ABSTRAK

Program Makan Bergizi Gratis (MBG) memicu beragam opini publik di media sosial X, sehingga diperlukan analisis sentimen untuk memetakan respons masyarakat. Penelitian ini membandingkan kinerja algoritma *Naïve Bayes* dan *Logistic Regression* dalam mengklasifikasikan sentimen ke dalam kategori positif, negatif, dan netral. Data penelitian yang digunakan berupa 1.500 *tweet* berbahasa Indonesia yang dikumpulkan melalui teknik *scraping* menggunakan *Tweet harvest*. *Dataset* tersebut kemudian dibagi menjadi dua bagian, yaitu 1.050 data untuk proses pelatihan dan 450 data untuk pengujian model. Alur penelitian ini dimulai dengan *pre-processing text* yang meliputi *case folding*, *cleansing*, *tokenizing*, *stopword removal*, dan *stemming*. Selanjutnya, dilakukan pembobotan kata menggunakan ekstraksi fitur TF-IDF sebelum masuk ke tahap klasifikasi. Evaluasi performa model diukur menggunakan confusion matrix dengan parameter akurasi, presisi, *recall*, dan *F1-score*. Hasil penelitian menunjukkan bahwa algoritma *Logistic Regression* mampu menghasilkan performa yang lebih unggul dibandingkan dengan *Naïve Bayes*. *Logistic Regression* meraih tingkat akurasi sebesar 76.22%, sedangkan *Naïve Bayes* hanya mencapai 71.56%. Berdasarkan hasil evaluasi tersebut, dapat disimpulkan bahwa algoritma *Logistic Regression* memiliki efektivitas dan keandalan yang lebih baik dalam melakukan analisis sentimen terkait program MBG pada platform media sosial X.

Kata Kunci: Makan Bergizi Gratis (MBG), Analisis Sentimen, *Logistic Regression*, *Naïve Bayes*

ABSTRACT

The Free Nutritious Meals Program (MBG) has sparked various public opinions on the social media platform X, necessitating a sentiment analysis to map public responses. This study compares the performance of the Naïve Bayes and Logistic Regression algorithms in classifying sentiments into positive, negative, and neutral categories. The research data consists of 1,500 Indonesian-language tweets collected through scraping techniques using TweetHarvest. The dataset was then divided into two parts: 1,050 data rows for the training process and 450 data rows for model testing. The research workflow begins with the text pre-processing stage, which includes case folding, cleansing, tokenizing, stopword removal, and stemming. Subsequently, word weighting is performed using TF-IDF feature extraction prior to the classification phase. Model performance is evaluated using a confusion matrix with accuracy, precision, recall, and F1-score parameters. The experimental results demonstrate that the Logistic Regression algorithm achieves superior performance compared to Naïve Bayes. Logistic Regression attained an accuracy rate of 76.22%, whereas Naïve Bayes only reached 71.56%. Based on these evaluation results, it can be concluded that the Logistic Regression algorithm provides better effectiveness and reliability in conducting sentiment analysis regarding the MBG program on the social media platform X.

Keywords: *The Free Nutritious Meals Program (MBG) , Sentiment Analysis, Naïve Bayes, Logistic Regression*