



Retail Sales Performance Analysis

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Problem Statement

- A nationwide retail company operates multiple stores across four regions (North, South, East, West). The business sells electronics and office supplies to different customer segments.
- Senior management has noticed that overall revenue is growing, but profit margins are inconsistent across regions and products. Some regions report high sales but low profits, while others perform steadily.
- The leadership team wants a single Power BI dashboard that:
- Cleans and validates raw sales data
- Identifies profitable and non-profitable products
- Highlights regional performance gaps
- Supports data-driven decisions for promotions and inventory planning
- You are assigned as a Data Analyst to explore the data, build a robust data model, apply DAX calculations, and present actionable insights.

Questions

- Identify missing values and duplicates in the Sales dataset. What cleaning steps are required?
- Perform univariate analysis on Sales and Profit. What distribution patterns do you observe?
- Which product categories contribute the highest revenue and profit?
- How does sales performance vary across regions?
- Create a star schema using Sales, Customer, and Product tables. Why is this model effective?
- Write a DAX measure to calculate Total Sales and Total Profit.
- Calculate Profit Margin (%) using DAX and identify low-margin products.
- Design a dashboard to show regional and category-wise performance.
- Which products should be discontinued or promoted based on analysis?



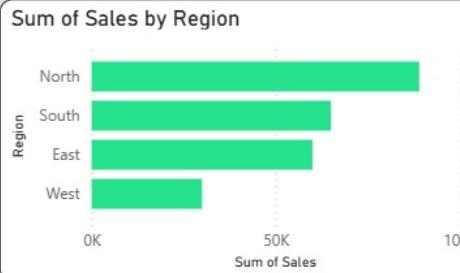
Financial Expense Dashboard

Retail Sales Performance Analysis

33K
Total Profit

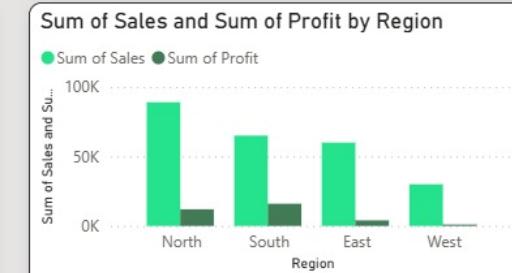
0.14
Profit Margin %

Sum of Sales by Region



Region	Sum of Sales
North	89K
South	65K
East	55K
West	30K

Sum of Sales and Sum of Profit by Region



Region	Sum of Sales	Sum of Profit
North	89K	11K
South	65K	14K
East	55K	4K
West	30K	-3K

244K
Total Sales

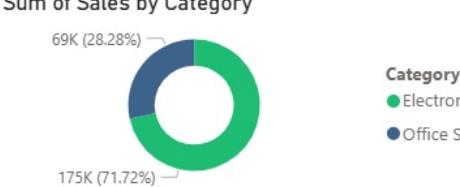
3.30K
Average Profit

First Category and First Segment by Region



Region	Category	Segment
North	Electronics	East Electronics
	Electronics	North Electronics
South	Electronics	South Electronics
	Electronics	West Electronics

Sum of Sales by Category



Category	Sum of Sales	Percentage
Electronics	69K	28.28%
Office Supplies	175K	71.72%

At 89000, North had the highest Sum of Sales and was 196.67% higher than West, which had the lowest Sum of Sales at 30000.

North had the highest Sum of Sales at 89000, followed by South, East, and West.

North accounted for 36.48% of Sum of Sales.

Help Q&A understand people better by adding synonyms.

Ask a question about your data

Try one of these to get started

Executive Dashboard Overview

KPI Overview

Total Sales

- Displays the **overall revenue generated** across all regions and products.
- Helps assess the **business scale and sales performance**.

3.30K

Average Profit

Total Profit

- Shows the **total profit earned** after costs.
- Indicates the **overall profitability** of sales operations.

0.14

Profit Margin %

Profit Margin %

- Represents the **percentage of profit relative to sales**.
- Helps evaluate **pricing efficiency and cost control**.

33K

Total Profit

Trends & Distribution

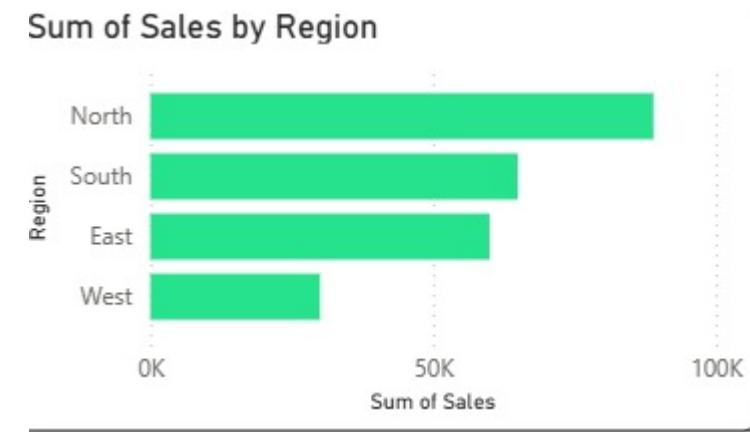
Column Chart – Sum of Sales & Profit by Region



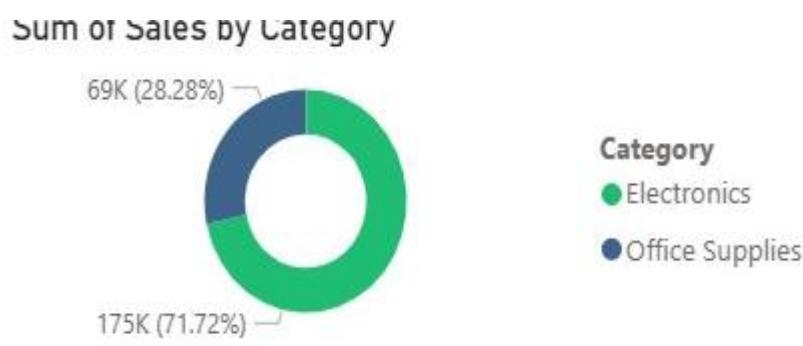
- Displays **sales and profit together** for each region.
- Highlights regions with **high sales but lower profit margins**.
- Helps identify **profitability gaps**.

Bar Chart – Sum of Sales by Region

- Compares total sales across **North, South, East, and West** regions.
- Identifies **top-performing and low-performing regions**.
- Helps in **regional sales strategy planning**.



Donut Chart – Sum of Sales by Category



- Visualizes **sales contribution by category**.
- Highlights **Electronics as the major revenue driver**.
- Helps compare category performance easily.

Table – Product-wise Sales & Profit

ProductName	Total Sales	Total Profit	Profit Margin %
Laptop	70000	11000	0.16
Monitor	50000	14000	0.28
Notebook	39000	4000	0.10
Pen Pack	30000	-3000	-0.10
Total	244000	33000	0.14

Provides detailed insight into **product-level performance**.

Identifies:

- High-profit products (e.g., Monitor, Laptop)

- Loss-making products (e.g., Pen Pack)

Supports **product portfolio optimization**.

Key Insights

- **North region leads sales** with the highest contribution, while West records the lowest sales.
- **Total sales of 244K** generated a **total profit of 33K**, showing overall positive performance.
- **Electronics dominate sales**, contributing the majority share compared to office supplies.
- **Profit margin of 14%** indicates moderate profitability with scope for improvement.
- **Negative profit observed in select products** (e.g., Pen Pack), highlighting pricing or cost issues.



Thank You