

## ***Abstract***

*Data mining is the process of analyzing data to discover the patterns of the data set. Data mining can discover large data into information in the form of a pattern that has meaning for decision support. One of the data mining techniques that can be used is the association of data mining. This method begins by finding the frequent itemset and a number followed by the formation of association rules. In this case, Fold-Growth algorithm is used to discover the number of association rules from databases of transactions, so that can be used as a consideration in making marketing or promotional effective strategies.*

*In this research can be proven that Fold-Growth algorithm success to be implemented in Market Basket Analysis case to discover the rule on determining place of goods. We can identify from transaction that we examine depend on quantity of transaction and combination of parameter between minimum support 0,1%-0,5% and minimum confidence 10%-50% we can conclude that ,combination of minimum support and minimum confidence give major contribution on result of the rule. In the other hand, additional rule that also become a concern,item food and non-food can not be applied in one department or one group aslo give contibution to discover the rule on determining place of goods.*

*Key words: data mining, association rules, market basket analysis, frequent itemset, Fold-Growth*