Abstract

The rate of internet user is growing rapidly, that causes in many aspect for example in purchasing online product. The conventional process than changes into modern one utilizing the internet. To improve the interest, most of the seller or websites start to give media for consumer giving a feedback or review about product that has been purchased. This can be easier for potential consumer deciding product they want to buy based on the existing review. However, many reviews will make the potential buyers difficult if they read all the reviewers and their conclusion.

This research will built a system that can automatically classify product reviews based on the sentiment/polarity (positive or negative). This system will be built through three steps, the first is preprocessing to clean the data then feature extraction using TF-IDF. The result of the feature extraction are made in vector form to be used as the input for the classification process using Random Forest method. This research focus on determining positive and negative feature on aspect level. At last, to evaluate the performance of classification method the system will use micro average f1-score. Based on the reviews data that used for sentiment classification using Random Forest, the highest value of micro average f1-score is 81.3%.

__Key words__: Review, TF-IDF, sentiment classification, Random Forest.