

ABSTRACT

The Starlink service has become a crucial solution for providing satellite internet in hard-to-reach areas. Public sentiment towards this service often varies, influencing user acceptance. This study aims to analyze the sentiment of tweets related to Starlink using the Long Short-Term Memory (LSTM) algorithm. Sentiment classification on highly varied tweets and the mixed sentiment between negative and positive opinions pose a significant challenge in text-based sentiment analysis. Therefore, a solution capable of processing text data accurately and efficiently is required. This research utilizes LSTM to analyze tweets related to the Starlink service, with preprocessing steps to clean the data and label positive and negative sentiments. The LSTM model is trained using parameters such as Batch Size, Dropout Rate, and Epoch, along with the SMOTE technique to address class imbalance. The testing results indicate that the model with a Batch Size of 16, a Dropout Rate of 0.3, and 100 Epoch achieved the highest Test Accuracy of 73.12%. The 90:10 train-test split ratio yielded the best accuracy, demonstrating improved model performance with more training data..

Keywords: *sentiment analysis, LSTM, Starlink, SMOTE, X, Deep Learning*