

ABSTRACT

Along with the development of the digital era that utilizes technology in life, social media has become a massive platform for people to create, interact with others, and exchange ideas. Instagram is one of the most widely accessed social media by users. Therefore, many people take advantage of this as an opportunity to compete and make a living. This research was conducted to find out how consumers respond to Micro, Small, Medium Enterprise (MSME) products that run their businesses through social media by performing sentiment analysis which collected datasets in the form of customer comments on MSME Instagram accounts, then processed using a comparison of Support Vector Machine (SVM) and Random Forest machine learning classification algorithms. Grid Search CV hyperparameter optimization is carried out to improve performance. The results obtained were the SVM accuracy value of 90.16% before optimization and 90.53.% after optimization, while Random Forest achieved an accuracy of 89.07% before and after optimization. These results state that the SVM model is superior to the Random Forest model in performing sentiment classification.

Keywords: social media, sentimental analysis, support vector machine, random forest, UMKM.