## ABSTRACT

PT Tiki Jalur Nugraha Ekakurir (JNE) is the most popular courier service that was ranked first as a top brand courier service company in Indonesia in 2018. Although as a top brand courier service in Indonesia, it turns out JNE still has a variety of complaints submitted by customers via the internet and social media. This is an interesting material to study as a means of evaluating and improving the company's logistic service quality strategy to maintain and monitor the level of service in order to remain in the position of leader in the courier service industry

This study used the sentiment analysis method of Naive Bayes Classifier (NBC) classification model and Support Vector Machine (SVM) and multi-class classification aims to review the best classification model, to find out the rating of sentiments, and find out what problems need to be prioritized. The data in this study were taken from customers' tweets on Twitter that mention to @JNECare and or @JNE\_ID accounts. The population in this study are all tweets that mention to the Twitter account @JNECare and or @JNE\_ID. The sample in this study were 11.134 tweets obtained for 30 days from September 1, 2019 to September 30, 2019.

The results in this study are that both classification models have very good accuracy values, but the NBC classification model has better performance in terms of the level of recall, f-measure, and kappa than SVM. Logistics service quality of JNE is dominated by 97.82% negative and positive 2.18% sentiments. The dimensions that have the most negative sentiments are the Personnel Contact Quality of 1,061 tweets and the Timeliness of 1,122 tweets so that both dimensions became the priority of the main problem (high priority) JNE to be repaired immediately. Therefore, JNE needs to improve personal message check-ups and provide quick response responses to customer problem complaints and increase the commitment in each freight delivery service to fit the estimated time Delivery.

*Keywords: logistic service quality, sentiment analysis, multi-class classification, text mining, and machine learning.*