

## ***Abstract***

*The continued development of internet technology is currently more widespread impact on the system of selling goods through online shop e-commerce. E-commerce will usually ask the buyer to provide a review of the product that has been purchased. an increasing number of buyers every day resulting in increasing as well the reviews are given on a product. The final task is to build a system that can summarize a collection of buyer's review of a product based on its quality. That will facilitate other prospective buyers to know the quality of the goods to be purchased based on the product's reviews before.*

*Process summarizing product's review conducted is one opinion mining process that is expected to generate a summary review of the product, which are opinion words with positive orientation or negative orientation. The first process on the final project is the process of extracting a product review based on the product's features and their opinions are followed, then performed the extraction of rule-making that has been obtained and the calculation of the frequency of occurrence rule in a review, and finally determining the orientation of subjective words (positive or negative) . The method used for the manufacture of rule is Association Rule Mining, while the frequency of occurrence rule calculations performed by algorithms Pointwise Mutual Information - Information Retrieval (PMI-IR).*

*Based on the test results, it shows that the algorithm PMI - IR can be used to process summarizing product's reviews with the highest frequency of occurrence counting rule in the form of an opinion piece for the product features and their orientation is determined by using Sentiwordnet.*

***Keywords*** : *Opinion Mining, Opinion Summarization, Association Rule Mining, Pointwise Mutual Information – Information Retrieval (PMI-IR), Sentiwordnet.*