

## Task 2: Data Visualization & Storytelling

*Prepared for: Data Visualization Assignment*

**Objective:** Create visualizations that convey a compelling business story and provide actionable recommendations.

**Tools:** Power BI (report screenshots provided).

**Dataset:** Superstore / Sales data (columns typically: Order Date, Region, Category, Sub-Category, Sales, Quantity, Profit, Customer, City, State, Ship Mode).

## KPI Overview

**632.63K**

Total Sales

**85.80K**

Total Profit

**0.14**

Profit Margin

**10K**

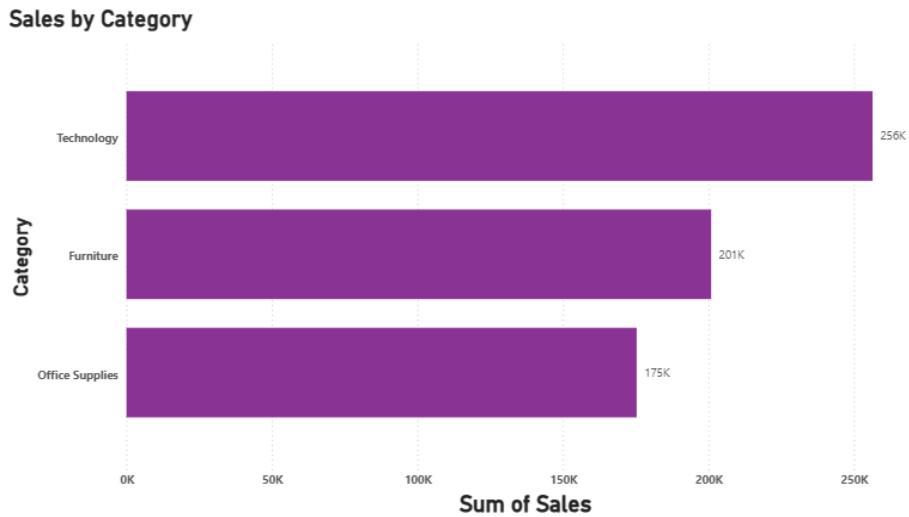
Sum of Quantity

**What it shows:** Total Sales, Total Profit, Profit Margin and Total Quantity at a glance.

**Insight:** Total sales are ■632.63K with profit ■85.80K and profit margin ~14% indicating moderate profitability. Focus needed to improve margins.

**Recommendation:** Investigate high-sales but low-margin products and renegotiate supplier terms or adjust pricing.

## Sales by Category

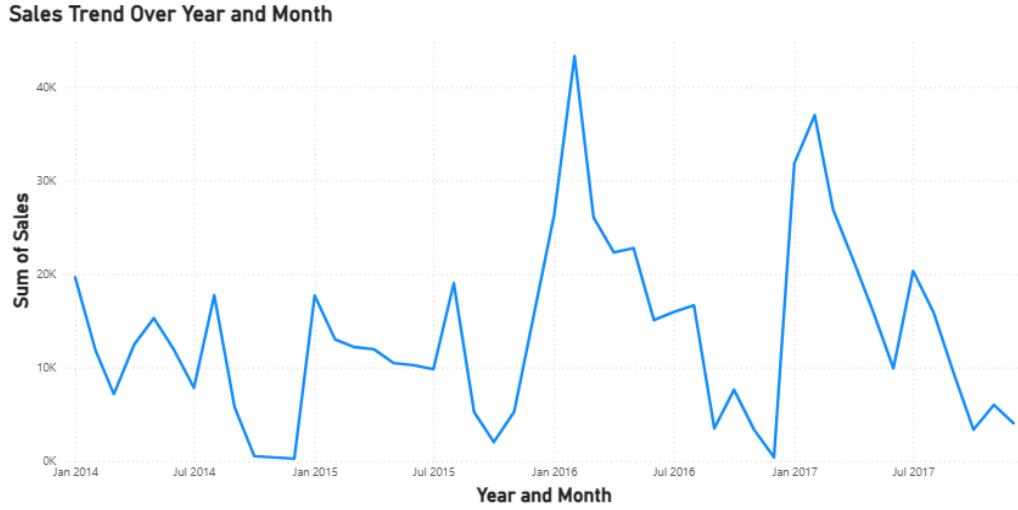


**What it shows:** Technology leads sales (~256K), followed by Furniture and Office Supplies.

**Insight:** Technology contributes the largest revenue share but further analysis is needed to confirm if it also drives profit.

