

# Sales Performance Analysis Report

The dataset used for this project represents a sales transactional system. It is organized using a star schema model, which contains one central Fact table and three supporting Dimension tables. Overall, the dataset provides complete details about customer purchases, products, and payment behavior across different dates.

## DASHBOARD

The first page of the dashboard acts as the **home page** or **navigation page** for the entire report. It provides a clean, simple interface that allows users to navigate to different analytical pages within the dashboard—such as Sales Summary, State-based analysis, or specific location-based insights. The dashboard begins with a large, clearly designed title banner:

### **“Sales Analysis Dashboard”**

This helps users easily recognize the purpose of the report and maintains a professional layout.

## Navigation Buttons

Three buttons are displayed:

### 1. **Sales Summary**

- Links to the page containing KPIs, sales trends, and profit analysis.

### 2. **State-based**

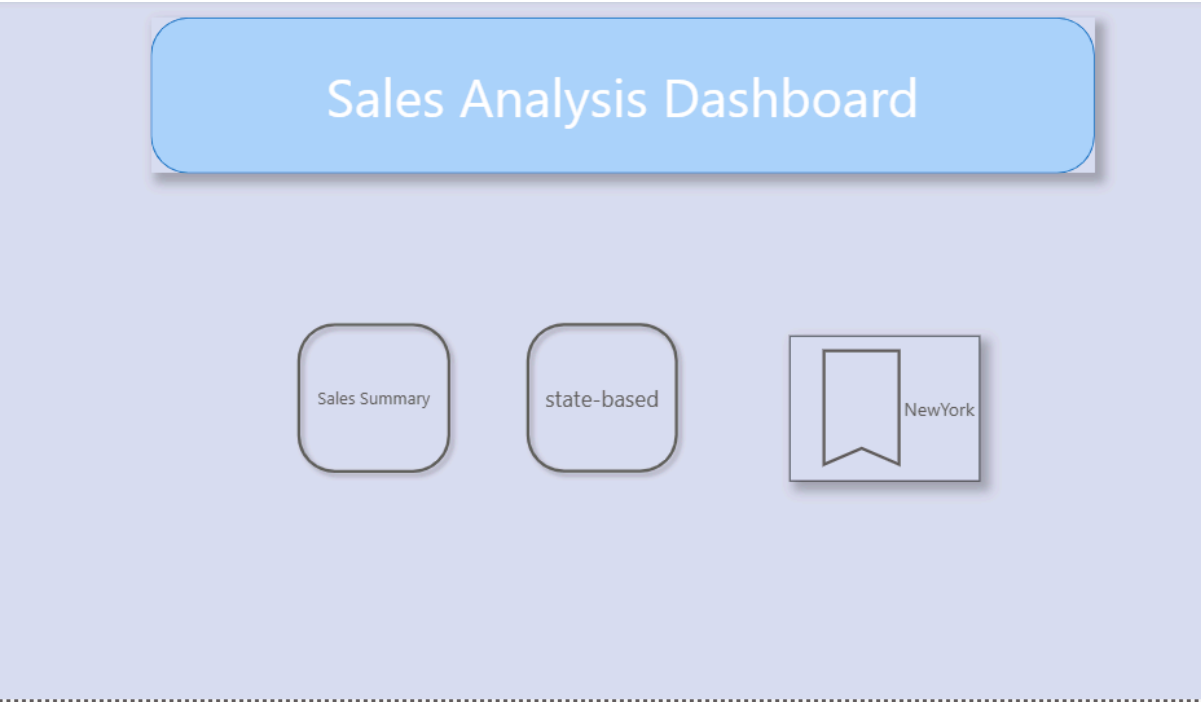
- Redirects users to analysis grouped by state to understand regional performance.

## Navigation Bookmark

### 1. **New York**

- A bookmark button that provides a filtered view specific to New York, demonstrating the use of bookmarks for quick access.

These buttons and book mark improve the dashboard’s usability and allow viewers to quickly dive into the analysis they need



# Sales Summary Dashboard

This page of the dashboard provides a clear and comprehensive overview of the business performance by summarizing key sales metrics, profitability insights, and category-wise trends. Each visualization is designed to help stakeholders quickly understand performance patterns, revenue drivers, and cost-profit relationships.

