



Project Report Summary

Project Title

Retail Superstore Sales Analytics Dashboard using Power BI & AI

Objective

To analyze retail sales data and generate actionable insights that help improve profit margins, discount strategy, and customer targeting. The goal is to support data-driven business decisions through interactive dashboards and AI-enhanced summaries.

Tools & Technologies Used

- Microsoft Power BI (Dashboard creation)
- Excel (Data preprocessing)
- ChatGPT (Insight summaries and stakeholder communication)
- GitHub (Project hosting and version control)

Data Summary & Cleaning

- Dataset:** Superstore (9,994 rows, 21 columns)
- Cleaned null values, standardized date formats, and categorized product types.
- Removed duplicates, reformatted columns, and created calculated columns in Power BI using DAX.

Key Business Insights

- Chairs** had the highest revenue but lowest profit due to over-discounting (>20%).
- West Region** had the highest total sales (₹7.25L), 85% higher than South.
- Corporate customers** ordered frequently but had the lowest average profit.
- Discounts >20% caused consistent negative profits across multiple categories.

Business Recommendations

- Reduce discounts above 20%, especially for Chairs and Phones.
- Focus marketing on **Consumer segment in West and Central regions**.
- Promote high-profit sub-categories like **Copiers and Phones** in underperforming regions.

AI Integration (ChatGPT)

Used ChatGPT to:

- Summarize visual insights for executive reports
 - Generate commentary for dashboards
 - Example prompt: *"Explain why profit is negative when discounts exceed 20% and recommend a solution."*
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Project Outcomes

- Created an interactive, professional Power BI dashboard.
 - Improved business understanding of profit leaks and segmentation strategy.
 - Demonstrated full data analytics lifecycle: data cleaning → visualization → insight → recommendation.
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GitHub Project Repository

 github.com/Laya-analytics/powerbi-sales-dashboard

Sales & Profit Performance Dashboard

Dataset: Superstore | Tool: Power BI

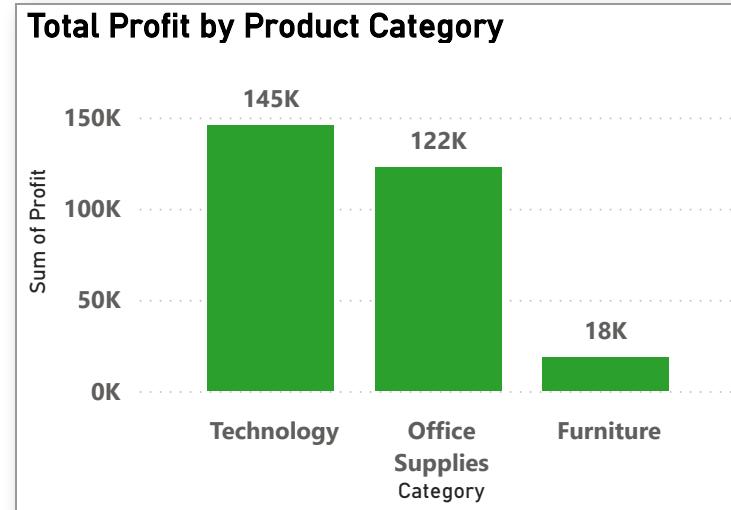
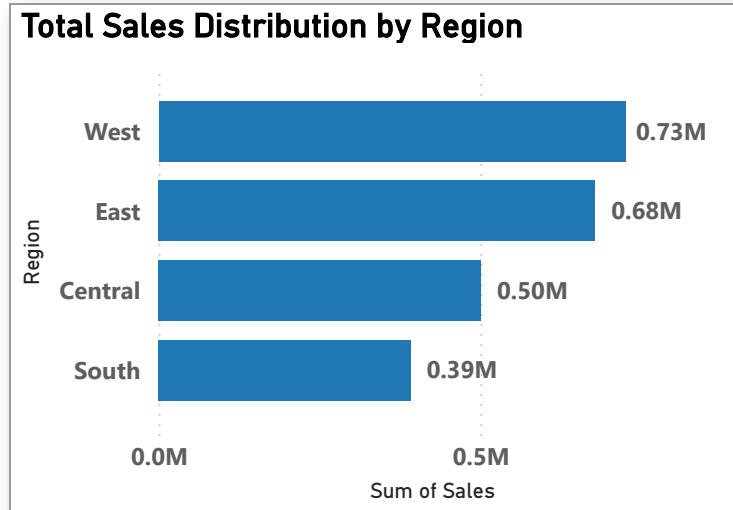
💡 Tip: Use dropdowns to exclude specific values by deselecting them.

