Analisis Opini Pengguna Bank BCA di Twitter Dengan Menggunakan Metode Random Forest dan Boosting

Nur Latifah Kurnianti¹, Yuliant Sibaroni²

^{1,2}Fakultas Informatika, Universitas Telkom, Bandung ¹nurlatifahk@students.telkomuniversity.ac.id, ²yuliant@telkomuniversity.ac.id

Abstract

Twitter is a social media platform that gives users the freedom to share their opinions. Not a few BCA bank customers share their experiences on Twitter, the experiences that are written have sentiment values in the form of negative, positive, or neutral sentiments. Bank services greatly affect the company's reputation, where good service will make customers happy to leave their money with the company, and vice versa. In this final project, the author will build a system that can classify sentiment values using the Random Forest method and optimized with the Boosting method. The Random Forest method is used because it has many attributes to produce a decision tree and the Boosting method to strengthen the results of the accuracy of the previous modeling. The Boosting model used for this research is Adaptive Boosting. This research was conducted to find out the opinion of BCA bank services on Twitter users. The stages of the research to determine the level of accuracy are through the stages of data collection, data processing, classification with the chosen method, and evaluation. There are 2 models that are carried out so that the performance of the two models can be compared. From the results of the evaluation the Random Forest method has an accuracy rate of 77% and the Boosting method has an accuracy rate of 82%. It is known that Boosting has a 5% higher accuracy rate than Random Forest. This happens because Adaptive Boosting can tolerate data noise.

Keywords: Opinion, Twitter, Random Forest, Boosting, Classification