Superstore Sales Analysis Project

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Tools Used: Microsoft Excel, MySQL, Tableau, Python

Executive Summary

This report presents a comprehensive analysis of the Superstore dataset using SQL for data exploration and Tableau for visualization. The objective is to identify sales trends, analyze profit-generating segments, and provide actionable insights for business decisions. Key findings include the most profitable product categories, underperforming regions, and high-value customer segments.

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1. Introduction

The Superstore Sales Analysis project aims to uncover business insights from historical retail data. This includes identifying profitable product categories, high-performing regions, and customer purchasing behavior. By leveraging SQL and Tableau, we visualize and extract meaningful patterns from raw sales data.

2. Dataset Overview

The dataset used, 'superstore_cleaned.csv', contains over 9,000 records and includes fields such as Order Date, Sales, Profit, Category, Sub-Category, Region, Customer Name, and more. The data was cleaned using Microsoft Excel to remove null values and correct inconsistent formats.

3. Tools Used

1. Microsoft Excel - for initial data cleaning and preparation.
2. MySQL - for executing queries and aggregating insights.
3. Tableau - for creating dashboards and visualizing trends.

4. SQL Analysis

Sample SQL Query - Top 10 Customers by Sales:

```
SELECT Customer_Name, SUM(Sales) AS Total_Sales
FROM superstore_cleaned
GROUP BY Customer_Name
ORDER BY Total_Sales DESC
LIMIT 10;
```

This query identifies the top customers contributing most to overall sales. Similar queries were used to explore category performance, regional trends, and profit distributions.
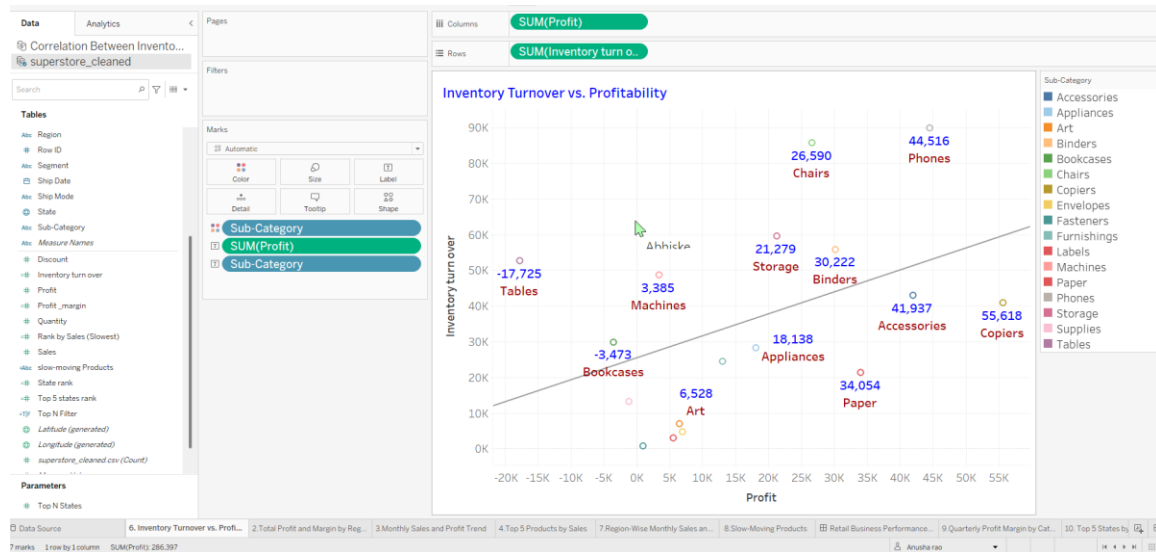
5. Tableau Dashboard

Visual dashboards were created in Tableau to highlight the following:

