ABSTRACT

Indonesia is a country that has great potential in the tourism sector by becoming one of the largest sources of income in Indonesia. Increasing the number of visits every year requires the government to focus on developing the quality of tourist destinations compared to determining quantity targets. Traveler reviews on TripAdvisor can be used as suggestions in developing and improving destinations in order to provide satisfaction to tourists when visiting tourist destinations.

The purpose of this study is to identify potential tourist destinations based on movement patterns and tourist perceptions by extracting information contained in tourist reviews, so that information can be used to make decisions on innovative ideas in stimulating strategic information that can be recommended to the government and tourism sector stakeholders. in the development of tourist destinations that match the interests and expectations of tourists.

The method used in this study is sentiment analysis using VADER to give a positive/negative score, multiclass classification to classify the test into 6 aspects of cognitive dimensions in knowing tourists' perceptions of tourist destinations, and social network analysis to show areas that are potential points of tourist visits.

The results of this study indicate that testing the Neural Network model in multiclass classification has an accuracy of 92.1%. The results of the analysis using sentiment analysis and multiclass classification show that each destination has shortcomings that must be evaluated and developed. This can be seen from the results of sentiment on the cognitive dimensions of each destination. The results of the social network analysis describe destinations that are potential points of tourist visits in Bali.

The results of the analysis in this study are expected to provide benefits for the government and tourism destination managers by knowing the dimensions that have the highest negative sentiment to be evaluated and developed. Based on the results of the study, the researchers provide suggestions for the government and destination managers to improve and develop tourist destinations that are in accordance with tourist perceptions.

Keywords: *Tourism, Destination Image, Cognitive Image, Text Classification, Sentiment Analysis, and Social Network Analysis.*