ABSTRACT

Indonesia is rich country in cultural and historical heritage, with total of 38 provinces. Borobudur is one of the 5 super-priority destinations aimed at enhancing the quality and quantity of tourism destinations. Borobudur is expected to provide opportunities for economic growth in its surrounding areas so that visitors to Borobudur can continue their tourism visits nearby, especially in the Joglosemar region, encompassing Yogyakarta, Solo, and Semarang (Joglosemar). However, this contrasts with events in 2019, where 4 million tourists visiting Borobudur only stayed for 2 to 3 hours and then decided to go elsewhere.

Tour operators are key players in the tourism supply chain, crucial in assisting tourists to choose destinations based on the facilities and prices offered, often through social media platforms, especially Instagram.

The objective of this research is to understand the network structure and sentiment of interactions shown in comments on Instagram posts regarding travel agents in the Joglosemar region. The methods employed in this research are social network analysis and sentiment analysis to support the sustainable development goals planned for the Joglosemar region.

The social network analysis revealed a network structure identified through centrality measurements. The user staycationjogja exhibited the highest degree centrality, betweenness centrality, and eigenvector centrality compared to other users, while several users had a maximum closeness centrality of 1, including user joglosemartour.id.

The sentiment analysis results, generated using Support Vector Machine (SVM) classification, revealed a sentiment breakdown with an accuracy rate of 90%. Negative sentiment dominates at 73.1% with comments containing hashtags that do not contain useful information, then positive sentiment at 26.9% which contains comments that are less detailed, making the percentage tend to be small. The model

identified 459 True Negatives (TN), 45 False Negatives (FN), 128 True Positives (TP), and 18 False Positives (FP).

Keyword: *service management, travel agent, Instagram, big data, social network analysis, sentiment analysis.*