

## Abstract

This research explores the impact of the closure of TikTok Shop by the Indonesian government on various aspects of the economy, the e-commerce industry, consumer behavior, and social media dynamics. TikTok Shop, as an e-commerce platform within the TikTok social media application, has become a significant business information system that collects, provides, and stores information related to electronic buying and selling activities. The closure of this platform has elicited both positive and negative reactions from the public, which are widely expressed through social media, especially Twitter. To analyze public sentiment regarding this issue, two relevant machine learning methods were used: Random Forest and Decision Trees. Random Forest is known for its efficiency in data mining and its ability to handle data imbalance in large datasets. Meanwhile, Decision Trees offer similar accuracy and can be applied in both serial and parallel modes, depending on the available data capacity and memory. The results of this study are expected to provide in-depth insights into the implications of the TikTok Shop closure as well as the effectiveness of using machine learning algorithms in social sentiment analysis. This research yielded quite effective results with an accuracy of score 75.24%, precision 80.18%, recall 67.06% dan f1-score 73.04%.

**Keywords:** random forest, decision tree, tiktok shop, e-commerce.