**Market Basket Analysis**

## Market Basket Analysis leads to the discovery of associations and correlations between items in huge transactional or relational datasets, customers purchasing patterns by discovering important associations among the products which they place in the shopping cart. Apriori and FP Growth are the most common algorithms for mining frequent item sets. The aim is to determine which item are frequently bought together by customers. This analysis help in identify the regular customer, products which are sold more and many more. The association between purchasing products are identified here. Exploratory data mining techniques are used followed by association rules, or pattern recognition. Association analysis is also known as affinity analysis or association rule mining, a method commonly used for market basket analysis. ARM is currently the most suitable method for analysis of big market basket data but when there is a large volume of sales transaction with high number of products, the data matrix to be used for association rule mining usually ends up large and sparse, resulting in longer time to process data. Association rules provide information of this type in the form of “IF-THEN” statements.