Data Visualization and Interpretation Lab Autumn 2025

Lab Assignment

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Program: B.Tech CSE

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Batch: 01 (Data Science)

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Task:

Create a financial dashboard on "financial sample.xlsx" dataset. The dashboard should have the following:

1. A dashboard heading including title and author name

FINANCIAL DASHBOARD by Sanya Agarwal
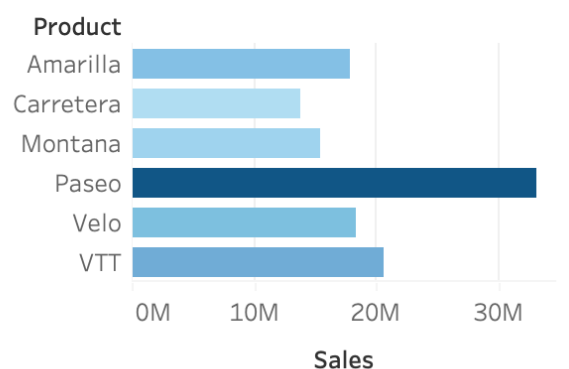
2. Total sales

Total
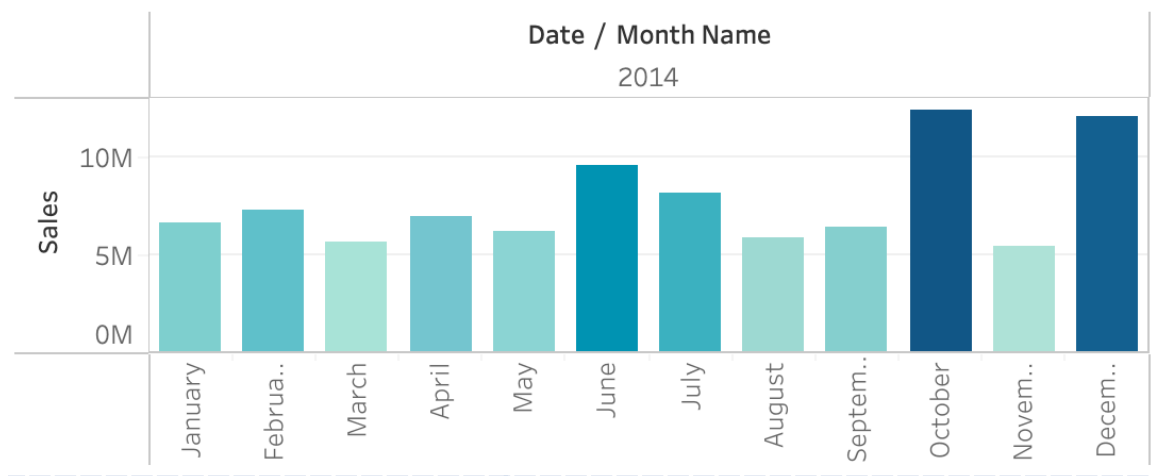Sales

118,726,350

3. Units sold

Units
Sold

1,125,806

4. A table to show category wise total sales of products

Category-wise Sales
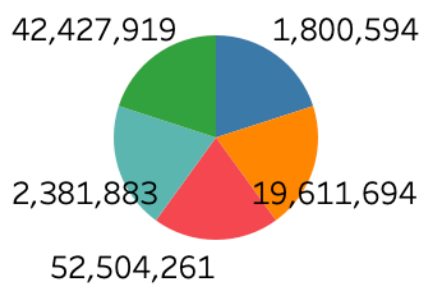
5. A plot to show Sales by year/month

