ABSTRACT

The pandemic has led to a decline in the number of both domestic and international tourists in Indonesia, with a 28% decrease from 2020 to 2019, the government must initiate the recovery of the tourism sector, especially focusing on domestic tourists. Sandiaga Salahuddin Uno (Minister of Tourism and Creative Economy) supports this approach, stating that with the uncertainty of international tourists, domestic tourists can become the focus to boost the tourism sector, particularly in natural attractions abundant in West Bandung Regency. This recovery prioritizes a consumer-centric strategy in line with the West Java Provincial Office of Tourism and Culture's approach. To support this recovery, aspect-based sentiment analysis research is conducted to identify the aspects of natural tourist destinations that need improvement and preservation. The research focuses on review data from Google Maps, following the CRISP-DM methodology, and utilizing the Extreme Gradient Boosting (XGBoost) algorithm. The aspects considered in this research are accessibility, facilities, and activities, with labels assigned as neutral, positive, or negative. The research includes three scenarios: using the original dataset, oversampling the dataset based on the activity aspect, and oversampling the dataset based on both activity and accessibility aspects. The oversampling methods used are ROS and SMOTE. All three dataset scenarios are used with base models and hyperparameter tuning. The evaluation includes metrics such as accuracy, precision, recall, and F1-score, and k-fold cross-validation is performed to assess potential overfitting. The evaluation results indicate that the scenario using ROS oversampling with base modeling provides the best performance.

Keywords: Nature Tourism, West Bandung Regency, Aspect-based Sentiment Analysis, XGBoost, Google Maps Reviews, Oversampling.