

## ABSTRACT

Development of internet and technology, has major impact on the change of business mechanism, such as of how to advertise, selling, or human interaction, and so on. This is so popular called e-commerce. Many e-commerce sites that provide convenience in transaction, and consumers can also provide reviews or opinions on products that purchased in the comments field. These opinions can be used by consumers and producers. Consumers to know the advantages and disadvantages of particular feature of the product that worth buying or not. Producers can analyse own strengths and weaknesses as well as its competitors products. Many opinions that reach hundreds or even thousands, so it needs a method that the reader can know the point of whole opinion. The idea emerged from review summarization that summarizes the overall opinion based on sentiment and features contain.

In this study, the domain even become the main focus is on the digital camera. This research consisted of four steps, among 1) giving of knowledge to the system to recognize the semantic orientation of an opinion 2) identify the features of product of consumer opinion 3) identify whether the opinion gives a positive or negative opinion 4) summarizing the result. In this research, discuss the methods such as Naïve Bayes for sentiment classification, and feature extraction algorithms based Dependencies Analysis, which is one of the tools in Natural Language Processing (NLP) and knowledge based dictionary or lexicon which is useful for handling implicit features. The end result of research is a summary that contains a bunch of reviews from consumers on the features and sentiment. With proposed method, accuracy for sentiment classification giving 81.2 % for positive test data, 80.2 % for negative test data, and accuracy for feature extraction reach 90.3 %.

**Keywords** : *reviews, sentiment classification, summarization, text mining*