

## ABSTRACT

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### ***SENTIMENT ANALYSIS OF TELEGRAM APPLICATION USERS ON GOOGLE PLAYSTORE REVIEWS USING SUPPORT VECTOR MACHINE (SVM) AND K-NEAREST NEIGHBOUR (KNN) METHODS***

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*(xiii + 63 + appendix)*

*The development of digital messaging services, often referred to as chatting, such as Telegram, has encouraged users to be more active in providing reviews, which can be utilized to evaluate the quality of the application. This study aims to conduct a sentiment analysis of the Telegram application based on reviews and ratings from the Google Play Store, categorized into three classes: positive, negative, and neutral, using the Support Vector Machine (SVM) and K-Nearest Neighbors (K-NN) methods. The research method applied is CRISP-DM, which consists of seven stages: business understanding, data understanding, data preparation, modeling, evaluation, and deployment. The results show that the SVM model with a linear kernel achieved an accuracy of 86% with an 80:20 data split, while the K-NN model with  $k=1$  obtained an accuracy of 78% with an 80:20 data split. Based on the evaluation using the confusion matrix, the accuracy of the SVM model remained at 86%, whereas the K-NN model achieved 78%. Thus, it can be concluded that SVM outperforms K-NN in analyzing user sentiment toward the Telegram application.*

*References (2020–2024)*