

ABSTRACT

SENTIMENT ANALYSIS REVIEW CUSTOMER OF JNE AND J&T EXPRESS EXPEDITION SERVICES USING NAÏVE BAYES METHOD

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A large number of online sales transactions make the use of goods delivery service users. Companies engaged in shipping services in Indonesia that are most in-demand by the public are JNE and J&T Express. Currently, JNE and J&T Express have utilized many communication media with their customers, one of which is Twitter. The number of followers from JNECare is 174,128 and the number of tweets is 948,700. For J&T Express with the Twitter account name jntexpressid, the number of followers is 117,663 and the number of tweets is 74,500. The number of customer comments can be used to see an overview of their opinions about JNE and J&T Express whether the dominant comment is a negative, positive or neutral label.

This final project is carried out by conducting sentiment analysis, using the Naive Bayes classification method or algorithm. Data is retrieved using the Twitter API. Then sentiment analysis is carried out on the comments, the steps to carry out sentiment analysis in this study are the data will be manually labeled one by one, then carry out the preprocessing process. The first process of preprocessing is case folding, in this process all letters will be converted into lowercase letters, and remove unimportant characters such as punctuation, numbers and emoji, the second process of tokenization is solving words, the third process of stopword removal is the process of deleting words that has no meaning and the last process is stemming, the process of removing affixes listed on certain words. Then perform feature extraction, then enter the classification, the data will be classified using the Naïve Bayes method.

The data will be divided into two, 75% training data and 25% testing data. Then evaluate with the confusion matrix. For JNE, the results obtained are 79% accuracy, 80% precision, 79% recall, and 79% f1-score. Then for J&T Express, it gets 76% accuracy, 76% precision, 76% recall, and 76% f1-score. In this study, applying k-fold cross validation and producing a score for the JNE expedition of 76% and for the J&T Express expedition of 75% of the percentage obtained, the model entered into a fairly good classification.

Keywords: Sentiment analysis, J&T Express, JNE, Naïve Bayes, Twitter.