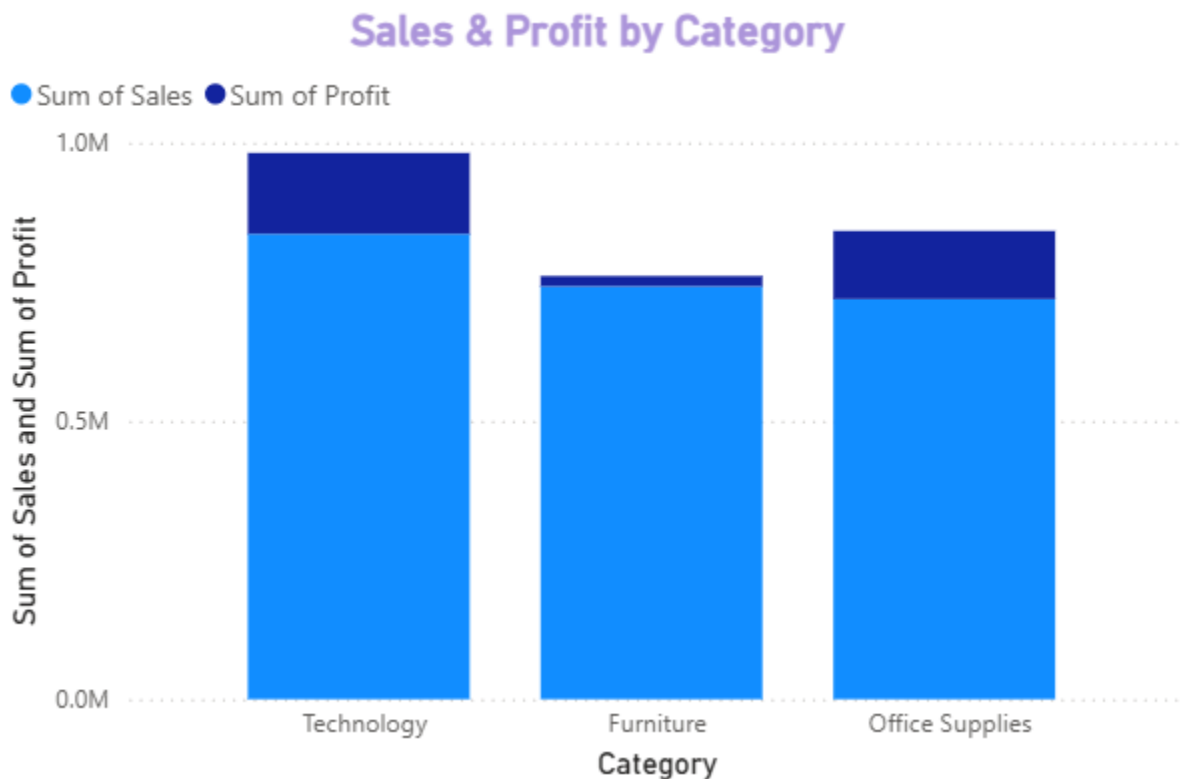


## ***Data Analyst Internship***

### **Task 2: Data Visualization and Storytelling:- Global Superstore :-**

#### **1. Chart Name: Sales & Profit by Category**

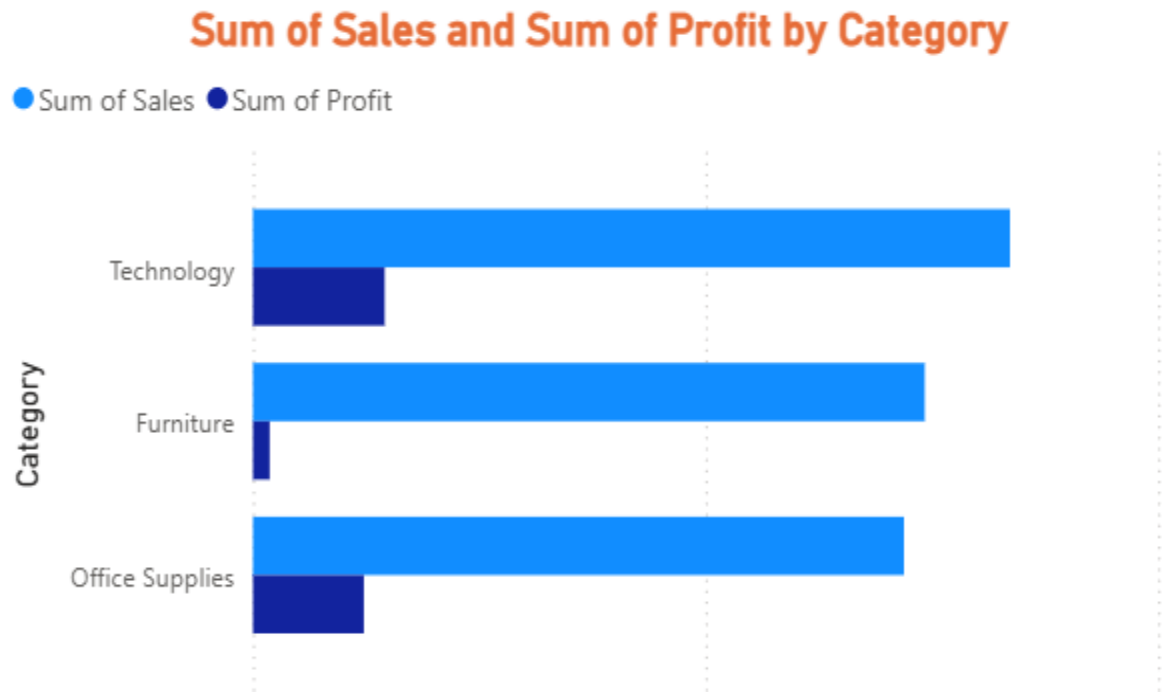
- **Chart Type:** Clustered Column Chart
- **X-Axis:** Category (Technology, Furniture, Office Supplies)
- **Y-Axis:** Sum of Sales and Sum of Profit



- **Insight:** Technology has the highest sales and profit among the categories.
  - **Business Impact:** (Focus marketing and investment strategies on Technology products as they offer the highest returns. Consider strategies to improve profitability in Furniture and Office Supplies.)
-

## 2. Chart Name: Sum of Sales and Profit by Category

- **Chart Type:** Clustered Bar Chart
- **X-Axis:** Sum of Sales and Sum of Profit
- **Y-Axis:** Category

