

ABSTRACT

ANALYSIS OF SENTIMENT TOWARDS TOURISM PLACES BASED ON REVIEWS ON GOOGLE MAPS USING NAÏVE BAYES CLASSIFIER ALGORITHM AND SUPPORT VECTOR MACHINE

(Case Study: Brebes Regency)

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Traveling is one of the popular recreational activities among people to relieve stress and enjoy the beauty of nature or local culture. Brebes Regency, the third largest in Central Java after Grobogan, but ranks last in the number of tourist visits in 2022 according to data from the Central Java Statistics Agency (BPS). This condition encourages the need for further analysis of visitor sentiment towards tourist attractions in Brebes to understand public perception. This study aims to classify visitor sentiment from Google Maps and compare the performance of the Naïve Bayes (NB) algorithm with Support Vector Machine (SVM). Of the 6734 review data analyzed using the TF-IDF feature, SVM showed superior performance with an accuracy of 87%, surpassing Naïve Bayes with 86%. In further testing, SVM produced a precision value of 0.69, recall 0.24, and f1-score 0.36 for negative sentiment, and precision 0.88, recall 0.98, and f1-score 0.93 for positive sentiment. Meanwhile, Naïve Bayes produces precision of 0.86, recall of 0.05, and f1-score of 0.10 for negative sentiment, and precision of 0.86, recall of 1.00, and f1-score of 0.92 for positive sentiment. This shows that SVM is not only more accurate overall, but also more balanced in recognizing both classes of sentiment, especially in detecting negative reviews which are very important as input for the development of the tourism sector.

Keyword: *Analysis Sentiment, Brebes, Naïve Bayes, Support Vector Machine, Tour.*