PROJECT – MARKET BASKET INSIGHTS

Market Basket Analysis

Market basket analysis is a strategic data mining technique used by retailers to enhance sales by gaining a deeper understanding of customer purchasing patterns. This method entails the examination of substantial datasets, such as historical purchase records, in order to unveil inherent product groupings and identify items that tend to be bought together.

Advantages of Market Basket Analysis

- Increases customer engagement
- Boosts sales and increases RoI
- Improves customer experience
- Optimizes marketing strategies and campaigns
- Helps in demographic data analysis
- Identifies customer behavior and pattern

Applications of Market Basket Analysis

1. Retail
2. E-commerce
3. Hospitality
4. Healthcare
5. Banking/Finance
6. Telecommunications

Implementing Market Basket Analysis in Python

1. First, define the minimum support and confidence for the association rule.
2. Find out all the subsets in the transactions with higher support(sup) than the minimum support.
3. Find all the rules for these subsets with higher confidence than minimum confidence.
4. Sort these association rules in decreasing order.
5. Analyze the rules along with their confidence and support.