DA Assignment - 1 Submission

Title:

Supermarket Sales Dashboard

Submitted by:
Name : Abhinaya K

Roll Number : 223T1A3214

Institute Name : Ravindra College Of Engineering For Women

📊 Introduction

Objective:
To analyse the sales performance of a supermarket chain operating in three branches over three months using Tableau visualizations. The data contains customer demographics, purchase behaviour, and sales figures.

Tools Used:

- Tableau Public/Desktop
- Supermarket Sales Dataset (Jan–Mar 2019)

Dataset Source:
Supermarket Sales (Kaggle / Classroom link)

🧹 Data Cleaning in Tableau

Steps Performed:

- Imported CSV dataset into Tableau
- Removed unnecessary columns:
    - *Invoice ID* (unique identifier not required for analysis)

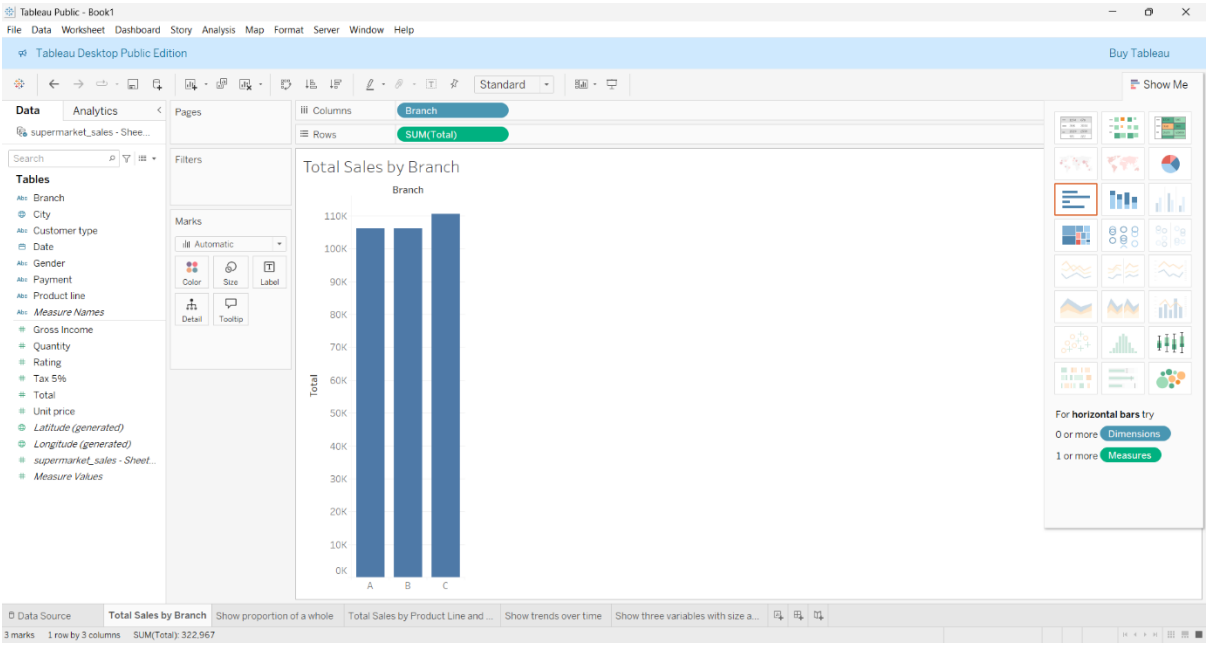
- *COGS* (already factored into other calculations)
- *Date/Time columns* – not used in some dashboards

- Renamed field names for better clarity (optional)

📉 Visualizations + Insights

🔷 1. Bar Chart – Total Sales by Branch

Screenshot:



Purpose: Compare values across categories
Best Attribute Combination:

