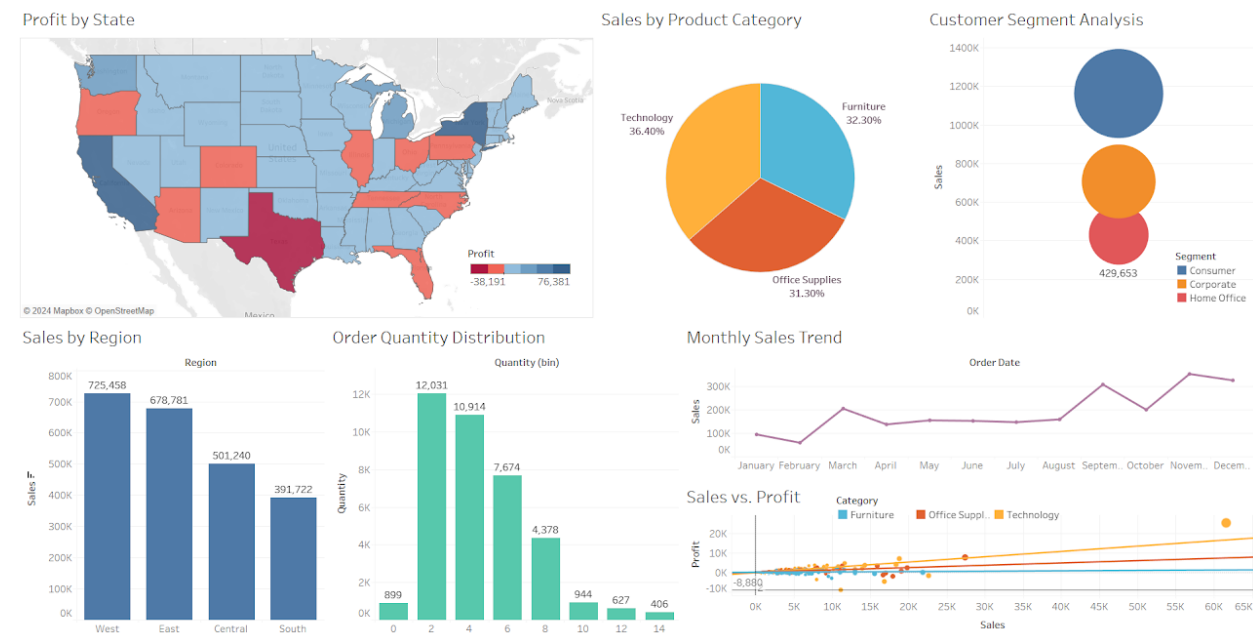


# Retail Sales Performance Dashboard

## Project Overview:

This dashboard was created as part of a project to analyze and visualize sales and profit data for a retail store using Tableau. The purpose of this dashboard is to compare sales statistics across different regions and product categories, providing key insights into performance trends and customer segments.