**Recommendation:** Prioritize promotional budgets and inventory for Technology; run margin analysis per category.

## Sales Trend Over Time



**What it shows:** Monthly sales trend from 2014 to 2017 with noticeable peaks around early 2016 and 2017.

**Insight:** Seasonality or campaign-driven spikes are visible. Some months show sharp drops — check promotions or stock-outs.

**Recommendation:** Align marketing campaigns with historical peaks and investigate causes of low months to smooth revenue.

## Profit by Region (Map View)

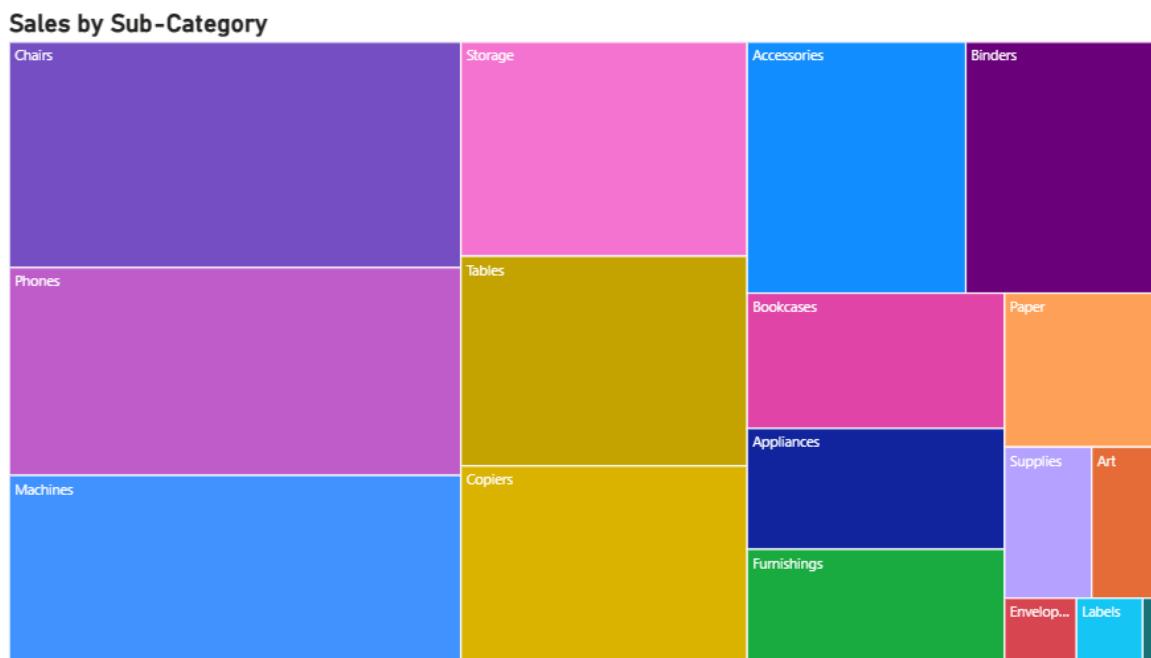


**What it shows:** Geographic distribution of profit across regions (bubble size ~ profit).

**Insight:** North America shows larger profit bubbles; some regions have sales but lower profit.

**Recommendation:** Tailor regional strategies — increase high-margin offerings where profit is strong and address low-profit regions.

## Sales by Sub-Category (Treemap)



**What it shows:** Contribution of sub-categories to overall sales — Chairs, Phones, Machines, Copiers, Tables, Storage are large contributors.

**Insight:** A few sub-categories drive the majority of revenue; product-level margin analysis could find upsell opportunities.

**Recommendation:** Bundle high-margin products with popular low-margin items and promote accessories with high margins.

## Executive Summary & Recommendations

Key Finding	Action
Technology is top-selling category	Confirm margins; prioritize tech promotions and inventory.
Profit margin ~14% (moderate)	Review pricing, supplier costs, and discount strategies.
Seasonal sales spikes	Plan campaigns around historical peaks; ensure stock availability.
Regional profit variance	Regional pricing/promotion; focus on profitable regions and improve forecasting.
Few sub-categories drive revenue	Upsell/cross-sell and product bundling.