SENTIMENT ANALYSIS OF RESTAURANT CUSTOMER REVIEWS USING THE SUPPORT VECTOR MACHINE ALGORITHM

(Case Study: Solaria in the Special Region of Yogyakarta)

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Abstract

Solaria is one of Indonesia's prominent restaurant chains, including in the Special Region of Yogyakarta (DIY). Customer reviews posted on platforms like Google Maps provide valuable insights into public perception regarding food quality, service, and overall dining experience. This study aims to perform sentiment analysis on Solaria's customer reviews in DIY using the Support Vector Machine (SVM) algorithm to classify sentiment polarity. A total of 1,186 reviews were collected in February 2025, spanning comments from 2016 to 2025. The analytical process involved several data preprocessing steps, including case folding, tokenization, stopword removal, and stemming. The SVM model was developed using Python, with the optimal configuration achieved by splitting the dataset into 90% training and 10% testing. Results demonstrated that the SVM algorithm effectively classified sentiments, achieving 87% accuracy, 87% precision, 87% recall, and an F1-Score of 87%. These findings confirm that SVM is a robust method for analyzing customer reviews and can serve as a valuable decision-support tool to enhance service quality in the restaurant industry.

Keywords**:** Sentiment Analysis, SVM, Google Maps, Customer Reviews.