## Superstore Dataset Overview:

**Number of Rows:** The dataset includes over 9,900 rows of transactional data.

## Key Fields:

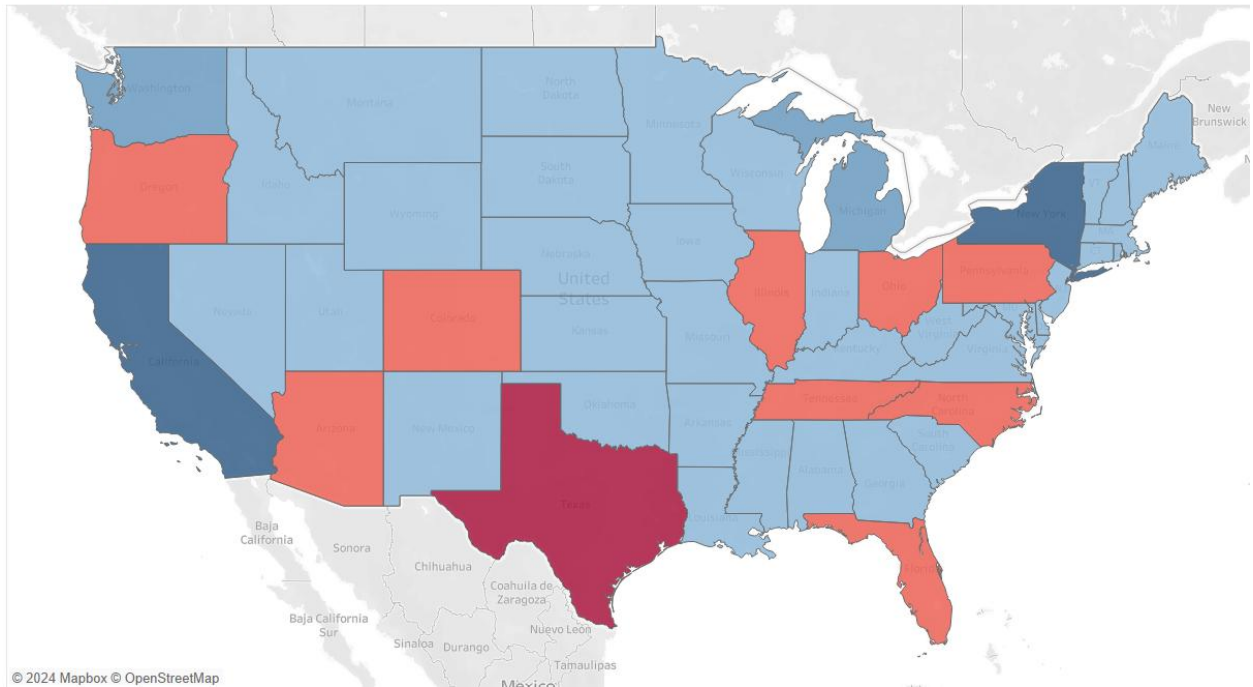
- Order ID: A unique identifier for each transaction.
- Order Date: The date on which the order was placed.

- Customer ID & Customer Name: Details about the customer making the purchase.
- Segment: The customer category, such as Consumer, Corporate, and Home Office.
- Region: The geographical area in which the transaction took place.
- Product Category & Product Sub-Category: Information about the type of products sold.
- Sales: The revenue generated by each transaction.
- Profit: The profitability of each sale after deducting the cost.
- Quantity: The number of items sold in each order.

