

## **ABSTRAK**

Sentiment analysis is natural language processing used to identify public opinion to obtain the percentage of sentiment as positive or negative labels. The development of the Indonesian Capital City (IKN) is a topic that is often discussed on various social media platforms, one of which is Twitter (X).

The main problem in this research is how to classify public opinion automatically and accurately to understand public perceptions of IKN development. This research uses two Machine Learning methods, namely Logistic Regression and Naive Bayes. The analysis process includes data preprocessing, feature extraction using TF-IDF, as well as hyperparameter tuning to improve model performance.

Performance calculations use accuracy, precision, recall and f1-score measurements. The research results show that Logistic Regression has the best performance with an f1-score of 73.7%, while Naive Bayes achieves an f1-score of 72%. It is hoped that this research can help identify public opinion regarding IKN development.

**Keyword:** twitter, sentiment analysis, machine learning, logistic regression, naive bayes