

Abstract

Restaurant reviews on social media are one of the main sources of information for customers before making a decision. Since user opinions vary, it requires sentiment analysis for processing reviews. This research aims to evaluate the performance of sentiment analysis on restaurant reviews in Bahasa Indonesia. This research explains how sentiment analysis can help in processing restaurant reviews, and provide a summary of reviews in the form of sentiment results for customers who will make decisions. Using aspect-based sentiment analysis in the form of five aspects, FOOD, AMBIENCE, MISCELLANEOUS, PRICE, and SERVICE. Word2Vec is a word embedding that learns word vector representations through neural networks. This study employs the Skip-Gram method, one of two types of Word2Vec methods available: Continuous Bag of Words (CBOW) and Skip-Gram. Word2Vec was chosen because of its ability to produce a vector representation of words that properly describes their meaning and context, which is crucial in sentiment analysis of restaurant reviews. Then, SVM is used as a classification technique for sentiment prediction by optimizing the dataset. SVM is used in this research because it can accurately solve various complex problems. The result is SVM with Word2Vec has the most optimal macro average f1-score of 86.33%.

Keywords: sentiment analysis, SVM, word2vec, NLP