### **Key Visualizations:**

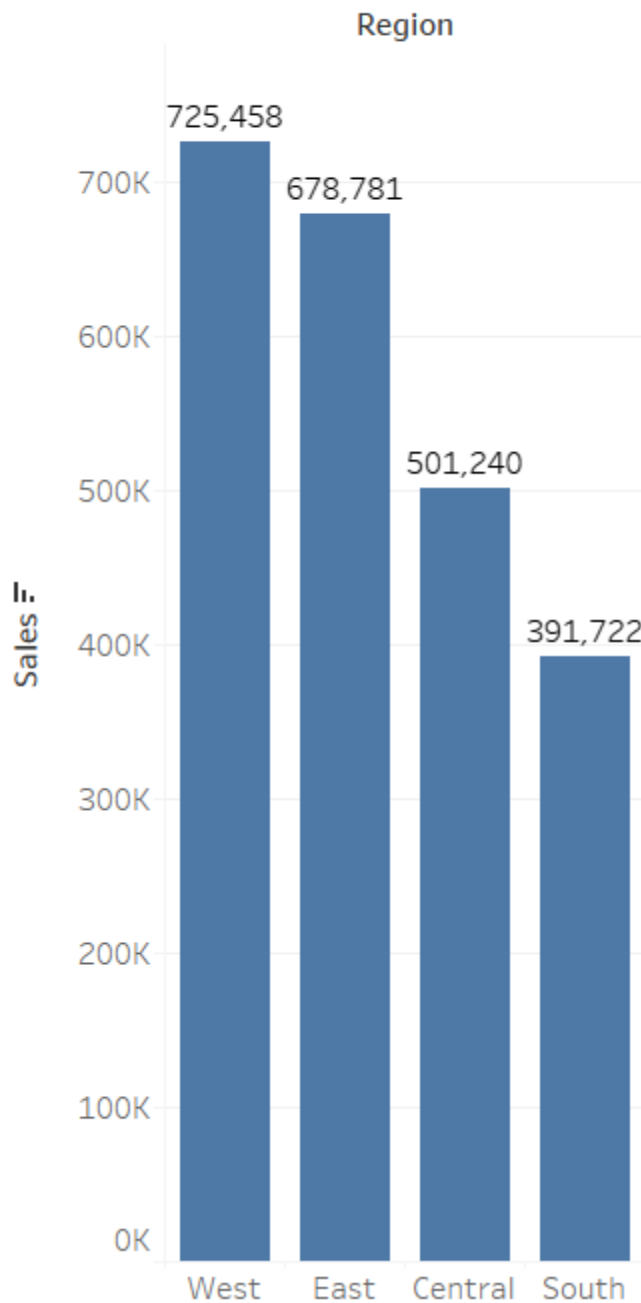
**Profit by State (Map):** This map shows profit distribution across different U.S. states. Red states indicate lower profits, while blue states indicate higher profits. Notably, Texas stands out with significantly lower profits, prompting further investigation into the cause. On the other hand, states like California and New York generate high profits, signaling strong performance.

## Profit by State



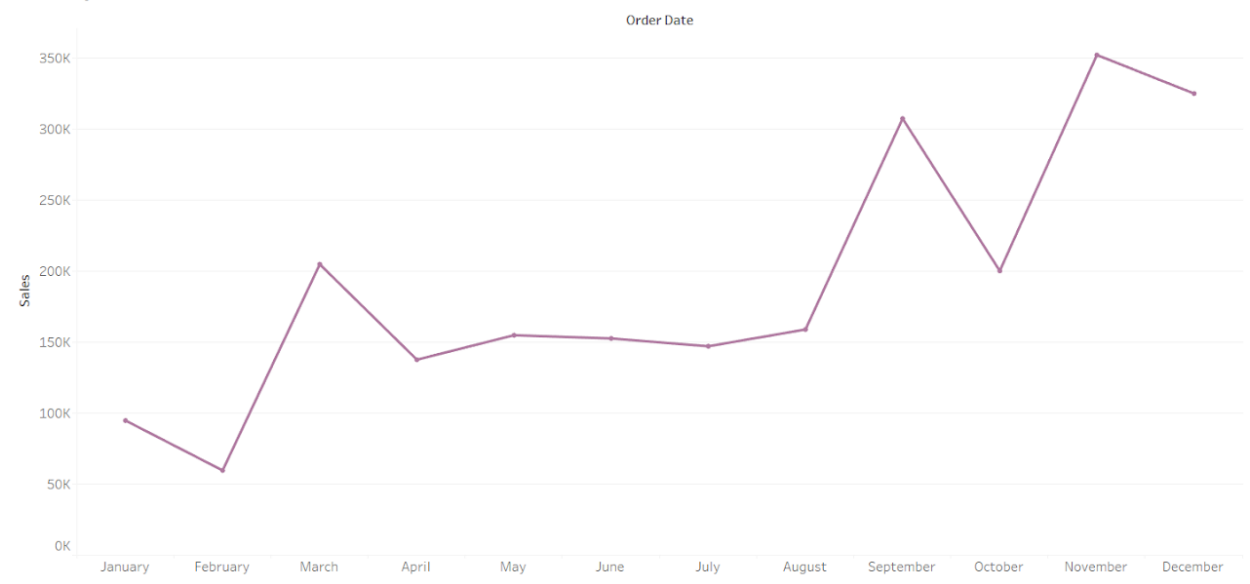
**Sales by Region (Bar Chart):** This bar chart compares total sales by region, with the West region showing the highest sales at \$725,458, followed by the East region. The Central and South regions lag behind, presenting opportunities for targeted marketing and sales strategies in those areas.