- Regional performance in terms of sales and profit.
- Top-selling products and categories.
- Monthly sales trends.
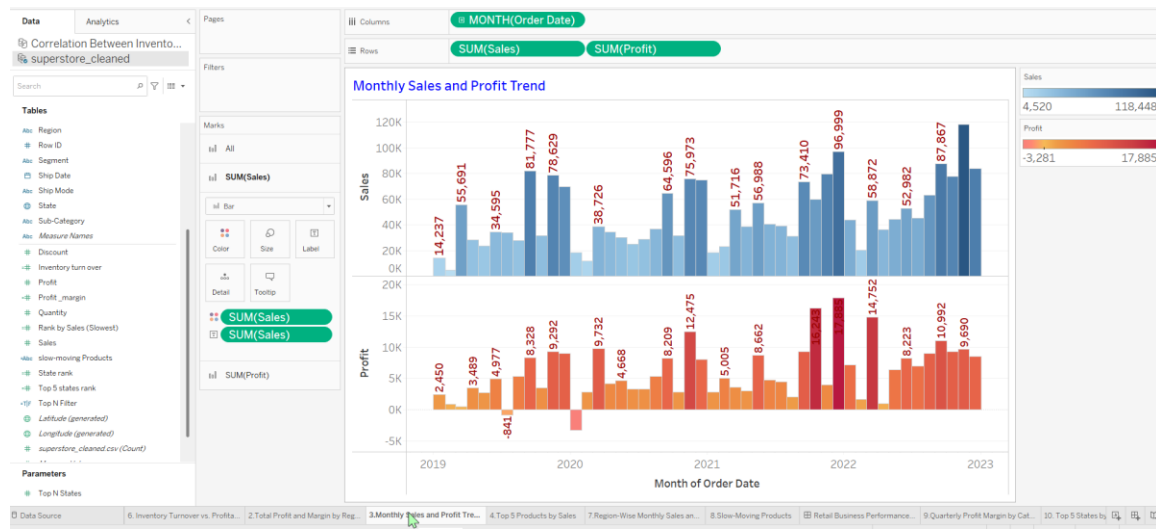- Sub-category level performance breakdown.

Sales by Region:-
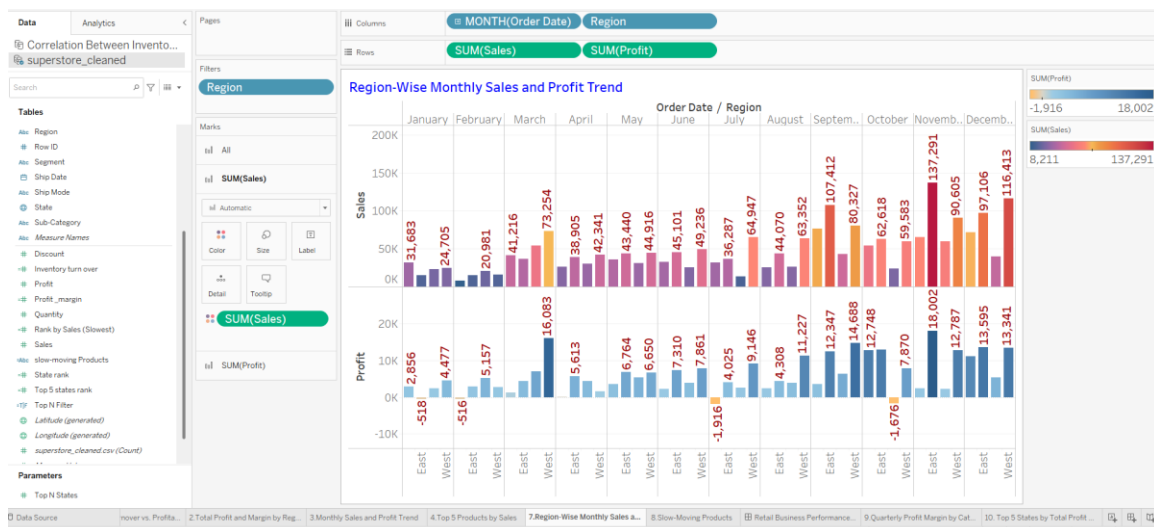
Inventory Turnover vs. Profitability:-

Monthly Trend:-

6. Key Insights

- The Technology category yields the highest profit margins.
- Office Supplies show stable sales but lower profit.
- The South region, while having high sales, lags in profit.
- Sub-categories like Phones and Chairs dominate revenue.

7. Conclusion

This analysis highlights areas where the Superstore business can optimize strategies—focusing on high-profit segments, revising pricing in low-profit regions, and targeting top

customer segments. Data-driven decision-making can significantly enhance profitability and market reach.