**INVENTORY MANAGEMENT**

Inventory is one of the major aspects of a retail industry. History has seen many losses occurred due to poor inventory management including big companies in US like Walmart and target.

Example :- Walmart underwent a 3 Billion loss due to more orders and no stock in the store.

The main attributes of this management are

1. What products to be order
2. When to be ordered
3. How much to be ordered

Considering the above 3 factors mostly any retail store can be moulded and we got this by grouping products as Best, Moderate, Worst products. Depending on the products selling trend how much to be ordered is decided using predictions and When to be ordered is done by considering lead time, demand supply pattern.

The above approaches were done on our dataset in the following way by using Descriptive analysis, Predictive analysis with Linear regression as a part of it.

Extracted the pattern of inventory for all products for a period of 48 months (Descriptive Analytics). Based on profits and quantity sold of products they are classified as best, moderate, worst and High, Medium, Low respectively. Based on product & given date the predicted sales for next 3 months are calculated by using Linear Regression (Predictive Analytics)**.**