Abstract

Social media such as Twitter has now become very close to society. Twitter users can express current issues, their opinions, product reviews, and many other things both positive and negative. Twitter is also used by companies to monitor the assessment of their products among the public as insight that will be used to evaluate what aspects of their products need to be further developed. Twitter with its limitation of only allowing users to post a maximum tweet of 280 characters will make a lot of abbreviated and difficult to understand words used, so it will allow vocabulary mismatch problems to occur. Therefore, in this paper, research conducted on aspect-based sentiment analysis of Telkomsel's products from the aspects of signal and service by applying feature expansion using Fasttext word embedding to overcome vocabulary mismatch problem and classification with the Support Vector Machine (SVM) method. Sampling technique with Synthetic Minority Oversampling Technique (SMOTE) used to overcome data imbalance. The experimental results show that feature expansion can increase the performance of model. The final results obtained F1-Score value of the model for the signal aspect increased by 27.91% with F1-Score 95.93%, and for the service aspect increased by 42.36% with F1-Score 94.53%.

Keywords: twitter, aspect-based sentiment analysis, feature expansion, fasttext, svm

