

ABSTRACT

The Program Makan Bergizi Gratis (MBG) is one of the Indonesian government's priority public policies which, since its implementation in 2025, has generated various public opinions on social media, particularly on the X (Twitter) platform. The large volume of opinions expressed in the form of unstructured text has rendered sentiment analysis and topic identification essential for systematically understanding public perceptions in a data-driven manner. This study proposed a combination of the Support Vector Machine (SVM) method for sentiment analysis and Latent Dirichlet Allocation (LDA) for topic modeling by employing a semi-supervised learning approach to address the limitations of labeled data availability. The dataset consisted of 656 labeled tweets used as training data and 9,792 unlabeled tweets utilized for topic modeling. The SVM model was trained using labeled data and subsequently employed to classify sentiments in unlabeled data, resulting in two sentiment categories, namely positive and negative. The research procedures encompassed data preprocessing, feature extraction using TF-IDF, model training using the SVM method with three kernel variations, namely linear, Radial Basis Function (RBF), and polynomial, as well as model evaluation using accuracy, precision, recall, and F1-score metrics. The findings indicated that the SVM method with the RBF kernel demonstrated the best performance, achieving an accuracy of 80% compared to the linear and polynomial kernels. Furthermore, the LDA modeling process produced the highest coherence value of 0.369289 with 5 topics, consisting of Program Quality, School Implementation, Program Benefits, Food Quality, and Program Facilities.

Keywords : Makan Bergizi Gratis, *Sentiment Analysis*, *Support Vector Machine*, *Latent Dirichlet Allocation*