

## ABSTRAK

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Judul Laporan Skripsi : Penerapan Algoritma *Support Vector Machine* (SVM) Untuk Analisis *Sentiment Rating* dan *Review* Pada Aplikasi Noice Di Situs *Google Play*.

Pembimbing : Inna Sabily Karima, S. Kom., M. Kom.

Aplikasi Noice merupakan aplikasi audio pertama di Indonesia yang menawarkan beragam audio menarik seperti *podcast*, *audiobook*, radio, musik, dan *live streaming* antar pengguna lainnya yang dapat dinikmati kapan saja, di mana saja hanya dengan mengakses aplikasi Noice melalui ponsel pintar. Pada penelitian ini fokus untuk analisis sentimen aplikasi Noice menggunakan metode *Support Vector Machine* terbukti cukup efektif dalam klasifikasi sentimen. Alur awal proses yang dilakukan pada analisis sentimen di penelitian ini yaitu pengumpulan data *review* dan *rating* sebanyak 1.912 dengan cara *scraping* pada situs *google play*. Selanjutnya tahap *preprocessing* yang memiliki lima tahapan yaitu *Case Folding* dan *Cleaning*, *Tokenizing*, *Stopword Removal*, *Normalization*, dan *Stemming*. Setelah mendapatkan hasil *preprocessing*, dataset berubah menjadi 1.451 dan melakukan proses pelabelan data yang menghasilkan sentimen positif 1.186 dan sentimen negatif 266. Selanjutnya, Membagi data latih dan data uji yang akan digunakan dalam implementasi algoritma SVM. Proses selanjutnya, melakukan perhitungan akurasi metode SVM. Terakhir yaitu evaluasi hasil SVM menggunakan *Confusion Matrix*, hasil evaluasi kinerja algoritma SVM kernel *linier* pada analisis sentimen *Review* Aplikasi Noice menggunakan tiga skenario data *split*, skenario kedua mempunyai kinerja terbaik dengan perbandingan 70% data latih dan 30% data uji. Akurasi 87%, presisi 91%, *recall* 96%, dan *F1-Score* 93%.

**Kata kunci:** Noice, *Support Vector Machine*, analisis sentimen, *Confusion Matirx*.

## ABSTRACT

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The Noice application is the first audio application in Indonesia which offers a variety of interesting audio such as podcasts, audiobooks, radio, music, and live streaming between other users which can be enjoyed anytime, anywhere just by accessing the Noice application via smartphone. In this research, the focus is on sentiment analysis for the Noice application using the Support Vector Machine method which has proven to be quite effective in sentiment classification. The initial flow of the process carried out in sentiment analysis in this research was collecting 1,912 review and rating data by scraping the Google Play site. Next is the preprocessing stage which has five stages, namely Case Folding and Cleaning, Tokenizing, Stopword Removal, Normalization, and Stemming. After getting the preprocessing results, the dataset changed to 1,451 and carried out a data labeling process which resulted in 1,186 positive sentiments and 266 negative sentiments. Next, divide the training data and test data which will be used in implementing the SVM algorithm. The next process is to calculate the accuracy of the SVM method. Finally, there is the evaluation of SVM results using the Confusion Matrix, the results of evaluating the performance of the linear kernel SVM algorithm in sentiment analysis Noice Application Review using three split data scenarios, the second scenario has the best performance with a comparison of 70% training data and 30% test data. Accuracy 87%, precision 91%, recall 96%, and F1-Score 93%.

**Key Word:** Noice, Support Vektor Machine, Sentiment Analysis, Confusion Matrix.