**Abstract**
Supermarkets every day record a lot of sales transactions, this will have an impact on the growth of very large amounts of data and generate large amounts of data. From the transaction data new information can be extracted that is useful to support the self-service business process. For example the importance of what kind of goods are the top priority that must be self-service. In this study, Fuzzy c-means algorithm is used in self-service sales data to obtain the level of product sales. babies, and for mineral water products that are categorized as low are types of mineral water products 240ml, 330ml and 600ml, and products that are in the high category are types of fried noodle products. In cluster testing using the Modified Partition Coefficient (MPC) method the result is that the highest cluster validity is best when using 5 clusters.

**Keywords:** ***Supermarket,Sales Data, Fuzzy C-Means,Clustering,*****MPC**