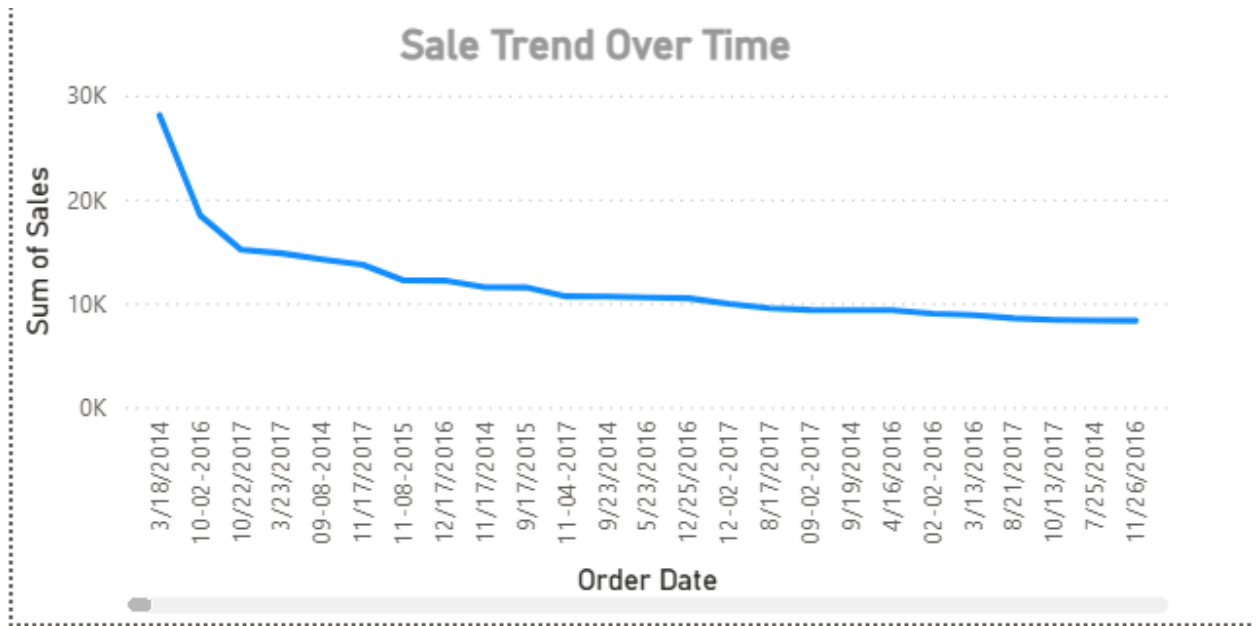


- **Insight:** Furniture shows relatively high sales but lower profits, indicating potential inefficiencies.
- **Business Impact:** (Explore cost-saving opportunities or pricing strategies in the Furniture category to increase profitability.)

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## 3. Chart Name: Sale Trend Over Time

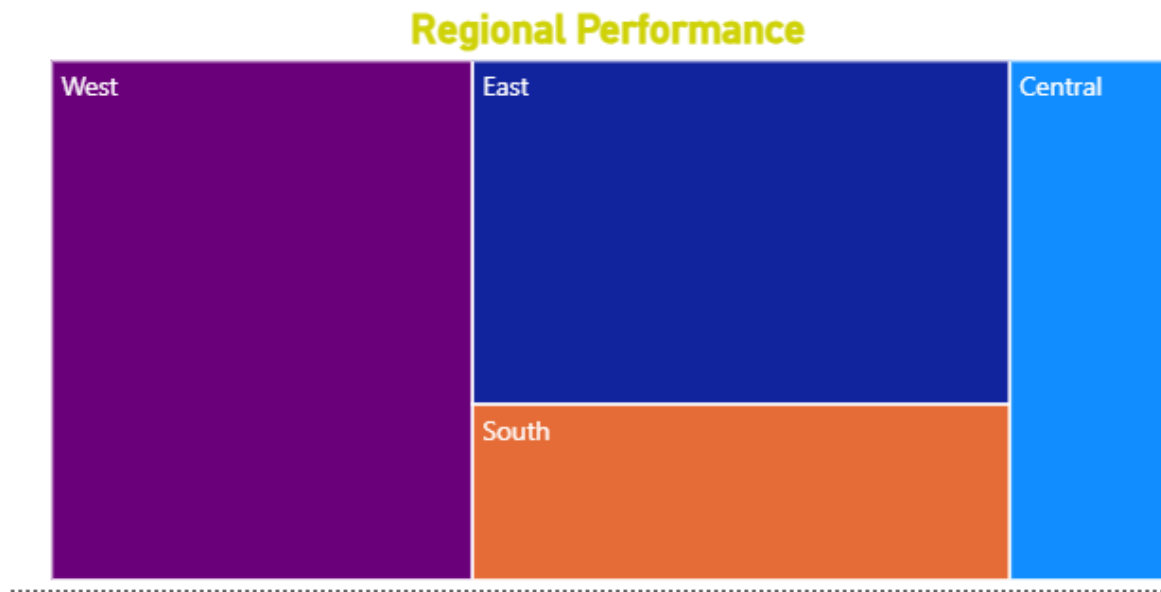
- **Chart Type:** Line Chart
- **X-Axis:** Order Date
- **Y-Axis:** Sum of Sales



- **Insight:** Sales trend appears to decline gradually over time.
- **Business Impact:** (Investigate causes of declining sales—such as market saturation or reduced demand—and take corrective actions like promotions or new product launches.)

