

## **Abstract**

PT Telekomunikasi Indonesia has many products that compete with other competitor's products for customer. In order to win the competition, a company should know how the customers respon or think about the products. Some finished by consultant and some finished by internal Market Analist.

Nowadays, people are getting familiar with internet. Through online social media, people can express their feeling about something by writing short text easily. Usually people are honest with their feeling, because they basicly communicate with their real friends. Thus online social media contains a lot of opinion about anything from people. And those information are very valuable for marketing activities. A company can know how the customers response about a product or service by doing data mining especially sentiment classification on social media.

The challenge is that people usually write their opinion on online social media with unstructured sentences. Basicly there are two levels of problems, word level and sentence level. Word level problem includes the use of punctuations, numbers to replace letters, misspelled words and non standard abbreviations. The sentence level problem, is the process of classifying each sentence correctly. The classification used in this research are : neutral, negative and positive.

This classification systems include several steps such as text pre-processing, feature extraction, and classification. The text pre-processing aims to transform informal texts into formal texts. Feature extraction extracts opinion from sentences. And finally, classification is a method to classify each sentence to the related sentiment.

With the improvements of the text preprocessing, feature extraction, scaling the data and the right SVM parameter, the selection can be achieved accuracy at a of minimum 85%

Keywords : Indonesian Text Classification, Indonesian Noisy Text Preprocessing, SVM