

Retail Sales Performance Analysis - Superstore Dataset

1. Introduction

This project analyzes the Superstore retail dataset to evaluate sales performance, profitability, regional trends, and product category insights. The goal is to derive actionable business insights that can support data-driven decision-making.

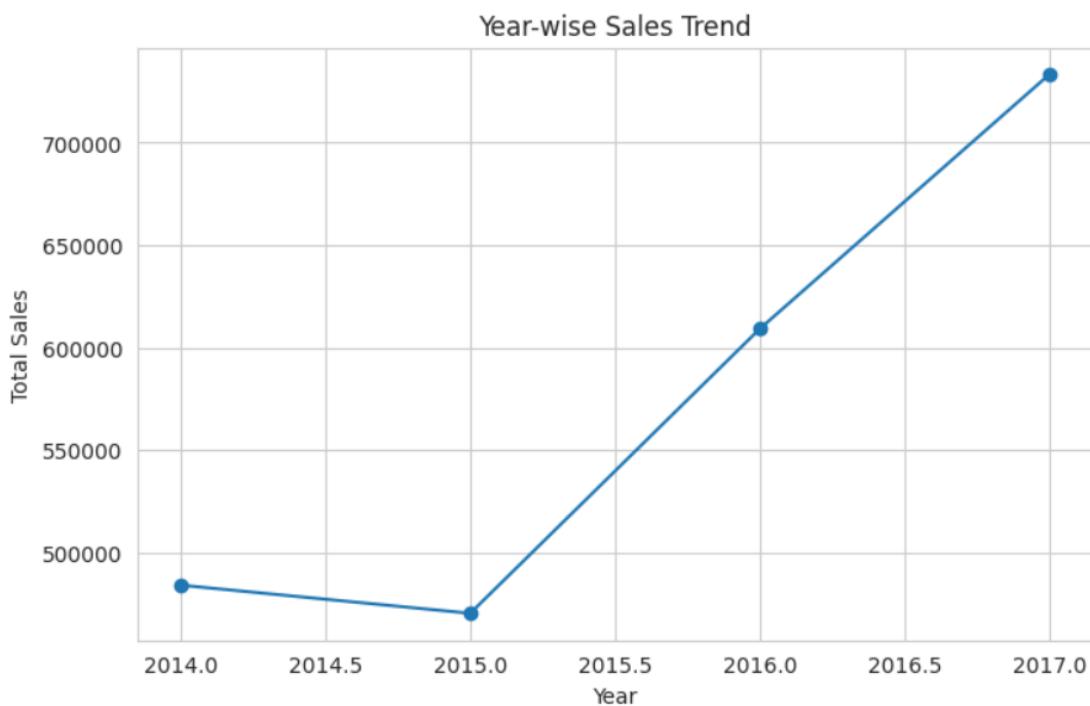
2. Data Cleaning & Preparation

- Converted Order Date to datetime format.
- Removed duplicate records.
- Created Year and Month columns for time-based analysis.
- Checked for missing values and ensured dataset consistency.

