

ABSTRACT

Sentiment analysis of Vidio app reviews on Google Play Store is challenging due to the large amount of unstructured data that is difficult to manage manually. This research is important because it can help app developers understand user opinions more deeply and efficiently. Currently, manual approaches often result in suboptimal analysis, and data imbalance between positive and negative reviews is a major obstacle that affects the performance of classification models. This study uses 2100 manually labeled data and goes through a preprocessing stage to prepare the review data. Classification is performed using Support Vector Machine algorithm with feature weighting using TF-IDF. Handling data imbalance by applying Synthetic Minority Oversampling Technique. Classification results with data sharing using cross-validation showed the highest accuracy obtained by SVM using SMOTE reached 90%. Meanwhile, the accuracy of 89% was obtained by SVM without using SMOTE with a recall value of 69% while SVM using SMOTE reached 77%. The conclusion from this result shows that the use of SMOTE technique can improve the accuracy of the model in handling dataset imbalance.

Keywords: *sentiment analysis, Vidio, Support Vector Machine, SMOTE*