## Sales by Region



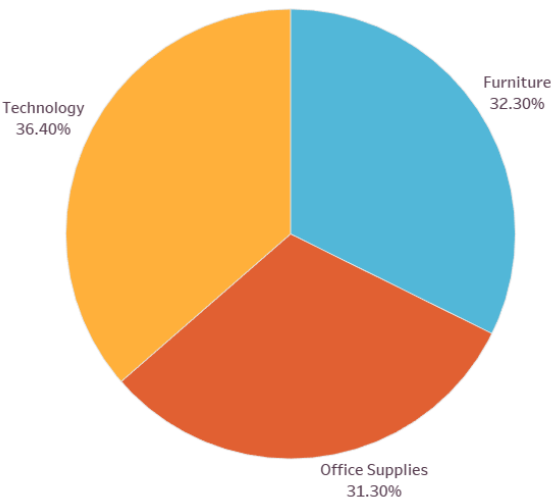
**Monthly Sales Trend (Line Chart):** The sales trend line chart highlights fluctuations in sales over the course of the year, with a noticeable peak in November and December, indicating higher sales during the holiday season. The dip in sales from February to April suggests a seasonal pattern, which could help in planning inventory and marketing strategies.

Monthly Sales Trend

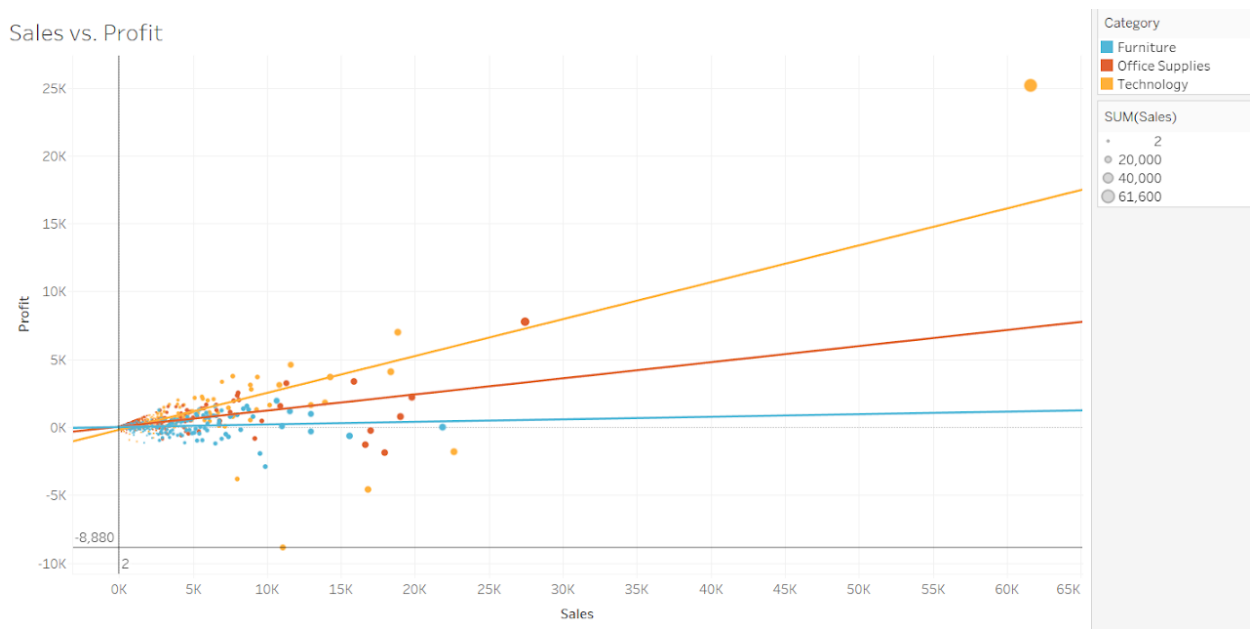


**Sales by Product Category (Pie Chart):** The pie chart illustrates sales distribution across three main product categories: Technology, Furniture, and Office Supplies. Technology leads with 36.4% of total sales, followed by Furniture and Office Supplies, showing that investment in technology products might have a higher return.

