ABSTRACT

The development of information technology in Indonesia is experiencing very rapid growth. This has an impact on users and the public in obtaining information from various sources, such as social media. One of the popular social media in Indonesia is Twitter. Sentiment analysis makes it possible to group the polarity of the text in a sentence, so that it can be known whether the opinion is positive or negative. In this study, sentiment analysis was carried out on tweets related to #TheLinkinJKT regarding the aspects of "ticketing system" and "event satisfaction". Sentiment analysis is performed using a machine learning approach with Support Vector Machine (SVM) algorithms. The results obtained in the "ticketing system" were 650 tweets with positive labels and 705 tweets with negative labels from 1,331 total data. While the results obtained in "event satisfaction" were 1,995 tweets with positive labels and 2,402 with negative labels from 4,400 total data with manual labeling. Based on the results of sentiment analysis using the Support Vector Machine (SVM) algorithm, data splitting was obtained from the highest dataset accuracy in the "ticketing system" with the largest split data ratio of 70:30 with an accuracy of 0.737 or 73% and the highest accuracy of the "event satisfaction" dataset obtained from the 80:20 split data ratio with the greatest accuracy of 0.743 or 74%. Based on the results of the study, the results of the model performance evaluation using K-Fold Cross Validation in the "ticketing system" with accuracy results of 0.74, precision of 0.71, recall of 0.71 and f1-score of 0.71, while in "event satisfaction" the accuracy results were 0.74, precision of 0.82, recall, of 0.57, and f1-score of 0.68.

Keywords: Sentiment Analysis, Natural Language Processing, Support Vector Machine