

ABSTRACT

JNT Express is the most popular courier service that ranks first as the number 2 top brand for courier service companies in Indonesia. It turns out that JNT still has various responses to complaints submitted by customers via the internet and social media. This has become an interesting material to be studied as a means of evaluation and strategy for improving the quality of the company's logistics services to maintain and monitor its service level in order to remain in the leader position in the courier service industry.

This study uses the sentiment analysis method of the Naive Bayes Classifier (NBC) and Support Vector Machine (SVM) classification models as well as multi-class classification which aims to review the best classification model, determine sentiment ratings, and find out what problems need to be prioritized. The data in this study were taken from customer tweets on Twitter that mention the @jntexpressid account. The population in this study is all tweets that mention the Twitter account @jntexpressid. The research sample is tweets obtained for 30 days from August 10, 2021 to September 9, 2021 as many as 3000 tweets.

The results of this study are that both classification models have very good accuracy values, but the SVM classification model has better performance in terms of recall, f-measure, and kappa values compared to NBC. The quality of JNT's logistics services is dominated by negative sentiments at 94.52% and positive at 5.47%. The dimensions that have the most negative sentiments are Order Discrepancy Handling with 131 tweets and Information Quality with 110 tweets so that these two dimensions become JNT's high priority issues that urgently need to be fixed. Therefore, JNT needs to improve package delivery control so that the delivery process is not jammed and lost packages/items are minimized so that handling can be organized and able to update tracking status in real-time so that package status can be updated.

Keyword: Logistic Service Quality, Sentiment Analysis, Multi-class Classification, Text Mining, and Machine Learning.