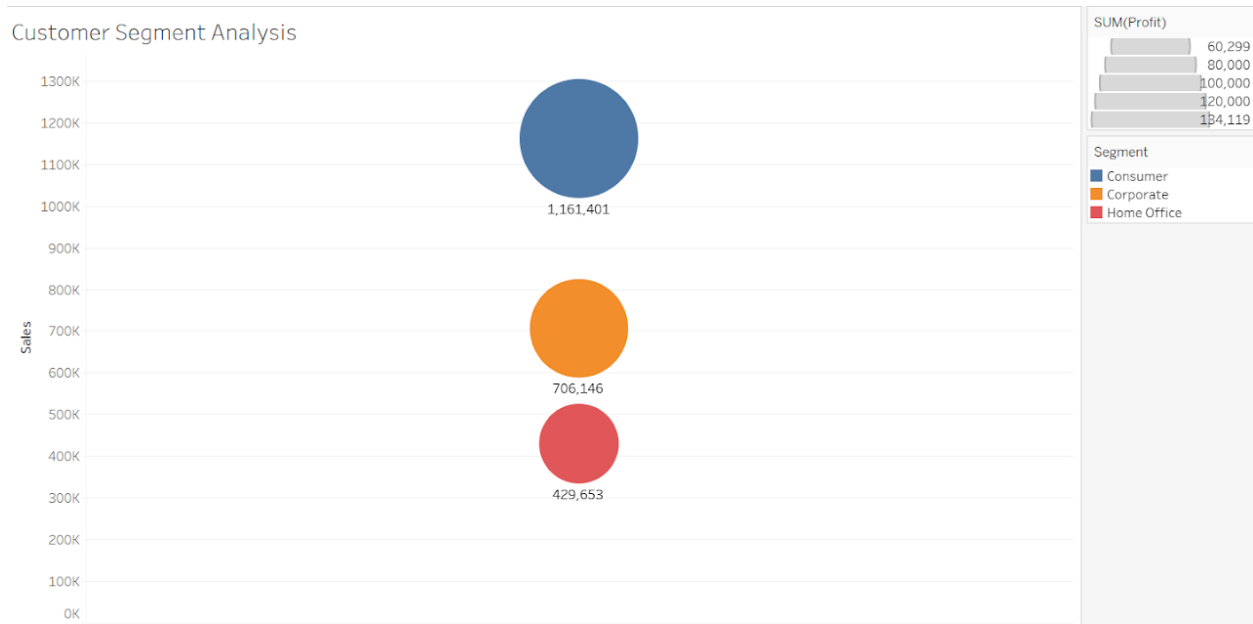
Sales by Product Category



**Sales vs. Profit (Scatter Plot):** The scatter plot shows the relationship between sales and profit, categorized by product type. Larger bubbles indicate higher sales volumes. Technology products have the highest correlation between sales and profit, while some office supplies show high sales but lower profit, indicating the need to review pricing strategies or cost control.