#### 4. Chart Name: Regional Performance

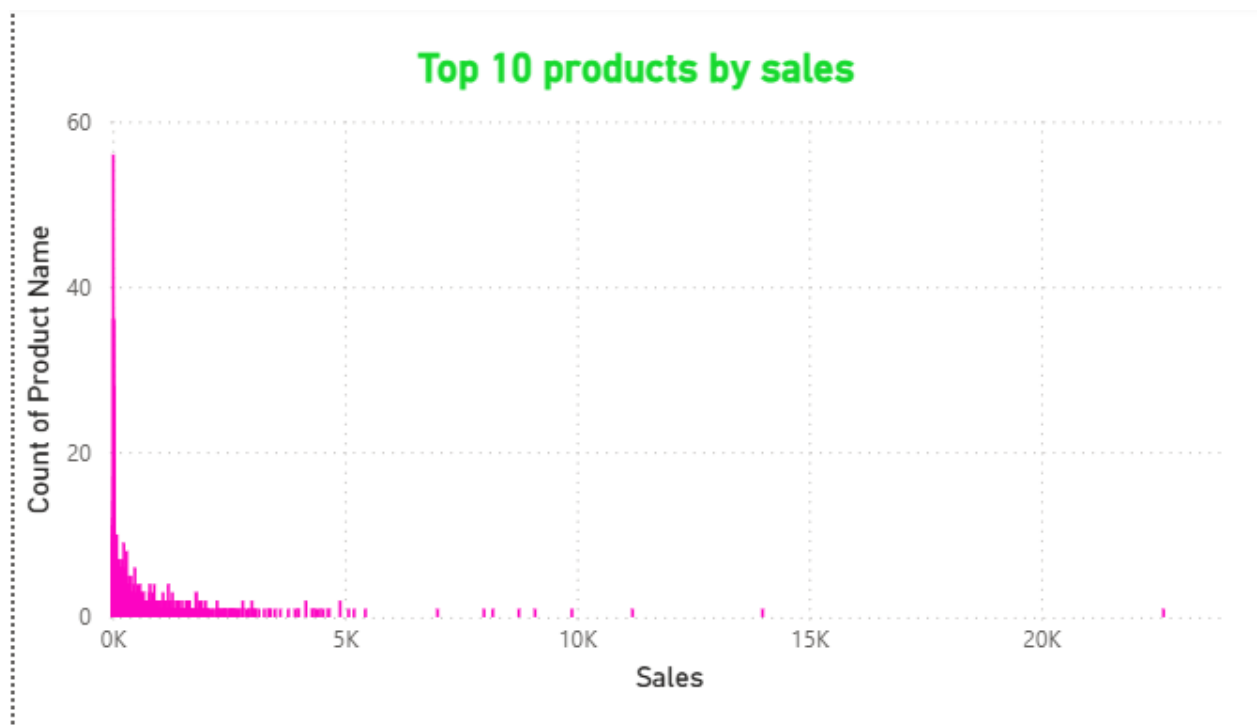
- **Chart Type:** Tree Map
- **X-Axis / Y-Axis:** Not applicable (hierarchical visual)



- **Insight:** West region has the largest sales contribution, followed by East, Central, and South.
  - **Business Impact:** (Allocate more resources and strategic efforts to underperforming regions like South to boost overall revenue growth.)
- 

## 5. Chart Name: Top 10 Products by Sales

- **Chart Type:** Bar Chart (Vertical histogram style)
- **X-Axis:** Sales
- **Y-Axis:** Product Name (Count)



- **Insight:** Sales are heavily concentrated in a few top products.
  - **Business Impact:** (Focus on high-performing products for inventory and promotional prioritization, while assessing long-tail products for improvement or discontinuation.)
- 

