ABSTRACT

Many industries and organizations use analytical data to make better business decisions. Companies can bring big changes to planning and decision making by applying data analysis on structured data and unstructured data. Sentiment analysis (or) opinion mining plays a significant role in our daily decision making process. These decisions may range from purchasing a product such as mobile phone to reviewing the movie to making investments---all the decisions will have a huge impact on the daily life.

Sentiment Analysis is dealing with various issues such as Polarity Shift, accuracy related issues, Binary Classification problem and Data sparsity problem. However various methods were introduced for performing sentiment analysis, still that are not efficient in extracting the sentiment features from the given content of text. Naïve Bayes, Support Vector Machine, Maximum Entropy are the machine learning algorithms used for sentiment analysis which has only a limited sentiment classification category ranging between positive and negative.

Testing for system performance has obtained a Precision value of 60%, Recall of 60%, F-Measure of 60% and Accuracy of 30%. There are still deficiencies in the system so the system cannot read job opening data. Of the total 10 job vacancy data that has been processed and classification by the system, there are 4 data included in the Engineering, 1 data included in the Economy and Business, 2 data included in the other year, 1 data included in SMA or equivalent and 2 data included into Bachelor.

Keywords: *Sentiment Analysis, Machine Learning, Data Analysis, Decision Making, Polarity Shift.*