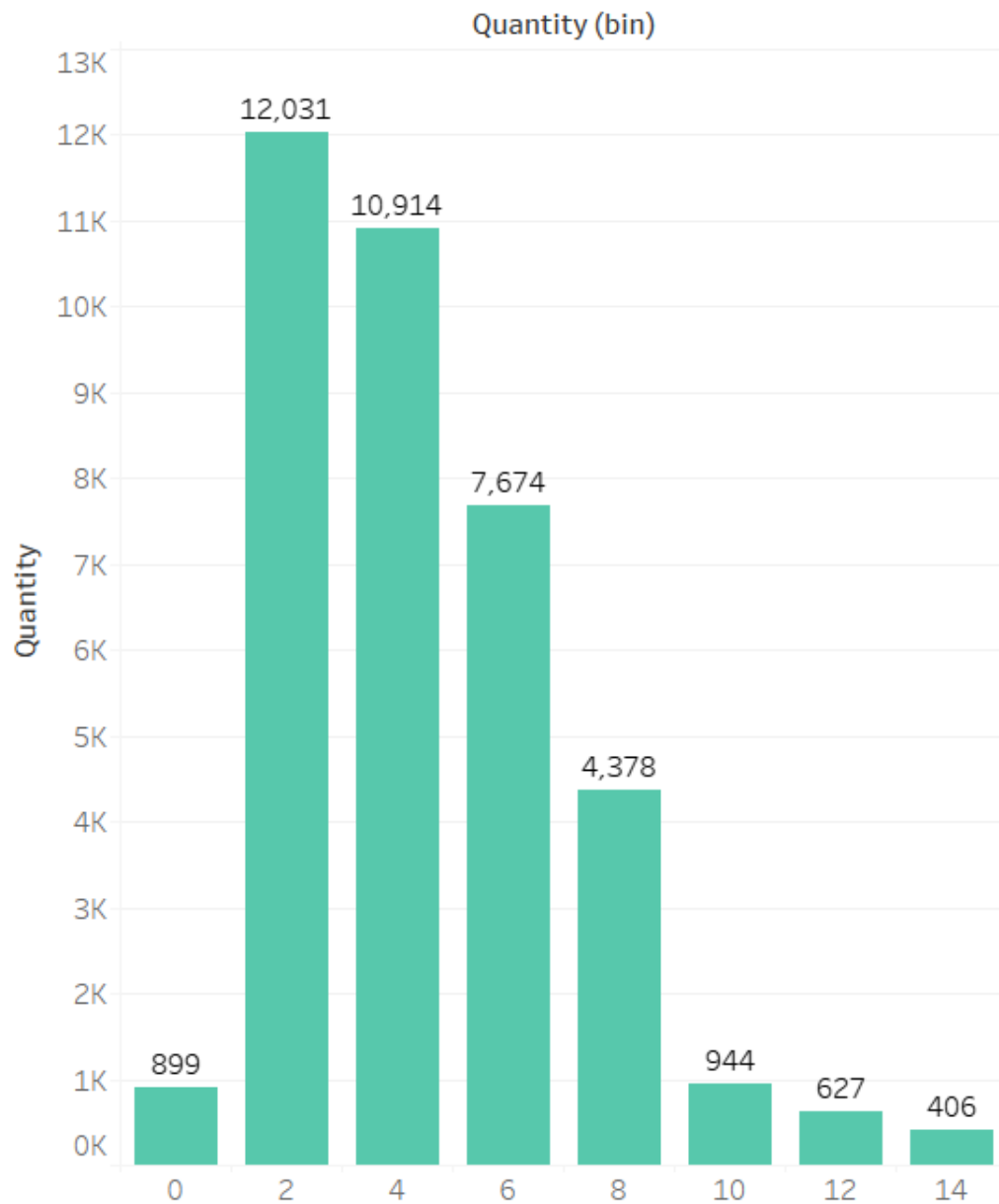


**Customer Segment Analysis (Bubble Chart):** This bubble chart compares total sales by customer segment. The Consumer segment generates the highest sales and profit, while the Corporate and Home Office segments show relatively lower values. Understanding these segments can help target marketing efforts.



**Order Quantity Distribution (Histogram):** The Order Quantity Distribution chart shows that most orders consist of small quantities, typically between 2 and 6 items, with orders of 2 items being the most frequent (12,031 orders). As the order size increases, the number of orders decreases significantly, with very few orders exceeding 10 items. This suggests that customers generally prefer smaller purchases, while larger orders are relatively rare.

