ABSTRAK

Perkembangan e-commerce di era Revolusi Industri 4.0 mendorong meningkatnya penggunaan aplikasi marketplace, salah satunya Shopee yang menjadi platform belanja daring paling populer di Indonesia. Tingginya jumlah pengguna menyebabkan meningkatnya volume ulasan yang mencerminkan tingkat kepuasan dan ketidakpuasan pengguna terhadap layanan aplikasi. Penelitian ini bertujuan untuk menganalisis sentimen ulasan pengguna aplikasi Shopee di Google Play Store menggunakan algoritma Naive Bayes.Metode penelitian yang digunakan adalah metode kuantitatif dengan tahapan pengumpulan data ulasan berbahasa Indonesia, preprocessing data yang meliputi *case folding*, *tokenizing*, *stopword removal*, dan *stemming*, serta proses pelabelan sentimen. Selanjutnya, pembobotan kata menggunakan metode *Term Frequency–Inverse Document Frequency* (TF-IDF) dan pemodelan klasifikasi sentimen dilakukan menggunakan algoritma Naive Bayes dengan bantuan RapidMiner Studio. Dataset dibagi menjadi data latih sebesar 80% dan data uji sebesar 20%.Hasil penelitian menunjukkan bahwa algoritma Naive Bayes mampu mengklasifikasikan sentimen ulasan ke dalam tiga kategori, yaitu positif, negatif, dan netral dengan baik. Evaluasi performa model menghasilkan nilai akurasi sebesar 94,50%, dengan nilai *precision* dan *recall* yang tinggi pada masing-masing kelas sentimen. Hasil ini membuktikan bahwa algoritma Naive Bayes efektif dalam melakukan analisis sentimen terhadap ulasan pengguna aplikasi Shopee.

Kata kunci: analisis sentimen; e-commerce; Shopee; Naive Bayes; ulasan pengguna

Abstract

The development of e-commerce in the Industrial Revolution 4.0 era has driven the increasing use of marketplace applications, one of which is Shopee, the most popular online shopping platform in Indonesia. The high number of users has led to an increase in the volume of reviews, reflecting the level of user satisfaction and dissatisfaction with the application's services. This study aims to analyze the sentiment of Shopee app users' reviews on the Google Play Store using the Naive Bayes algorithm. The research method used is quantitative, with stages including data collection of Indonesian-language reviews, data preprocessing including case folding, tokenizing, stopword removal, and stemming, and sentiment labeling. Next, word weighting using the Term Frequency–Inverse Document Frequency (TF-IDF) method and sentiment classification modeling were performed using the Naive Bayes algorithm with the help of RapidMiner Studio. The dataset was divided into 80% training data and 20% testing data. The results show that the Naive Bayes algorithm is able to effectively classify review sentiment into three categories: positive, negative, and neutral. The model performance evaluation yielded an accuracy value of 94.50%, with high precision and recall values for each sentiment class. These results demonstrate that the Naive Bayes algorithm is effective in performing sentiment analysis on Shopee app user reviews.

Keywords: *sentiment analysis; e-commerce; Shopee; Naive Bayes; user reviews*