

## Task 02: Retail Store Sales Dashboard – Full Project Documentation

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### Project Objective

To analyze retail sales performance using Excel by building an insightful, multi-page dashboard covering key business metrics like sales trends, regional analysis, customer segments, product categories, and the impact of discounts, along with strategic recommendations.

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### Steps Followed to Complete Task 02

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#### 1. Dataset Download

- Collected the raw "Retail Store Sales" dataset provided by the internship/training source.
  - Saved the file in Excel format for further processing.
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#### 2. Data Cleaning Using Excel

- Opened the dataset in Excel.
  - Performed the following cleaning steps:
    - Removed all blank rows and extra columns not needed for analysis.
    - Verified and corrected **data types** (dates, numbers, text).
    - Cleaned and formatted **Order Date, Ship Date** to standard date format.
    - Ensured consistency in **categorical fields** like Region, Segment, Category, and Sub-Category.
    - Removed **duplicates** using "Remove Duplicates" feature.
  - Saved the cleaned version separately as: **Cleaned\_Retail\_Store\_Dataset.xlsx**.
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### 3. Data Analysis via Pivot Tables

- Created pivot tables for each of the required analysis aspects:
    - **Sales by Month**
    - **Profit by Region**
    - **Customer Segment Sales**
    - **Category/Sub-category Sales**
    - **Discount vs Sales vs Profit by Month**
  - Used **filters** and **slicers** to explore data for different combinations.
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### 4. Data Visualization and Dashboard Creation

Created visual dashboards in Excel by combining pivot charts with text summaries. Pages included:

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#### Page 1: Overview

- KPIs: Total Sales, Total Profit, Total Orders.
  - Line chart showing Monthly Sales & Profit Trend.
  - Title: "**Sales Performance Overview**"
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#### Page 2: Region Analysis

- Column chart for Sales and Profit by Region.
  - Map visualization (if applicable).
  - Title: "**Regional Performance Breakdown**"
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#### Page 3: Customer Behavior

- Segment-wise sales & profit analysis.
- Top 10 Customers by Total Sales (Bar chart).

- Title: "**Customer Segment & Behavior Insights**"
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#### **Page 4: Product Impact**

- Category and Sub-Category Sales Distribution.
  - Best Performing Product Types.
  - Title: "**Product Category Impact Analysis**"
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#### **Page 5: Discount vs Profit**

- Combo chart: Line (Discount), Bars (Sales) across months.
  - Color-coded by Category: Technology, Office Supplies, Furniture.
  - Title: "**Discount Impact on Sales & Profit**"
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#### **Page 6: Insights & Recommendations**

- Key takeaways from visual analysis:
    - October-November had peak sales with high discounts.
    - Technology responds well to discounts.
    - April discounts didn't lead to higher sales → diminishing returns.
  - Business Recommendations:
    - Focus discounts on Technology in Q2 and Q4.
    - Reassess Office Supplies strategy.
    - Use A/B testing for optimal discount thresholds.
  - Title: "**Insights & Actions**"
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#### **5. Dashboard Design Best Practices**

- Used minimal and meaningful color palette for category clarity.
- Proper titles, axis labels, legends used on every chart.

- Avoided clutter and merged similar metrics for comparison.
- Business insights were emphasized, not just visuals.

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## 6. Final Outputs & Submission Material

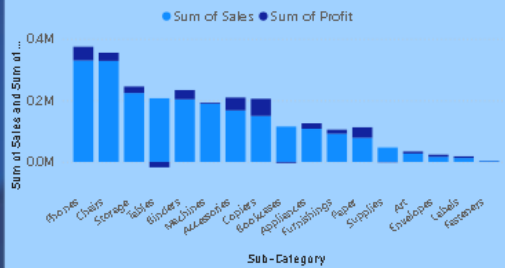
- Cleaned Dataset Excel File
  - 6 Dashboard Pages exported as PNG
  - Combined all into a **single polished PDF Report**
  - (Optional) Uploaded the entire project to GitHub for portfolio purposes.
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## 7. Screen Shots

