

ABSTRAK

Pariwisata merupakan salah satu sektor penting dalam meningkatkan perekonomian daerah, termasuk Kabupaten Bangkalan yang memiliki berbagai destinasi wisata pantai. Namun, ulasan wisatawan yang tersebar di media sosial dan platform digital lainnya belum dimanfaatkan secara optimal sebagai bahan evaluasi oleh pengelola wisata. Oleh karena itu, diperlukan analisis sentimen yang tidak hanya menilai sentimen secara umum, namun mampu mengidentifikasi sentimen berdasarkan aspek tertentu. Penelitian ini bertujuan untuk menerapkan *Aspect-Based Sentiment Analysis* (ABSA) dalam menganalisis sentimen ulasan wisata pantai di Kabupaten Bangkalan berbasis multi-aspek, yang meliputi aspek daya tarik, aksesibilitas, amenitas, dan pelayanan tambahan. Data ulasan diperoleh dari berbagai media sosial dan platform digital, kemudian dilakukan identifikasi aspek dan pelabelan sentimen per aspek. Tahapan pengolahan data meliputi *Text Augmentation* untuk meningkatkan variasi data dan menyeimbangkan distribusi kelas sentimen, *preprocessing* teks, serta koreksi ejaan menggunakan *Damerau-Levenshtein Distance* (DLD). Selanjutnya, data direpresentasikan menggunakan metode TF-IDF dengan *N-Gram* dan diklasifikasikan menggunakan *Support Vector Machine* (SVM). Pengujian model dilakukan menggunakan *10-fold cross validation*. Hasil penelitian menunjukkan bahwa model terbaik diperoleh pada kombinasi *Unigram+Bigram* dengan penerapan DLD, dengan nilai akurasi sebesar 89% pada aspek daya tarik, 85% pada aspek aksesibilitas, 78% pada aspek amenitas, dan 89% pada aspek pelayanan tambahan. Hasil ABSA menunjukkan bahwa aspek amenitas dan aksesibilitas masih memerlukan peningkatan, sementara aspek daya tarik dan pelayanan tambahan memperoleh persepsi yang relatif positif dari wisatawan.

Kata kunci: *Aspect-Based Sentiment Analysis, Analisis Sentimen, Support Vector Machine, Damerau-Levenshtein Distance, N-Gram, Text Augmentation*

ABSTRACT

Tourism is one of the important sectors in improving regional economic growth, including Bangkalan Regency, which has various coastal tourism destinations. However, tourist reviews spread across social media and other digital platforms have not been optimally utilized as evaluation materials by tourism managers. Therefore, sentiment analysis is required not only to assess overall sentiment but also to identify sentiments based on specific aspects. This study aims to implement Aspect-Based Sentiment Analysis (ABSA) to analyze sentiments of beach tourism reviews in Bangkalan Regency using a multi-aspect approach, including attraction, accessibility, amenities, and additional services. Review data were collected from various social media and digital platforms, followed by aspect identification and sentiment labeling for each aspect. The data processing stages include Text Augmentation to increase data diversity and balance sentiment class distribution, text preprocessing, and spelling correction using Damerau–Levenshtein Distance (DLD). Furthermore, the data were represented using the TF-IDF method with N-Gram features and classified using the Support Vector Machine (SVM) algorithm. Model evaluation was conducted using 10-fold cross-validation. The results indicate that the best model was achieved using the Unigram+Bigram combination with DLD, obtaining accuracy values of 89% for attraction, 85% for accessibility, 78% for amenities, and 89% for additional services. The ABSA results show that the amenities and accessibility aspects still require improvement, while the attraction and additional services aspects receive relatively positive perceptions from tourists.

Keywords: *Aspect-Based Sentiment Analysis, Analisis Sentimen, Support Vector Machine, Damerau-Levenshtein Distance, N-Gram, Text Augmentation*