

ABSTRACT

Product reviews are essential in e-commerce as they can help potential buyers make decisions prior to making purchases and help sellers get the measure of their products. A product can have thousands of reviews, making it burdensome for potential buyers and sellers to draw a conclusion from those abundant reviews. This research built a system that applies Aspect-based Sentiment Analysis (ABSA) with a dataset from product reviews on the Female Daily website. The system was built using TF-IDF as its feature extraction method combined with word bigram and word bigram. The Support Vector Machine (SVM) algorithm is used to classify the sentiments. This experiment results indicate that the preprocessing stage, especially the stemming and stopwords removal process are greatly affect the accuracy results. The choice of word N-gram is also crucial, where this research shows that the word unigram gives a higher accuracy than the word bigram. The final results of this research show that TF-IDF combined with word unigram and SVM with a linear kernel brings out the best accuracy, that is to say, 88.35%.

Keywords—product reviews, sentiment analysis, TF-IDF, SVM