Task 2: Data Visualization and Storytelling

Introduction: Dataset Overview

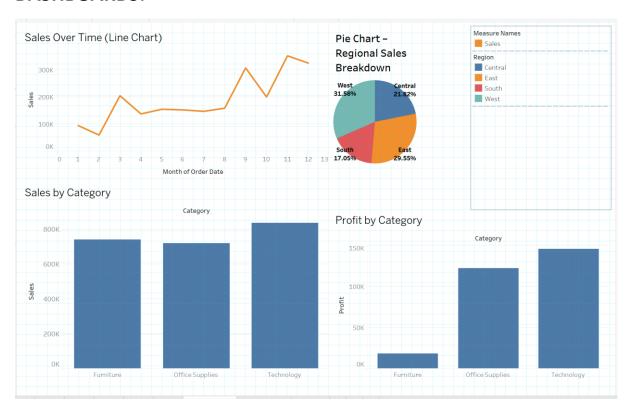
- Sales Store Dataset with 9,994 orders across 4 years (2014–2018)
- us Sales from across the United States
- 21 columns covering Orders, Customers, Products, Discounts, Profits, etc.
- Objective: Uncover sales patterns, customer behaviour, and key opportunities.

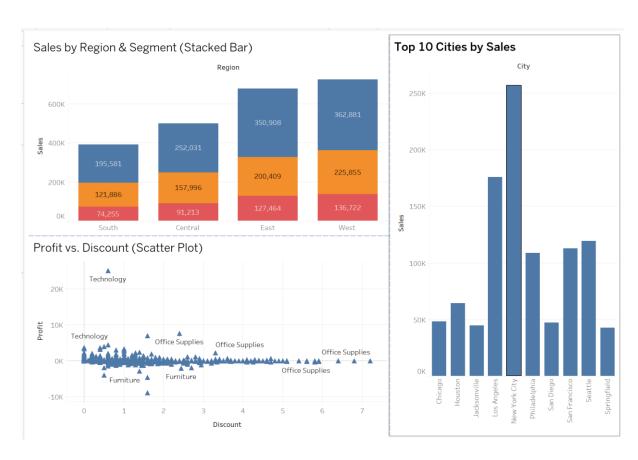
Tools: Tableau

VISUALIZATIONS:

Visualization	Insight
1. Sales Over Time (Line Chart)	Peak sales observed during Q4 of each year – seasonal boost likely from holiday sales.
2. Sales & Profit by Category (Bar Chart)	Office Supplies has high sales but low profit margin, while Technology yields more profit.
3. Region vs Segment (Stacked Bar)	West leads in sales; Consumer segment dominates across all regions.
4. Top Cities (Horizontal Bar)	New York City, Los Angeles , and Seattle are top-performing cities in revenue.
5. Profit vs Discount (Scatter Plot)	High discounts often lead to negative profits – over-discounting may hurt revenue.
6. Pie Chart: Sales by Region	West (32%) and East (28%) are the strongest regions; South & Central lag behind.

DASHBOARDS:





STORYBOARD:

Introduction: Dataset Overview Sales Store Dataset with 9,994 orders across 4 years (2014–2018) us Sales from across the United States 21 columns covering Orders, Customers, Products, Discounts, Profits, etc. - Objective: Uncover sales patterns, customer behavior, and key opportunities. Sales Over Time (Line Chart) Trend shows sales peaks in **Q4 of each year**, especially late 2017 Indicates strong seasonal demand during holiday season Suggests need for inventory & marketing boost around peak months. Category Performance (Bar Chart) Office Supplies have highest sales, but low profit margin Profit vs. Discount Analysis (Scatter Plot) Technology contributes fewer sales but generates higher profits -Clear pattern: **Higher discounts** → **Lower profits** Insight: Focus marketing on high-margin categories for better ROI. -Some heavily discounted products are loss-making - Recommend tightening discount policies on low-margin items. Regional Sales & Segment Breakdown (Stacked Bar) -West and East regions lead in total sales Pie Chart - Regional Sales Distribution -Consumer segment dominates, followed by Corporate -Sales split: -Suggests personalized strategies by region & segment type West (32%) East (28%) Central (20%) Top Performing Cities (Horizontal Bar)

South (20%)

-At-a-glance understanding of regional contribution
-Action: Explore underperforming regions for growth potential

Summary:

-Top cities: New York, Los Angeles, Seattle, Chicago

-Focus: Expand presence in similar Tier 1 cities for growth.

-High-density urban areas drive major sales

- Focus on high-profit categories (like Technology) rather than just high sales.
- Review discount strategies—deep discounts reduce overall profitability.
- Leverage strong markets (West & East) and expand in underperforming regions.
- Plan for Q4 sales spikes—optimize stock and delivery during holiday seasons.