

# Analisis Perbandingan Model Kernel *Support Vector Machine* dalam Analisis Sentimen Opini Pengguna Bank BCA di Twitter

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## Abstract

Twitter is one of the sosial media that is used by the publik to express their thoughts and opinions. Every word they utter has a sentiment value in the form of positive, negative, and neutral. Bank BCA is a bank that is quite well-known among the publik, bank BCA is the largest private bank in Indonesia. However, since June 2020 until now, namely in November 2022, there has been a lot of discussion on Twitter about disruptions to BCA mobile banking, this has made the publik give their opinion on BCA bank. Every comment they make can affect the good name of Bank BCA. The case studies taken in this study are the opinions of Bank BCA users on Twitter in the period June 2020 to November 2022. Each opinion must contain sentiments that can affect the good name of BCA bank, therefore this analysis was carried out to help bank BCA find out how good the name is Bank BCA is among its users and assists the publik in choosing the banking institution they will use. The method to be used is the Support Vector Machine (SVM). In this study, we will compare the kernel model to the Support Vector Machine (SVM). These models include Polynomial, Linear, and Radial Basis Functions (RBF). This research was conducted to find out information from Twitter users' opinions about BCA bank. The 3 models will be compared to find out the highest accuracy of the kernel in the sentiment analysis case study. Comparisons were made to determine the highest level of accuracy of the SVM kernel. The stages in this analysis are data collection, *training*, and *testing*. The data will be *tested* using the SVM kernel and a classification report will be calculated to determine the level of accuracy in each kernel. From the results of the classification model that has been carried out, the highest accuracy results are obtained for each RBF kernel with an accuracy of 73.3%, while the Linear kernel is 72%, and the Polynomial kernel is 67.3%.

**Keywords:** bank bca, svm, sentimen analysis, svm kernel

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