## Order Quantity Distribution

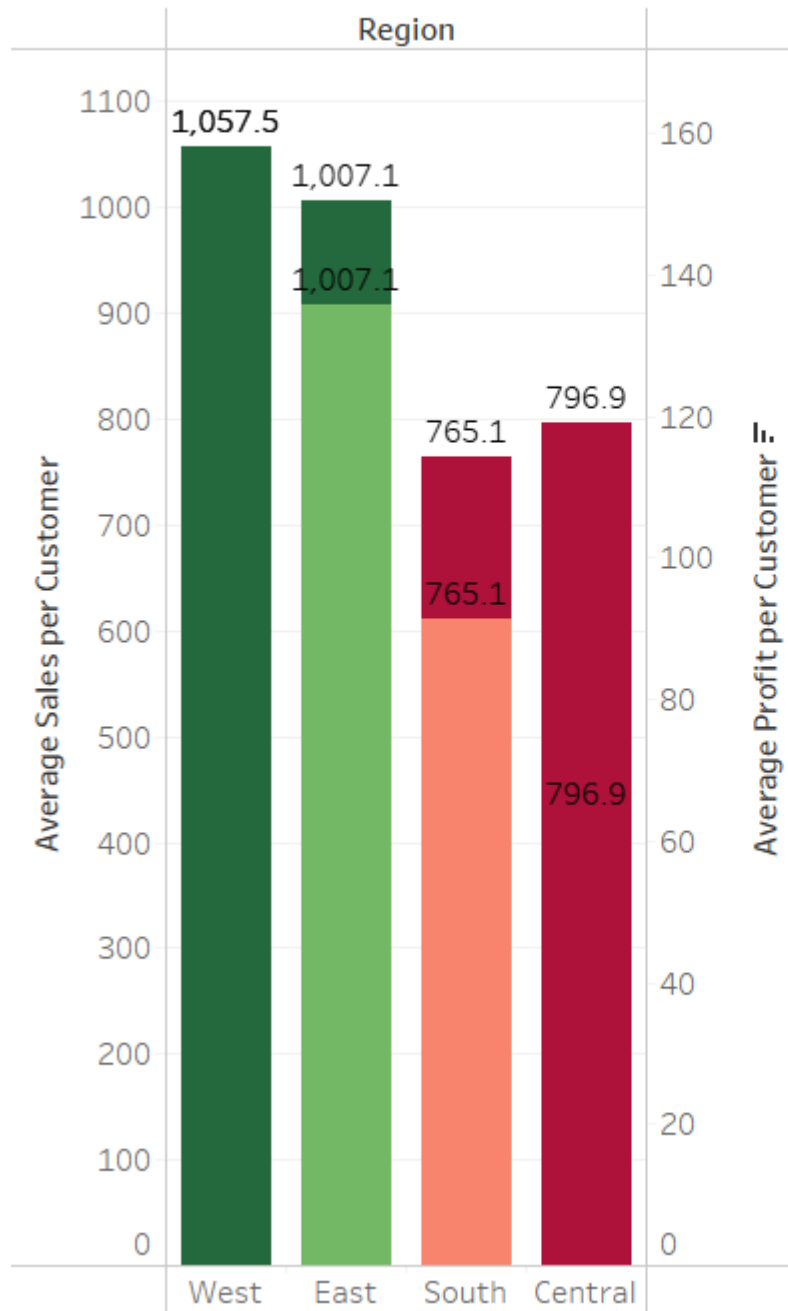


**Average Sales and Profit per Customer by Region:** The bar chart presents a comparison of average sales per customer and average profit per customer across four regions. The West region has the highest average sales per customer at \$1,057.5, closely followed by the East region at \$1,007.1. Both regions also show strong profit per customer. The South and Central regions show lower average sales, with \$765.1 and \$796.9, respectively, which correlates

