

Superstore Sales Analysis Report

1. Objectives :

The primary objective of this analysis is to understand the sales, profit, and order trends across different dimensions of the Superstore dataset. This includes analysing performance by region, country, customer segment, product category, and time. Additionally, the goal is to identify factors affecting profit and provide actionable business recommendations.

2. Methodology :

The analysis was conducted using SQL and Python (Pandas). Key metrics such as total sales, quantity, orders, and profit were aggregated and segmented by various dimensions like product, geography, customer, and time. Profit margin was calculated as $(\text{Profit} / \text{Sales}) * 100$. Correlation and distribution analyses were used to study the impact of shipping cost and discount on profitability.

3. Key Insights :

- Technology is the most profitable category, while Tables (in Furniture) leads in losses.
- High discount levels are often associated with low or negative profit margins.
- Customers from the Consumer segment generated the most orders and sales.
- Certain countries like the United States and India contribute significantly to sales and profit, while some others have high sales but poor profitability.
- High shipping costs often correlate with lower profit margins.

4. Visuals :

Visuals were created using bar charts, line plots, and pie chart to illustrate trends across time, customer segments, and product categories.

5. Recommendations :

- Reduce high discounts on low-margin products to improve profitability.
- Investigate loss-making sub-categories like Tables for pricing or sourcing optimization.
- Optimize shipping cost for orders with low profitability.
- Focus marketing efforts on high-profit customer segments and regions.
- Explore forecasting and advanced analytics to anticipate demand and optimize stock.