

ABSTRAK

Program Makan Bergizi Gratis (MBG) merupakan kebijakan pemerintah yang menyediakan makan siang dan susu gratis bagi siswa, serta dukungan gizi untuk ibu hamil dan balita. Tujuan program ini adalah meningkatkan kualitas gizi masyarakat, khususnya generasi muda. Namun, implementasinya memunculkan pro dan kontra di media sosial X. Sebagian masyarakat mendukung karena dianggap bermanfaat bagi kesehatan dan pendidikan, sedangkan lainnya mengkritik efektivitas sasaran, besarnya anggaran, dan potensi penyalahgunaan dana. Penelitian ini bertujuan menganalisis sentimen publik terhadap Program MBG melalui opini di media sosial. Analisis dilakukan dengan algoritma *Random Forest* yang dipadukan dengan TF-IDF, seleksi fitur *Chi-Square*, dan SMOTE untuk menyeimbangkan distribusi kelas. Data dikumpulkan melalui *crawling tweet* berbahasa Indonesia dengan kata kunci “makan bergizi gratis” dan “makan siang gratis” pada periode 1 Juni sampai 30 Agustus 2025. Penelitian menggunakan kerangka CRISP-DM, mulai dari pemahaman bisnis, pemahaman data, persiapan, pemodelan, evaluasi, dan penerapan. Evaluasi kinerja model menggunakan akurasi, *presisi*, *recall*, dan *F1-score*. Hasil menunjukkan bahwa penerapan SMOTE serta seleksi fitur *Chi-Square* dengan rasio 75% membantu model membedakan kedua kelas sentimen secara lebih seimbang. Model terbaik, yaitu *Random Forest* dengan hasil *hyperparameter tuning*, mencapai akurasi 92%, *precision* 0,92, *recall* 0,92, dan *F1-score* 0,92. Temuan ini menggambarkan bahwa opini publik terhadap Program MBG dengan kecenderungan sentimen positif lebih dominan.

Kata Kunci: Analisis Sentimen, *Random Forest*, TF-IDF, *Chi-Square*, SMOTE, Makan Bergizi Gratis.

ABSTRACT

The Free Nutritious Meal Program (MBG) is a government policy that provides free lunch and milk for students, as well as nutritional support for pregnant women and toddlers. The goal of this program is to improve the nutritional quality of the community, especially the younger generation. However, its implementation has generated pros and cons on social media X. Some people support it because it is considered beneficial for health and education, while others are concerned about the effectiveness of targets, the size of the budget, and the potential to cover funds. This study aims to analyze public sentiment towards the MBG Program through opinions on social media. The analysis was carried out using the Random Forest algorithm combined with TF-IDF, Chi-Square feature selection, and SMOTE to balance class distribution. Data were collected by crawling Indonesian language tweets with the keywords "free nutritious meal" and "free lunch" in the period from June 1 to August 30, 2025. The study uses the CRISP-DM framework, starting from business understanding, data understanding, preparation, modeling, evaluation, and implementation. The performance evaluation model uses accuracy, precision, recall, and F1-score. The results show that applying SMOTE and Chi-Square feature selection with a 75% ratio helped the model distinguish the two sentiment classes more evenly. The best model, Random Forest with hyperparameter tuning, achieved 92% accuracy, 0.92 precision, 0.92 recall, and 0.92 F1-score. These findings indicate that public opinion toward the MBG Program tends to be more positive.

Keywords: Sentiment Analysis, Random Forest, TF-IDF, Chi-Square, SMOTE, Free Nutritious Meals.