

## **ABSTRACT**

### **ANALYSIS OF CUSTOMER SATISFACTION SENTIMENTS OF JNT EXPRESS, JNE AND SICEPAT ON TWITTER USING MULTINOMIAL NAÏVE BAYES METHODS**

By

**Zahra Fikri Ayu Nirwana**

**20103147**

*Companies in the field of goods delivery services are currently growing rapidly. The number of online buying and selling transactions through e-commerce as well as the need to deliver personal goods has led to an increase in the number of people using goods delivery services. Goods delivery service companies that are a favorite among Indonesians are JNT Express, JNE and Sicepat. Currently, these companies have been actively using various communication media, including Twitter to interact with their customers. Customer opinions about delivery services often appear on Twitter and sometimes become the main issue that steals the attention until it becomes a headline and becomes a hot conversation among the public. Analyzing customer sentiment through comments on Twitter is very important for JNT Express, JNE, and Sicepat. The Multinomial Naïve Bayes method was used to explore customers' views on their delivery services. By utilizing this analysis, the three companies were able to identify customer trends and preferences in greater depth, respond to emerging issues more quickly and effectively, and improve their service quality based on the opinions or comments received. This not only helps maintain their reputation as trusted delivery service providers, but also increases customer satisfaction in today's competitive market environment. A total of 1069 comment data was obtained using Google Collaboratory with the help of tweet-harvest from January 1, 2023 to December 31, 2023. The sentiment classification process was performed by utilizing Naïve Bayes classification to identify whether the reviews are positive, negative, or neutral. The classification results of the dataset with a composition of 75% of the training data and 25% of the test data on the JNT Express expedition obtained an accuracy result of 80%, JNE obtained an accuracy result of 75% and Sicepat 67%. For datasets with 80% and 20% composition, JNT Express obtained an accuracy of 77%, JNE 74% and Sicepat 65%. In addition, customer reviews from the three expeditions are predominantly positive for the JNT Express company which results in the company being superior to the JNE and Sicepat companies.*

**Keywords:** *Sentiment Analysis; Customer Satisfaction; Twitter; Shipping; Naïve Bayes Method.*