

## ABSTRACT

*Transportation is an important part of the development process of a country because the transportation system reflects the country's social and economic progress. One of the innovations in the transportation industry in Indonesia is the whoosh High-Speed Train, the first high-speed train service in Indonesia and Southeast Asia developed by PT. Kereta Cepat Indonesia China (KCIC). This study aims to evaluate the service quality sentiment received by KCIC, determine what dimensions of service quality need to be maintained and improved by KCIC based on the sentiment analysis carried out, and determine what topics are dominant in the discussion.*

*The method used in this study is qualitative. This study uses a sampling technique for four months; the sampling length was taken since the Whoosh High-Speed Train operated commercially, from October 17, 2023, to April 17, 2024. Data was obtained through social media X in the form of tweets by scraping data on the keyword "KCIC" using Phantombuster software; the next stage is data processing by classifying the service quality dimensions and sentiment data on each tweet; the next stage is testing the validity of the model using RapidMiner, and seeing what topics are formed using topic modelling.*

*The study results show that the service quality classification model produces an accuracy performance level of 62.66%, which is quite good. The proportion of tangible dimensions is the most discussed dimension; this dimension is related to the facilities and physical form of transportation services at stations and trains. The sentiment analysis classification model produces an accuracy performance level of 75.05%, which is quite good. The proportion of positive sentiment is the most discussed sentiment; this sentiment is related to the satisfaction and favourable opinion of the public towards the service quality provided by the whoosh high-speed train. Furthermore, based on topic modelling results, users understand and achieve several things that high-speed train service. The results of this study can be used to help companies develop, improve, maintain, and innovate in service quality in the high-speed train sector in Indonesia.*

**Keywords:** *Mass transportation, service quality, e-wom, sentiment analysis, support vector machine.*