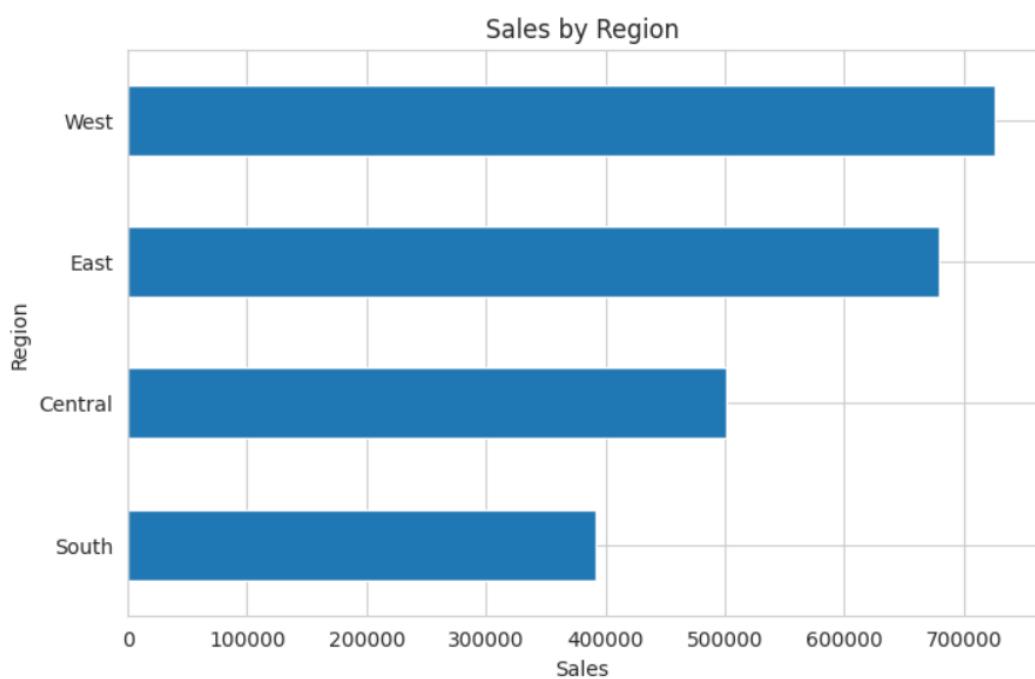
3. Exploratory Data Analysis

- Year-wise Sales Trend Analysis
- Regional Sales Performance Comparison
- Category and Sub-Category Profitability
- Discount vs Profit Relationship
- Correlation Analysis