Sales Trend by Month and Year

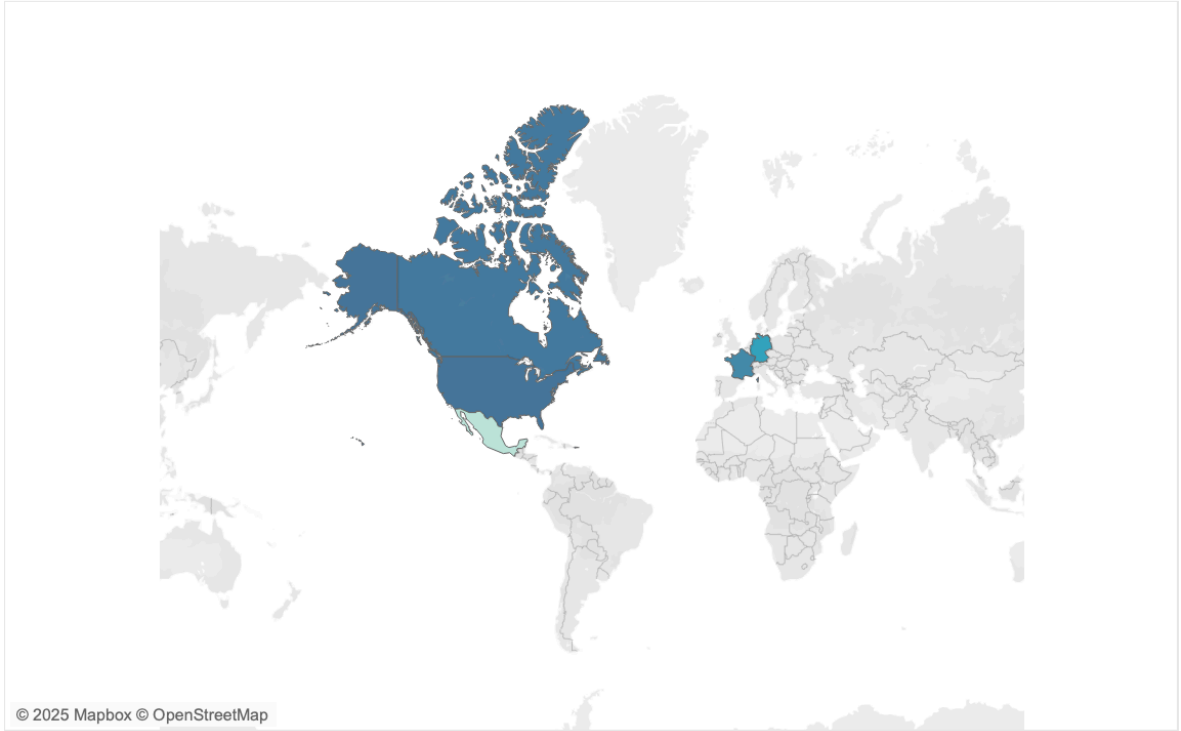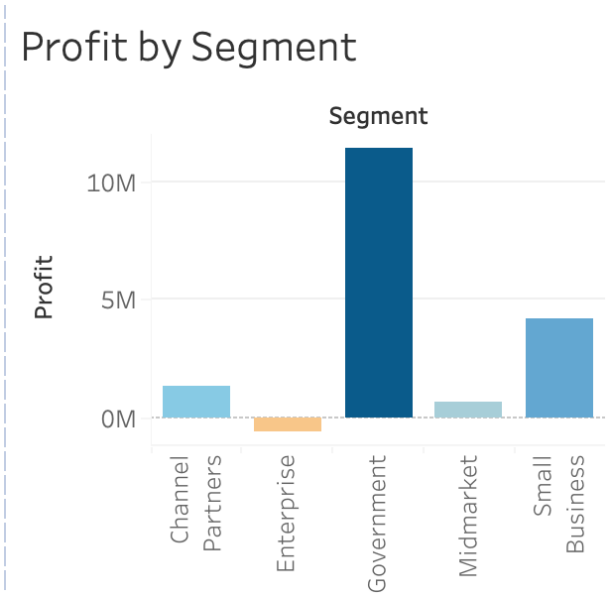6. A plot to show sales by segments

Sales by Segment

42,427,919   1,800,594

2,381,883   19,611,694

52,504,261

Segment
- Channel Partners
- Enterprise
- Government
- Midmarket
- Small Business

