ABSTRAK

IMPLEMENTASI *MACHINE LEARNING* UNTUK ANALISIS SENTIMEN ULASAN OBJEK WISATA BENTENG KUTO BESAK MENGGUNAKAN METODE *NAIVE BAYES*

(Tira Aprisyah, 2026: 89 Halaman)

Perkembangan platform digital seperti Google Maps menghasilkan banyak ulasan pengunjung yang dapat dimanfaatkan sebagai sumber informasi untuk mengevaluasi kualitas objek wisata. Namun, data ulasan yang tidak terstruktur dan berjumlah besar memerlukan metode pengolahan untuk memperoleh informasi mengenai kecenderungan sentimen pengunjung. Penelitian ini bertujuan untuk mengimplementasikan metode *Naive Bayes* dalam analisis sentimen ulasan pengunjung Benteng Kuto Besak. Data dikumpulkan melalui teknik *web scraping* dengan jumlah awal 2.000 ulasan dan setelah proses pembersihan diperoleh 1.996 ulasan. Tahapan penelitian meliputi preprocessing teks, pelabelan data, pembagian data, pembobotan TF-IDF, klasifikasi menggunakan *Multinomial Naive Bayes*, evaluasi model, dan implementasi hasil analisis pada *dashboard website*. Pelabelan dilakukan berdasarkan rating Google Maps ke dalam tiga kategori sentimen, yaitu positif, netral, dan negatif. Hasil pelabelan menunjukkan 1.398 ulasan positif, 112 ulasan netral, dan 486 ulasan negatif. Hasil pengujian model memperoleh *accuracy* 83,25%, *precision* 79,67%, *recall* 83,25%, dan *F1-score* 79,77%. Hasil penelitian menunjukkan bahwa metode *Naive Bayes* mampu mengklasifikasikan sentimen ulasan Benteng Kuto Besak dengan baik dan *dashboard website* mampu menyajikan hasil analisis secara visual dan informatif.

Kata kunci: Analisis Sentimen, Benteng Kuto Besak, *Naive Bayes*, TF-IDF, *Dashboard website*

ABSTRACT

IMPLEMENTATION OF MACHINE LEARNING FOR SENTIMENT ANALYSIS OF BENTENG KUTO BESAK TOURISM REVIEWS USING THE NAIVE BAYES METHOD

(Tira Aprisyah, 2026: 89 *Pages*)

Digital platforms such as Google Maps generate many visitor reviews that can be used as a source of information to evaluate the quality of tourist attractions. However, the large volume and unstructured nature of review data require appropriate processing methods to obtain information regarding visitors' sentiment tendencies. This study aims to implement the Naive Bayes method for sentiment analysis of visitor reviews of Benteng Kuto Besak. The data were collected through web scraping with an initial total of 2,000 reviews, and after the cleaning process, 1,996 reviews were used. The research stages include text preprocessing, data labeling, data splitting, TF-IDF *weighting, classification using Multinomial Naive Bayes, model evaluation, and implementation of the analysis results in a dashboard website. Data labeling was conducted based on Google Maps ratings into three sentiment categories: positive, neutral, and negative. The labeling results showed 1,398 positive reviews, 112 neutral reviews, and 486 negative reviews. Model testing achieved an accuracy of 83.25%, precision of 79.67%, recall of 83.25%, and F1-score of 79.77%. The results indicate that the Naive Bayes method can classify visitor review sentiment of Benteng Kuto Besak effectively, and the dashboard website can present the analysis results visually and informatively.*

Keywords: *Sentiment Analysis, Benteng Kuto Besak, Naive Bayes,* TF-IDF*, Dashboard Website*