

ABSTRACT

The pandemic that hit Indonesia in 2020 impacted the tourism sector on total visits by both foreign and domestic tourists, which had a fatal impact on the Indonesian economy. Based on the explanation by the Director of the Ministry of Tourism and Creative Economy, Wawan Ruswan, the number of visits by domestic tourists decreased by 198 million. Menparekraf Sandiaga Salahuddin Uno said that 2022 will be the year the tourist market recovers. This recovery is of course followed by improvements by the government in various matters related to the tourism sector. One of them is the Department of Tourism and Culture of West Java Province. With the enormous potential of the tourism sector in West Java, better utilization is needed to restore the tourism sector, especially the many natural tourist objects in West Bandung Regency. To find out which aspects should be developed, it is necessary to listen to public opinion. This study aims to analyze aspect-based sentiments on natural tourism objects in West Bandung Regency based on reviews on Google Maps. The steps taken in this study are based on the KDD (Knowledge Discovery in Database) data mining process and use the Multinomial Logistic Regression algorithm. By conducting this research, it is possible to predict reviews from the public regarding natural tourism objects from various aspects and sentiments in them. The aspects used in this study are accessibility, facilities (accommodation & amenities), and activities (attractions & activities). The results of this study will focus on the effect of the pre-processing technique and the oversampling method used on the performance of the f-1 score model. The results showed that the pre-processing stemming (SM) and emoji processing (EP) techniques produced the best performance in the Multinomial Logistic Regression algorithm. In addition, the SMOTE method for oversampling is very influential in improving model performance.

Keywords: *Nature Tourism, West Bandung Regency, Aspect-Based Sentiment Analysis, Multinomial Logistic Regression, Google Maps Reviews*