## KPI CARDS (Top Summary Metrics)

### Total Cost – 4.6M

This KPI card displays the total cost incurred during the selected period. It helps the business understand how much has been spent to generate revenue.

### Total Profit – 1.6M

This card shows the total profit earned. It indicates how efficiently the business is converting sales into profits.

### Total Sales – 6.2M

This is one of the most important KPIs, showing overall revenue.  
It helps reviewers see the scale of the business and revenue performance.

### **Profit Margin % – 26.1%**

Profit Margin % = (Total Profit ÷ Total Sales) × 100

A profit margin of 26.1% indicates good profitability compared to cost.

#### **Overall Interpretation:**

Sales are high (6.2M), with a good profit margin (26.1%), meaning strong financial performance.

## **Sales by Payment Mode (Donut Chart)**

This donut chart breaks down total sales based on different payment methods such as:

#### **Debit Card**

- Credit Card
- UPI
- COD
- EMI

#### **Purpose:**

Shows which payment mode customers prefer.

#### **Example Insight:**

Here Debit Card have bigger segments, it indicates that a large portion of customers choose card-based payments over UPI, Credit Card, or Cash on Delivery. This shows that customers are comfortable with instant, secure, and hassle-free digital payments.

## **Sales by Category (Slicer Filter)**

A slicer is added so viewers can filter the entire report by product category.

This makes the dashboard interactive and allows deeper analysis.

**Usage Example:**

Selecting “Furniture” will update all charts and KPIs to show data only for that category.

## Sales by Sub-Category (Bar Chart)

This horizontal bar chart shows sales distribution among different sub-categories such as:

- Chairs
- Binders
- Bookcases
- Electronic Gadgets
- Others

**Insights Provided:**

- Identifies top-selling sub-categories
- Highlights underperforming items
- Helps in inventory planning and marketing strategy

“Markers” is the strong revenue driver and “Binders” showing the lowest revenue .

## Sales by Month and Year

This scatter plot compares sales trends month-wise across multiple years (2020–2024). Each year is represented with different colored dots.

**Purpose of this Graph**

- Shows seasonal trends .
- Helps identify year-over-year growth patterns.
- Detects anomalies such as sudden spikes or drops.

### Example Insight:

If the dots for 2024 are generally higher than previous years, it indicates business growth.

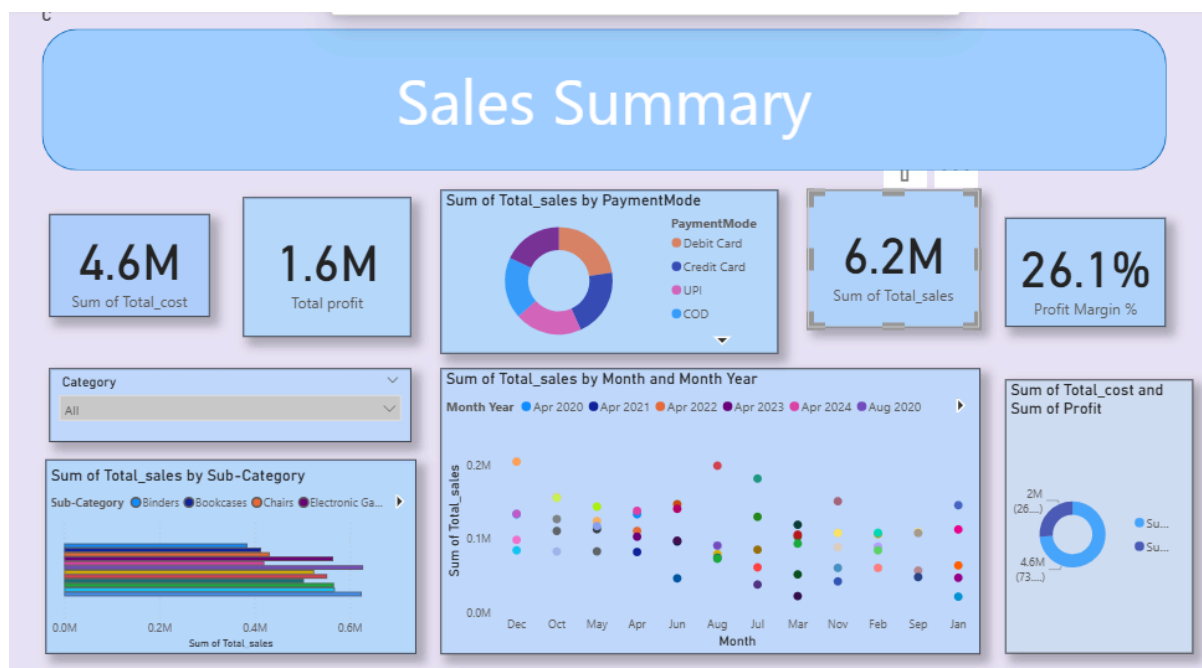
## Cost vs Profit Comparison (Donut Chart)