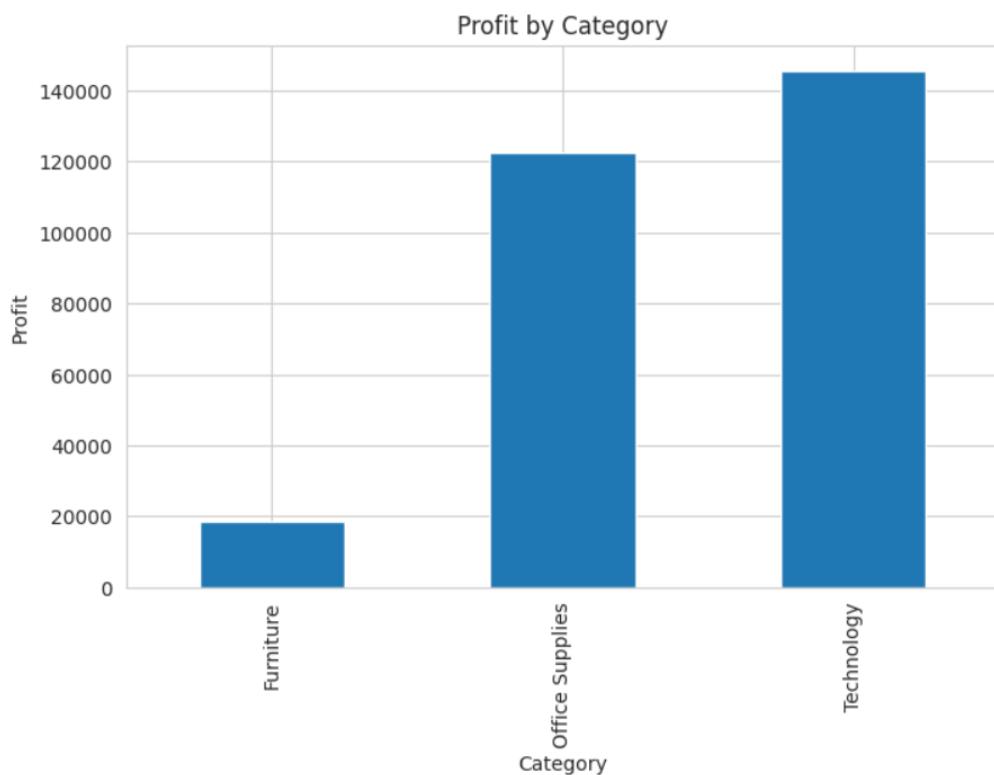
➤ Year-wise Sales Trend Analysis



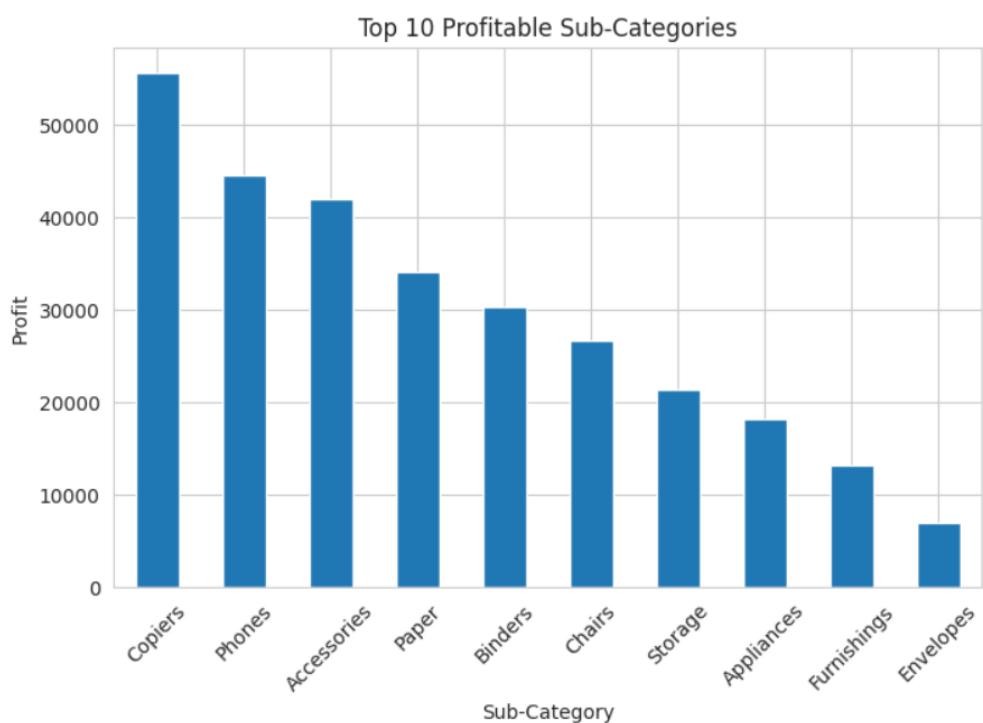
➤ Sales by Region



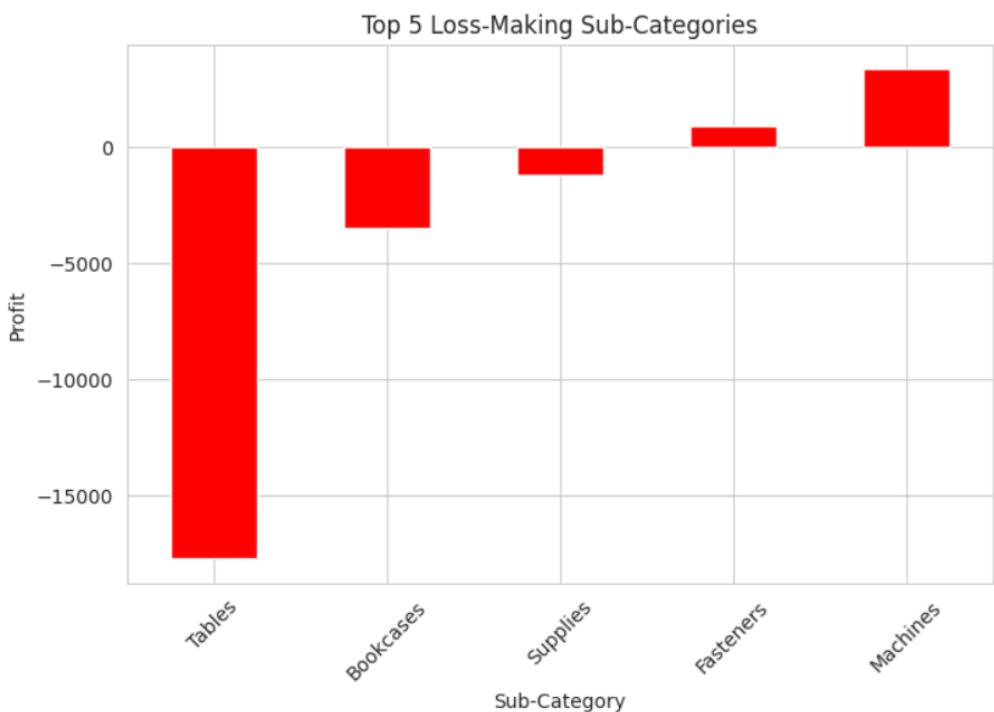
➤ Profit by Category



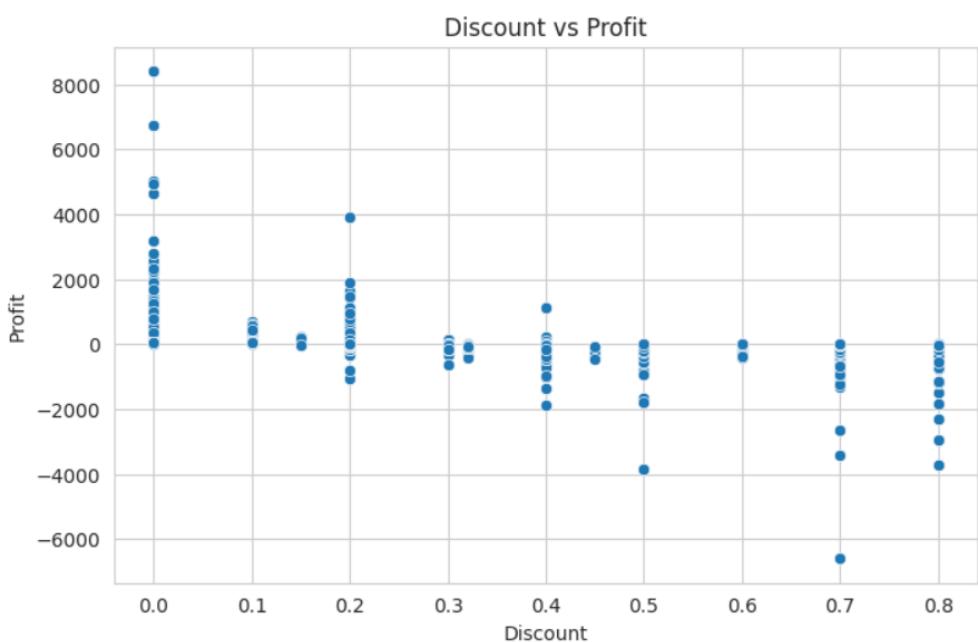
➤ Top 10 Profitable Sub-Categories



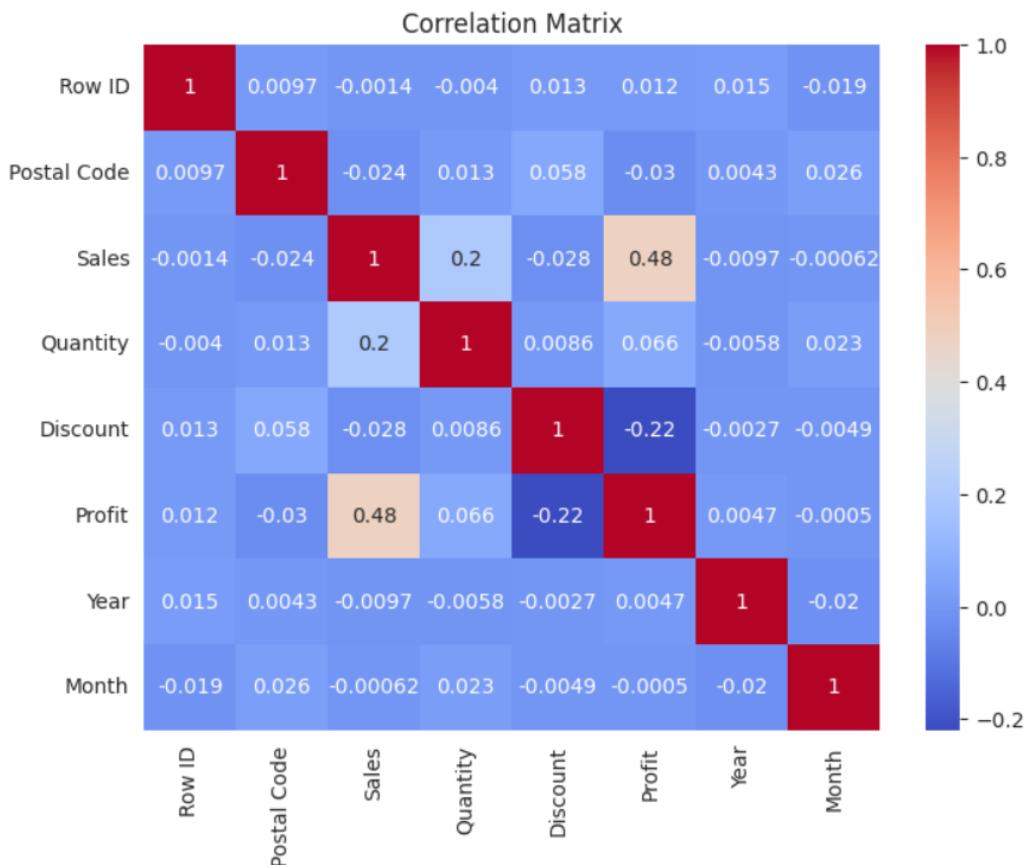
➤ Loss Making Sub-Categories



➤ Discount vs Profit Relationship



➤ Correlation Heatmap



4. Key Business Insights

- High discounts are negatively impacting profit margins.
- Technology category generates the highest overall profit.
- Certain sub-categories such as Tables and Bookcases generate losses and require strategy review

5. Conclusion

This analysis highlights the importance of strategic discount management, regional focus, and category-level performance tracking. The findings can help improve profitability and optimize inventory and marketing strategies.