## 6. Chart Name: Profit vs Discount Analysis

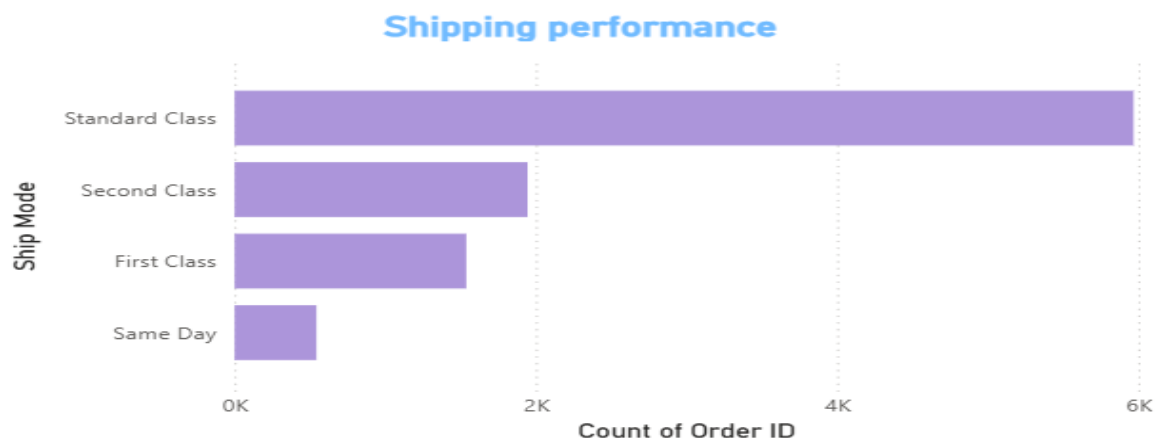
- **Chart Type:** Scatter Chart
- **X-Axis:** Sum of Discount
- **Y-Axis:** Sum of Profit



- **Insight:** Higher discounts often correlate with reduced or negative profit.
- **Business Impact:** (Review discount strategies to ensure they are not eroding profitability—optimize discount thresholds.)

## 7. Chart Name: Shipping Performance

- **Chart Type:** Bar Chart (Horizontal)
- **X-Axis:** Count of Order ID
- **Y-Axis:** Ship Mode



- **Insight:** Standard Class is the most used shipping method, while Same Day is the least.
- **Business Impact:** (Ensure Standard Class logistics are cost-effective and efficient; explore why Same Day shipping is underutilized and if improvements can be made.)

## Storytelling text:-

Our Superstore sales data reveals clear patterns in product performance, customer behavior, and operational efficiency. **Technology** is the standout category, generating the highest **sales and profit**, while **Furniture**, despite high sales, shows weaker profitability, pointing to potential inefficiencies. Over time, a **declining sales trend** suggests waning customer engagement or seasonal market fluctuations.

Regionally, the **West dominates** in performance, with the **South lagging**, highlighting geographic imbalance. At the product level, a small set of items drives the majority of sales, confirming the **Pareto principle** (80/20 rule). Meanwhile, **discounting** proves to be a double-edged sword—while used frequently, excessive discounts are clearly eroding profits.

On the operational side, the **Standard shipping mode** is heavily favored, while premium options are underutilized—raising questions about logistics cost and customer urgency.

## Business impact:-

- **Product Strategy:** Double down on high-performing Technology products and replicate success factors across weaker categories like Furniture and Office Supplies.
- **Profitability:** Redesign discount strategies to reduce profit leakage—consider smarter, data-driven discounts based on customer behavior and product margin.
- **Regional Expansion:** Address the underperformance in the South region with targeted marketing, local partnerships, or adjusted product offerings.
- **Sales Recovery:** Investigate causes of declining sales trends—this could involve product fatigue, pricing misalignment, or market shifts. Introduce retention campaigns or seasonal boosts.
- **Shipping Optimization:** Optimize Standard Class delivery systems for cost efficiency and explore customer incentives for choosing faster delivery modes.