This chart visually compares **Total Cost** and **Total Profit**.

### Key Use

- Shows the overall cost-to-profit ratio
- Helps evaluate business efficiency
- Quick view of cost dominance vs profit share

cost is 74% and profit is 26%.



## State-Based Sales Insights – Detailed Dashboard Description

The *State-Based Sales Insights* page of the dashboard provides a geographical and performance-oriented breakdown of sales metrics across major U.S. states. This page is designed to help stakeholders understand how different regions contribute to total sales,

profit, and customer performance. By combining maps, trend lines, treemaps, and KPI cards, the page offers both high-level summaries and deep-dive regional insights.

## 1. Total Quantity Sold by Month (Line Chart)

This visualization shows how total quantity sold fluctuates throughout the 12 months. The line chart helps identify:

- Seasonal demand patterns
- Months with unusually high or low sales
- Sales consistency over time
- Possible promotional or holiday-driven spikes

The trend helps decision-makers plan inventory, marketing campaigns, and resource allocation based on monthly performance.

## 2. State-wise Profit Summary (Table)

The table lists states such as **Florida, New York, California, Texas**, along with the **sum of profit** generated from each state.

**This table helps you:**

- Identify high-profit states
- Compare profitability across different regions
- Understand which states contribute the most to business revenue
- Support targeted decision-making for expansions or marketing effort

The “Total” row gives a clear picture of the total profit coming from all states combined.

## 3. Key Performance Indicators (KPIs)

**Total Quantity Sold – 13K**

This KPI card provides a quick snapshot of the total quantity sold across all states. It gives stakeholders a high-level picture of overall product movement.

### **Top Customer by State – Cory Evans**

This card highlights the customer who contributes the highest sales/profit within the filtered state.

It helps identify loyal, high-value customers and supports customer relationship strategies.

## **4. Sales Distribution by State (U.S. Map Visual)**

The map visual shows sales intensity across states. States with higher sales appear in darker or more highlighted tones.

### **Insights from the Map:**

- Quickly identify best-performing regions
- Detect underperforming states
- Understand geographical buying patterns
- Support regional planning and distribution decisions

This visual is especially helpful for executives who prefer spatial representation of data.

## **5. Sum of Total Sales by State (Bar Chart)**

This chart compares total sales across states such as New York, Florida, California, Texas, Illinois, and Ohio.

### **The bar chart helps identify:**

- Which states generate the highest revenue
- Balanced or unbalanced sales distribution
- Ranking of states by performance
- States that may require additional focus or investment

The bars make it easy to visually spot performance gaps between states.

## 6. Quantity and Profit Comparison by State (Treemap)

This combined treemap uses size and color to compare both **quantity sold** and **profit earned** from each state.

A treemap gives an intuitive, compact summary of state-level performance.

## 7. Filters ( Sub-Category)

The dashboard provides interactive filters for:

- **State:** To view insights for a specific region
- **Sub-Category:** To analyze how specific product types perform across states

These filters make the page dynamic and allow focused analysis based on user needs.