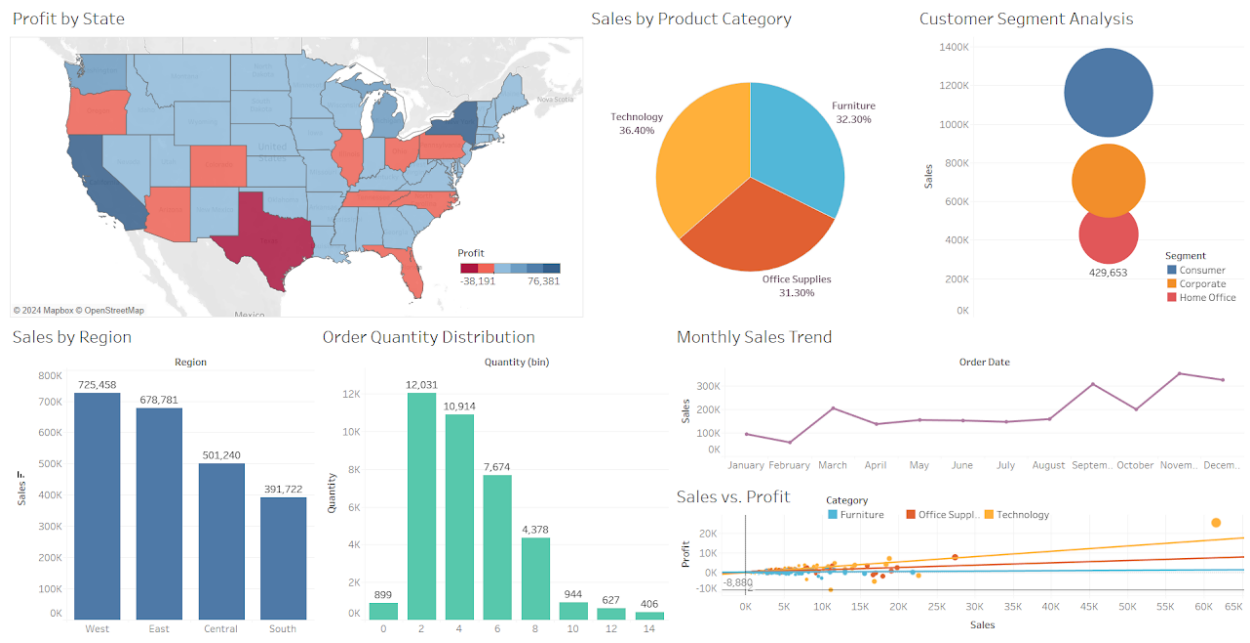


with lower profitability. The West region stands out as the most profitable in terms of both sales and profit per customer.

## Average Sales and Profit per Customer by Region



Sales & Profit Performance Dashboard:



Insights & Recommendations:

- 1. Regional Performance:** The West and East regions dominate in sales, while the Central and South regions show potential for growth. Targeted marketing efforts and tailored promotions could help increase sales in underperforming regions.
- 2. Product Category Focus:** With Technology leading in both sales and profit, investing in expanding the technology product line and marketing those items could further boost profitability. Additionally, a deeper analysis of Office Supplies' lower profit margins could reveal areas for cost optimization or pricing adjustments.
- 3. Customer Segmentation:** The Consumer segment drives the majority of sales and profits. This suggests the importance of focusing on consumer-oriented marketing campaigns, while exploring strategies to increase engagement with Corporate and Home Office customers.

4. **Sales Seasonality:** The strong seasonal peak in November and December highlights the importance of preparing for holiday sales. Enhancing stock levels and launching targeted holiday promotions can maximize this opportunity.

### **Conclusion:**

This Tableau dashboard provides actionable insights into retail sales and profit performance. The analysis highlights key areas for strategic improvement, including boosting sales in underperforming regions, focusing on high-profit product categories, and leveraging customer segmentation for more targeted marketing efforts.