7. A plot to show sales by country

Sales by Country

© 2025 Mapbox © OpenStreetMap

8. A plot to show profit by segments

Profit by Segment

Segment
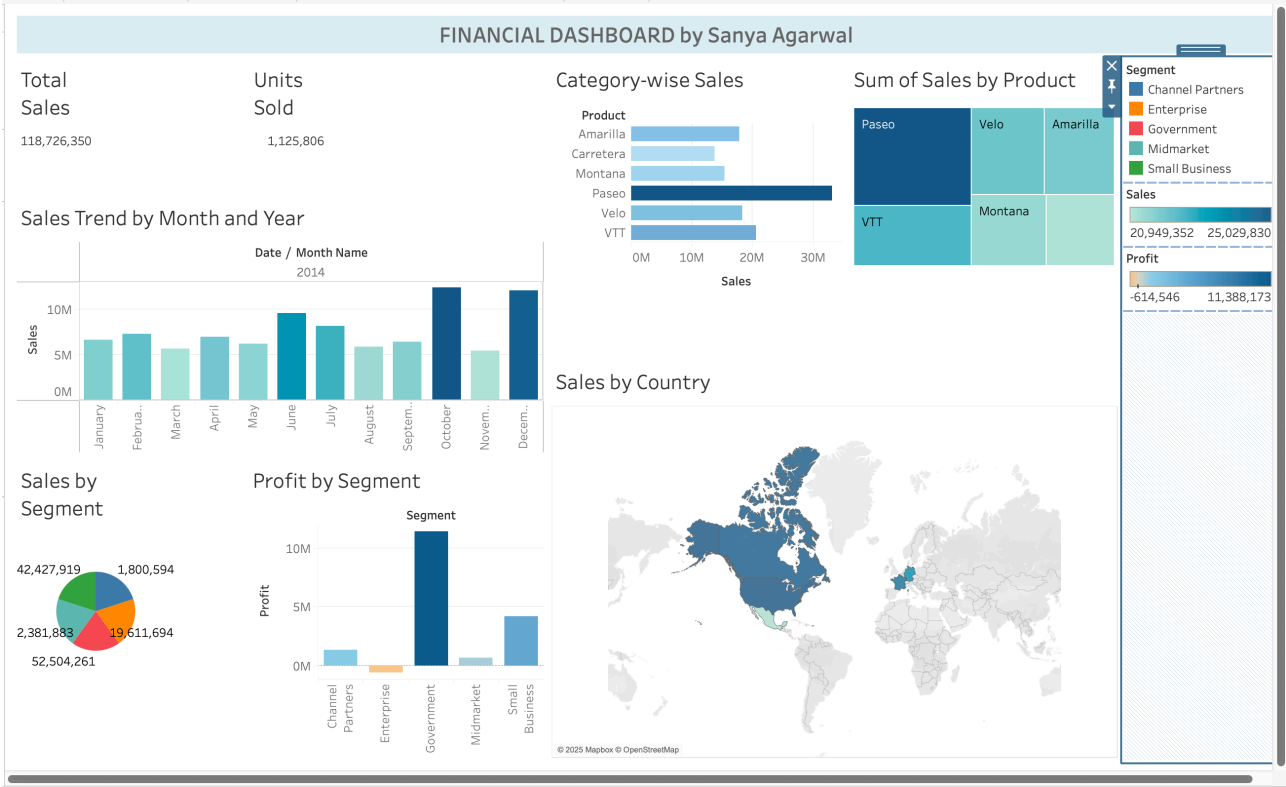
9. A plot to show sales by product
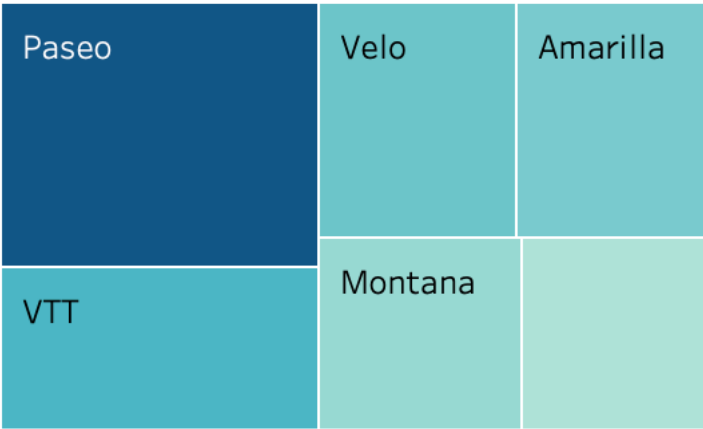
Note: Use appropriate plot and do proper formatting.

Write insights/observations after analyzing each tile in your dashboard.

1. Total sales and Units sold

Interpretation : The financial performance represents total sales (118,726,350) and units sold(1,125,806) for given period. <u>It indicates the total revenue and volume of reported period</u>.

2. Category-wise sales

Interpretation : The horizontal bar shows total sales by product category. Paseo leads with over 30 million in sales. <u>It shows that Paseo is dominant contributor among other categories</u>.

3. Sales trend by month/year

Interpretation : The bar chart displays the monthly sales over 2014. Sales are stable from January to August then we can see a significant rise in September and peak in October and December. <u>This pattern indicates seasonal trend, the rise in demand</u>.

4. Sales by Segment

Interpretation : The pie chart divides total sales by market segments. <u>This highlights from where most revenue is generated</u>.

5. Sales by country

Interpretation : The map uses shading (blue , teal) to show <u>geographic distribution of sales</u>. The lighter color indicates the minimal contribution in sales

6. Profit by segment

Interpretation : The segmented bar chart represents profit distribution across different segments. Government yields the highest profit by wide margin.

7. Sum of Sales by Product

   Interpretation : The treemap <u>visualizes each product's contribution to overall sales</u>. Paseo occupies the largest area in treemap.

Conclusion - Financial Dashboard

It provides a comprehensive overview for business and demonstrating clear product and segment performance. Paseo dominates product sales.