**PHASE 1: MARKET BASKET INSIGHTS**

In this part you will need to find tha association between the items/item sets and based on those association we can analyse the consumer behaviour

This project analyses sales data to answer interesting business questions and provide insights to the management team including market basket analysis.

**DEFINITION**:

Market basket insights is a data mining technique used by retailers to increase sales by better understanding customer purchasing patterns. It involves analysing large data sets, such as purchase history, to reveal product groupings, as well as products that are likely to be purchased together.

**BENEFITS AND IMPLEMENTATION OF MARKET BASKET INSIGHTS:**

**BENEFITS**:

Benefits of Market basket insights can increase sales and customer satisfaction. Using data to determine that products are often purchased together, retailers can optimize product placement, offer special deals and create new product bundles to encourage further sales of these combinations.

These improvements can generate additional sales for the retailer, while making the shopping experience more productive and valuable for customers. By using market basket analysis, customers may feel a stronger sentiment or brand loyalty toward the company.

**IMPLEMENTATIONS:**

Implementing Market Basket insights in Python First, define the minimum support and confidence for the association rule.

Find out all the subsets in the transactions with higher support(sup) than the minimum support.

Find all the rules for these subsets with higher confidence than minimum confidence.

**EXAMPLES:**

**Examples of market basket insights**

Amazon's website uses a well-known example of market basket analysis. On a product page, Amazon presents users with related products, under the headings of "Frequently bought together" and "Customers who bought this item also bought."