Filter by Category

All

Filter by Region

All



Insights Summary
At 7,25,457.82, West had the highest Sum of Sales and was 85.20% higher than South, which had the lowest Sum of Sales at 3,91,721.91.

West had the highest Sum of Sales at 7,25,457.82, followed by East, Central, and South.

West accounted for 31.58% of Sum of Sales.

Across all 4 Region, Sum of Sales ranged from 3,91,721.91 to 7,25,457.82.

Sum of Sales started trending up on 2014. rising by 51.41%

Next

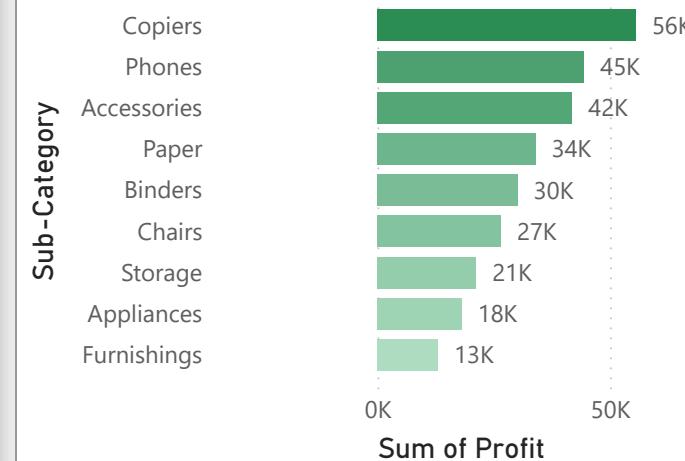
Sum of Profit, First Category and Sum of Profit by State and Category

Category ● Furniture ● Office Supplies ● Technology



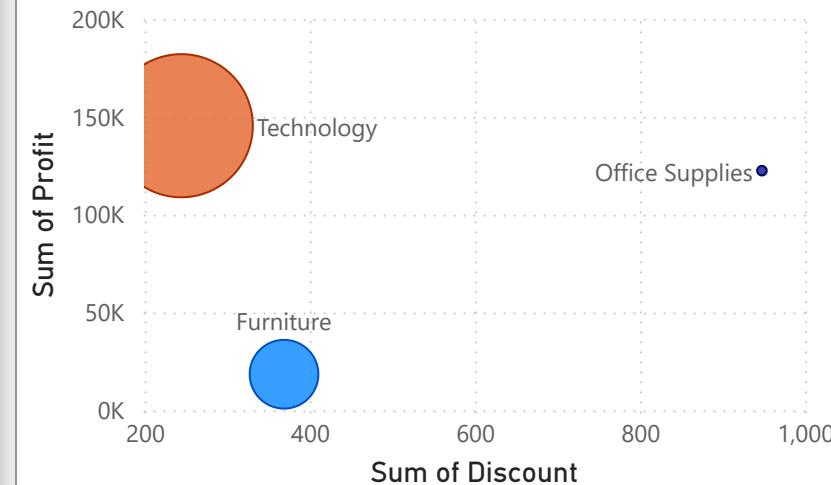
Profit by Sub-Category

Sum of Profit 0.00K 60.00K



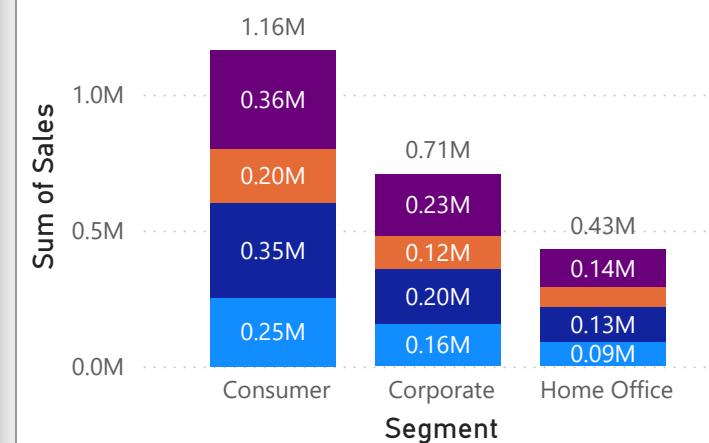
Sales vs Profit vs Discount

Category ● Furniture ● Office Supplies ● Technology



Sales & Profit by Segment and Region

Region ● Central ● East ● South ● West



Quick Insights — Type to Explore Data

Ask a question about your data

Try one of these to get started

average sale

average profit

total discount

orders sorted by city

show the maximum sale