

ABSTRAK

Mochamad Akbar Oktavio. 2026. Analisis Sentimen Wisata Situ Patenggang Menggunakan Metode Multinomial Naive Bayes. Skripsi. Program Sarjana. Program Studi Informatika. Universitas Muhammadiyah Jember.

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Perkembangan media digital memungkinkan wisatawan menyampaikan opini melalui platform ulasan daring seperti Google Maps. Penelitian ini bertujuan untuk menganalisis sentimen pengunjung terhadap Wisata Situ Patenggang menggunakan metode Multinomial Naive Bayes. Data yang digunakan berupa 602 ulasan Google Maps periode 2020–2024. Tahapan penelitian meliputi preprocessing teks, pelabelan sentimen menggunakan metode *Lexicon-Based* yang kemudian dibandingkan dengan hasil pelabelan oleh ahli bahasa, pembobotan TF-IDF, penyeimbangan data menggunakan *Synthetic Minority Over-sampling Technique* (SMOTE), serta klasifikasi menggunakan *Multinomial Naive Bayes*. Hasil pelabelan *Lexicon-Based* menghasilkan 453 ulasan positif dan 149 ulasan negatif, sedangkan hasil pelabelan ahli bahasa menghasilkan 457 ulasan positif dan 145 ulasan negatif. Karena hasil *Lexicon-Based* digunakan sebagai label akhir, data tersebut selanjutnya digunakan pada proses klasifikasi. Pengujian dilakukan dengan pembagian data latih dan data uji sebesar 80:20. Sebelum penerapan SMOTE, model memperoleh *accuracy* sebesar 85,12%, *precision* 83,49%, *recall* 100%, dan *F1-score* 91,00%. Setelah penerapan SMOTE, *accuracy* meningkat menjadi 88,43%, sedangkan *precision*, *recall*, dan *F1-score* masing-masing mencapai 92,31%. Hasil tersebut menunjukkan bahwa *Multinomial Naive Bayes* mampu melakukan klasifikasi sentimen terhadap ulasan Wisata Situ Patenggang dengan baik dan penerapan SMOTE dapat meningkatkan kinerja model.

Kata kunci: Analisis Sentimen, Google Maps, *Lexicon-Based*, *Multinomial Naive Bayes*, Situ Patenggang, SMOTE, TF-IDF.

ABSTRACT

Mochamad Akbar Oktavio. 2026. *Sentiment Analysis of Situ Patenggang Tourism Using the Multinomial Naive Bayes Method. Undergraduate Thesis. Bachelor's Degree Program. Informatics Study Program. Universitas Muhammdiyah Jember*

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The development of digital media enables tourists to express their opinions through online review platforms such as Google Maps. This study aims to analyze visitor sentiment toward Situ Patenggang Tourism using the Multinomial Naive Bayes method. The data used in this study consisted of 602 Google Maps reviews collected from 2020 to 2024. The research stages included text preprocessing, sentiment labeling using a *Lexicon-Based* method and comparison with labeling results from a language expert, TF-IDF weighting, data balancing using the *Synthetic Minority Over-sampling Technique (SMOTE)*, and classification using the Multinomial Naive Bayes method. The *Lexicon-Based* labeling resulted in 453 positive reviews and 149 negative reviews, while the language expert labeling resulted in 457 positive reviews and 145 negative reviews. The *Lexicon-Based* results were used as the final labels because they were consistent with the labeling method applied in this study. The model was evaluated using an 80:20 training and testing data split. Before applying *SMOTE*, the model achieved an accuracy of 85.12%, precision of 83.49%, recall of 100%, and F1-score of 91.00%. After applying *SMOTE*, the accuracy increased to 88.43%, while precision, recall, and F1-score each reached 92.31%. These results indicate that the *Multinomial Naive Bayes* method can effectively classify sentiment in Situ Patenggang Tourism reviews, and the application of *SMOTE* can improve the model's performance.

Keywords: *Sentiment Analysis, Google Maps, Multinomial Naive Bayes, Situ Patenggang, SMOTE, TF-IDF.*