, and automatically annotated with IndoBERT, a transformer model fine-tuned for Indonesian. The model mapped positive or negative polarity across 12 service aspects (e.g., Room, Cleanliness, Facilities, Staff). Annual sentiment scores for each aspect were then correlated with the guesthouse's annual revenue using the Spearman rank-order correlation test, chosen for its robustness with ordinal variables and a small sample size ($N = 3$ years).

The analysis shows that the Room aspect exhibits a perfect positive correlation with revenue ($\rho = +1.00$), underscoring room quality as a primary driver of booking decisions. In contrast, Facilities display a perfect negative correlation ($\rho = -1.00$), suggesting that persistent complaints about amenities constitute a major drag on earnings. Other aspects such as Cleanliness, Price, and Location shows present weak, statistically non-significant correlations ($p > 0.05$), hinting at more complex influences and possible lag effects on financial outcomes.

These findings demonstrate the effectiveness of the ABSA-IndoBERT pipeline in pinpointing service "pain points" that most affect revenue. Practical recommendations include prioritizing investment in hard facilities (e.g., air-conditioning, Wi-Fi, bathroom fixtures) and preserving a superior sleep experience to boost guest loyalty. Future work could extend this approach to real-time sentiment monitoring for proactive revenue management in the hospitality sector.

Keywords: Aspect-Based Sentiment Analysis, IndoBERT, Spearman correlation, customer sentiment, revenue, hospitality