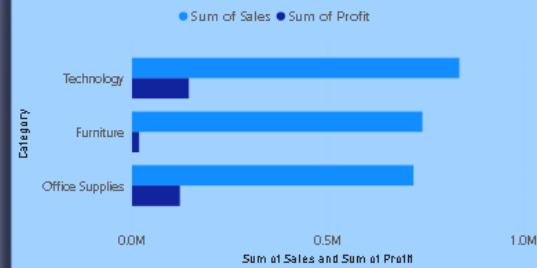


## Sales & Profit by Category and Sub-Category

### Sales & Profit by Sub- Category



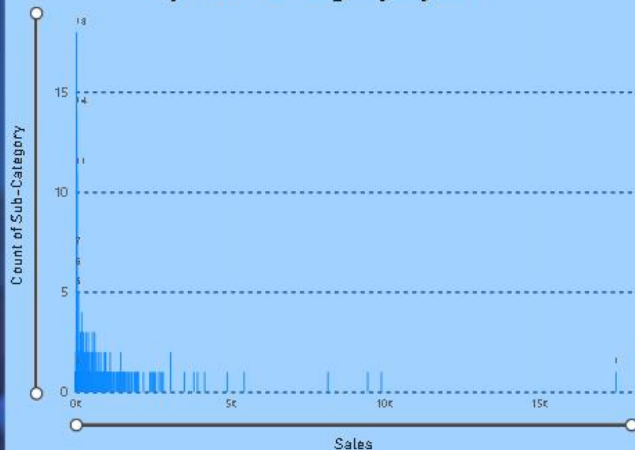
### Sales V Profit by category



Category	Central	East	South	West	Total
Furniture	-2,871.05	3,046.17	6,771.21	11,504.95	18,451.27
Office Supplies	8,879.98	41,014.58	19,986.39	52,609.85	122,490.80
Technology	33,697.43	47,462.04	19,991.83	44,303.65	145,454.95
<b>Total</b>	<b>39,706.36</b>	<b>91,522.78</b>	<b>46,749.43</b>	<b>108,418.45</b>	<b>286,397.02</b>

## Profit Heatmap – Category vs Region

### Top Sub- Category by Sales



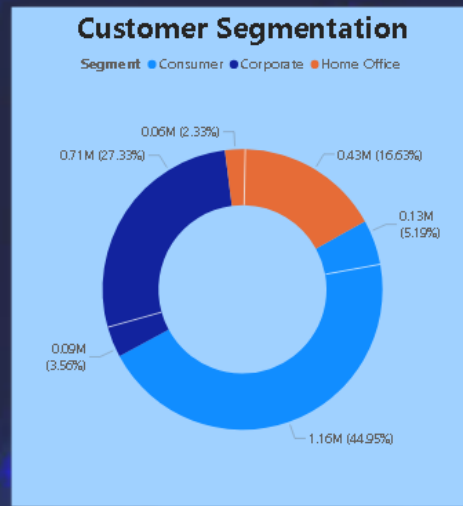
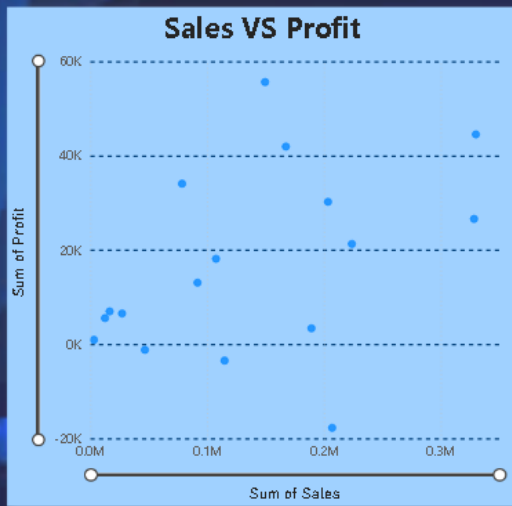
501.24K

Sum of Sales

### Country, Region, State

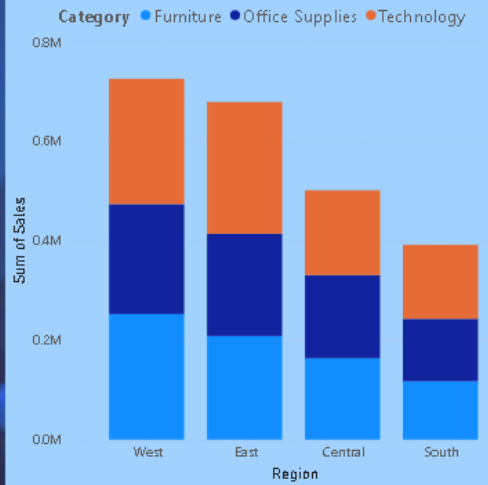
- United States
- Central
- East
- South
- West

## Customer Segmentation & Sales



## Discount Analysis – Impact on Sales & Profit

### Region - Wise Sales Performance

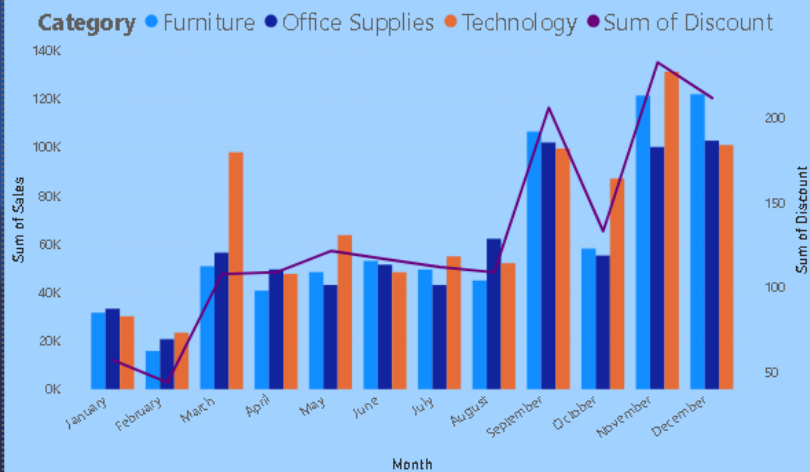


### Discount VS Profit



## Insights & Recommendations

### Discount VS Sales



### Recommendations:

- Focus seasonal discount campaigns in October and November to leverage high purchase intent.

### Summary:

The "Discount vs Sales" chart reveals that October and November saw the highest sales across all categories, closely aligned with high discount rates. Technology consistently performed well, especially during high-discount months like March, September, and November. However, not all discount spikes led to higher sales — notably, April showed high

