ABSTRAK

Pertumbuhan pesat teknologi digital telah mendorong perusahaan untuk memanfaatkan ulasan pengguna sebagai sumber data penting dalam mengevaluasi kualitas layanan mereka. Grab Indonesia, sebagai salah satu penyedia layanan transportasi daring terbesar di Asia Tenggara, menerima ribuan ulasan pengguna melalui platform Google *Play Store*. Penelitian ini bertujuan untuk melakukan analisis sentimen terhadap ulasan pengguna aplikasi Grab Indonesia menggunakan dua algoritma pembelajaran mesin, yaitu *Naïve Bayes* dan *Support Vector Machine* (SVM), serta membandingkan performa keduanya dalam mengklasifikasikan ulasan menjadi sentimen positif dan negatif. Data diperoleh melalui teknik *web scraping* dari Google *Play Store*, dengan total 2.140 ulasan. Tahapan penelitian meliputi preprocessing data (tokenisasi, transformasi huruf, penghapusan stopword, dan filter token), pelabelan sentimen, serta pembobotan dengan metode TF-IDF sebelum dilakukan klasifikasi. Pengujian dilakukan dengan membagi data menjadi 80% data latih dan 20% data uji. Hasil evaluasi menunjukkan bahwa algoritma SVM menghasilkan akurasi sebesar 93%, presisi 93%, *recall* 93%, dan *F1-score* 90%, sedangkan *Naïve Bayes* memperoleh akurasi 92%, presisi 85%, *recall* 92%, dan *F1-score* 89%. Dari hasil ini, disimpulkan bahwa SVM lebih unggul dari segi akurasi dan kemampuan klasifikasi, meskipun *Naïve Bayes* tetap unggul dalam efisiensi komputasi. Penelitian ini memberikan kontribusi penting dalam pengembangan sistem analisis sentimen, khususnya untuk perusahaan yang ingin memahami persepsi pelanggan melalui ulasan digital. Selain itu, penelitian ini juga menunjukkan bahwa pemilihan algoritma harus mempertimbangkan keseimbangan antara akurasi dan efisiensi tergantung pada konteks aplikasi yang dihadapi.

Kata Kunci: *Analisis Sentimen, Grab Indonesia, Naïve Bayes, Support Vector Machine, Google Play Store.*

ABSTRACT

The rapid advancement of digital technology has encouraged companies to utilize user reviews as a crucial data source to evaluate the quality of their services. Grab Indonesia, one of the largest online transportation service providers in Southeast Asia, receives thousands of user reviews through the Google Play Store platform. This study aims to perform sentiment analysis on user reviews of the Grab Indonesia application using two machine learning algorithms: Naïve Bayes and Support Vector Machine (SVM), and to compare their performance in classifying reviews into positive and negative sentiments. The data was collected using a web scraping technique from the Google Play Store, resulting in a total of 2,140 reviews. The research stages included data preprocessing (tokenization, case transformation, stopword removal, and token filtering), sentiment labeling, and term weighting using the TF-IDF method before classification. Testing was conducted by splitting the data into 80% training data and 20% testing data. The evaluation results showed that the SVM algorithm achieved an accuracy of 93%, precision of 93%, recall of 93%, and F1-score of 90%, while Naïve Bayes achieved an accuracy of 92%, precision of 85%, recall of 92%, and F1-score of 89%. These results indicate that SVM outperforms Naïve Bayes in terms of classification accuracy, although Naïve Bayes excels in computational efficiency. This study provides a valuable contribution to the development of sentiment analysis systems, particularly for companies aiming to understand customer perceptions through digital reviews. Additionally, it emphasizes that algorithm selection must balance accuracy and efficiency based on the application context.

Keywords: *Sentiment Analysis, Grab Indonesia, Naïve Bayes, Support Vector Machine, Google Play Store.*