Superstore Sales Analysis Report

Introduction

The purpose of this project was to analyze sales performance using SQL and visualize insights through a dashboard. The dataset contained sales transactions across regions, categories, and customers. The goal was to identify key trends, profitable segments, and opportunities for business improvement.

Abstract

This project involved importing the Superstore dataset into MySQL, performing SQL queries for data exploration, and building a Power BI dashboard. SQL was used to clean, extract, and aggregate the data, while Power BI provided an interactive visualization layer. The final insights helped identify profitable regions, top-performing categories, preferred payment and shipping methods, and customer purchasing patterns.

Tools Used

- **MySQL Workbench** – Data import, queries, and aggregation

- **Power BI** – Dashboard creation and visualization

- **Excel/CSV** – Data preparation and formatting

Steps Involved in Building the Project

1. **Data Import**: The Superstore dataset was imported into MySQL using the Table Data Import Wizard.

2. **Data Exploration with SQL**: Queries were written to analyze sales by region, category, sub-category, segment, and shipping method. Aggregations such as SUM, AVG, and COUNT were used.

3. **Dashboard Creation**: Data was connected to Power BI, where interactive visuals (bar charts, line charts, pie charts) were built.

4. **Insights Derived**:

   ○ **Regional Sales**: West region contributed the highest sales, while South contributed the least.

   ○ **Segment Analysis**: The Consumer segment accounted for the majority of sales (48%).

   ○ **Payment Mode**: COD (43%) was the most preferred, followed by Online payments.

   ○ **Category Performance**: Office Supplies generated the highest sales (0.64M).

   ○ **Profit Trends**: Profits peaked towards the end of the year, especially in Q4.

   ○ **Shipping Mode**: Standard Class was the most used shipping method.

Conclusion

The analysis highlighted that the **Consumer segment and Office Supplies category** were the primary revenue drivers. COD and Online payments dominated transactions, while Standard Class shipping was most common. Business recommendations include optimizing inventory for office supplies, focusing on West and East regions, and offering incentives for online payments. This project demonstrates how SQL and Power BI can be combined to generate meaningful business insights and support decision-making.