- **Dimension:** Branch or Product Line
- **Measure:** Total or Gross Income

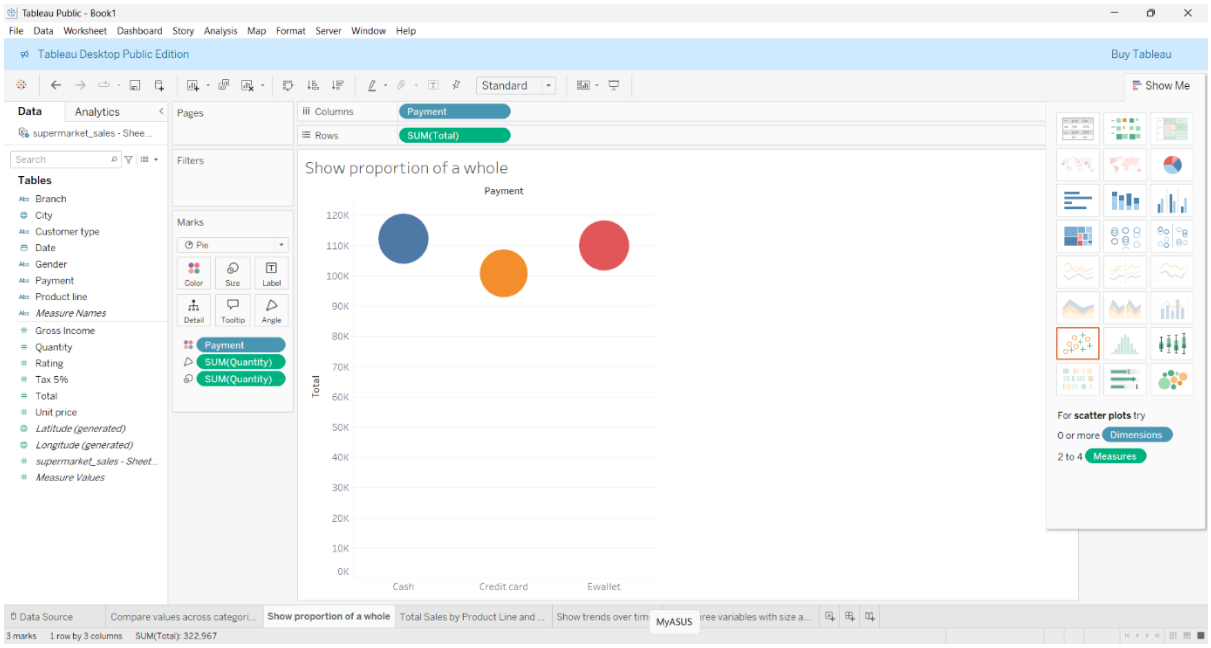
📌 **Example:**
"Total Sales by Branch"

- *X-axis:* Branch (A, B, C)
- *Y-axis:* Total Sales

💡 **Insight**: Branch **C** has the highest total sales, followed by Branch A and B. This can be due to higher footfall or higher average transaction value.

✅ 2. Pie Chart

Screenshot:



Purpose: Show proportion of a whole
Best Attribute Combination:

- **Dimension:** Payment or Customer Type
- **Measure:** Number of Records or Total

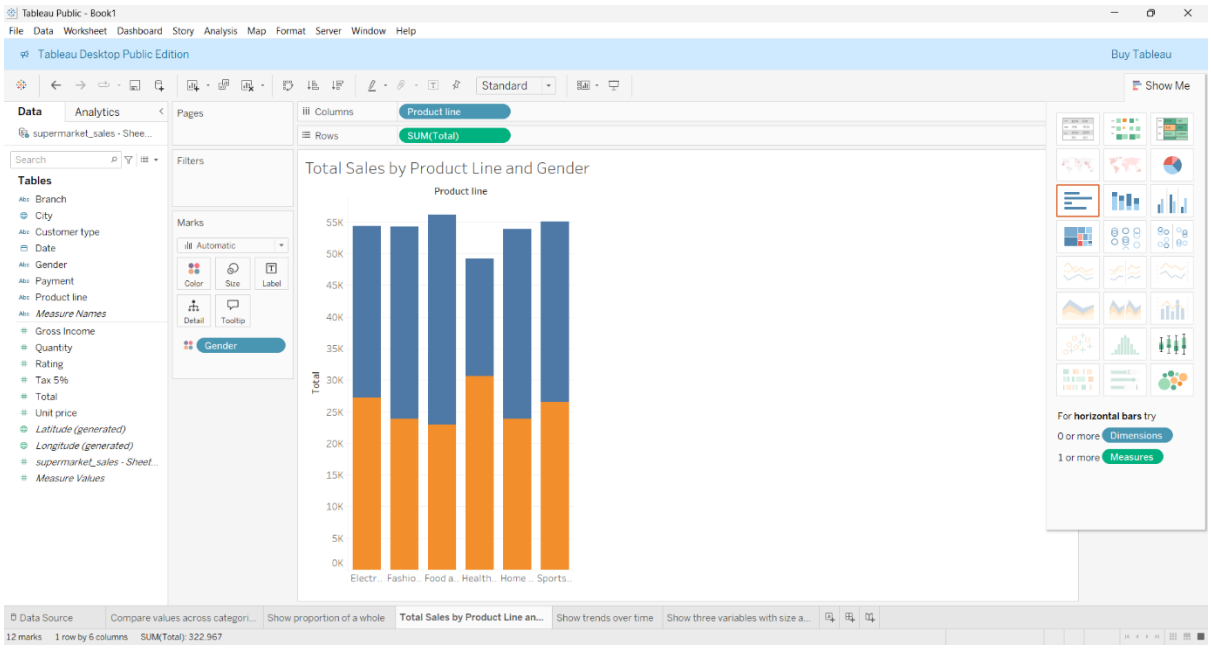
📌 **Example:**
"Sales Distribution by Payment Method"

- Slice by: Payment Type (Cash, Credit Card, Ewallet)
- Size: Count of Transactions or Total Amount

💡 **Insight:** Understand preferred customer payment methods.

✅ 3. Stacked Bar Chart

Screenshot:



Purpose: Compare sub-category values across a main category
Best Attribute Combination:

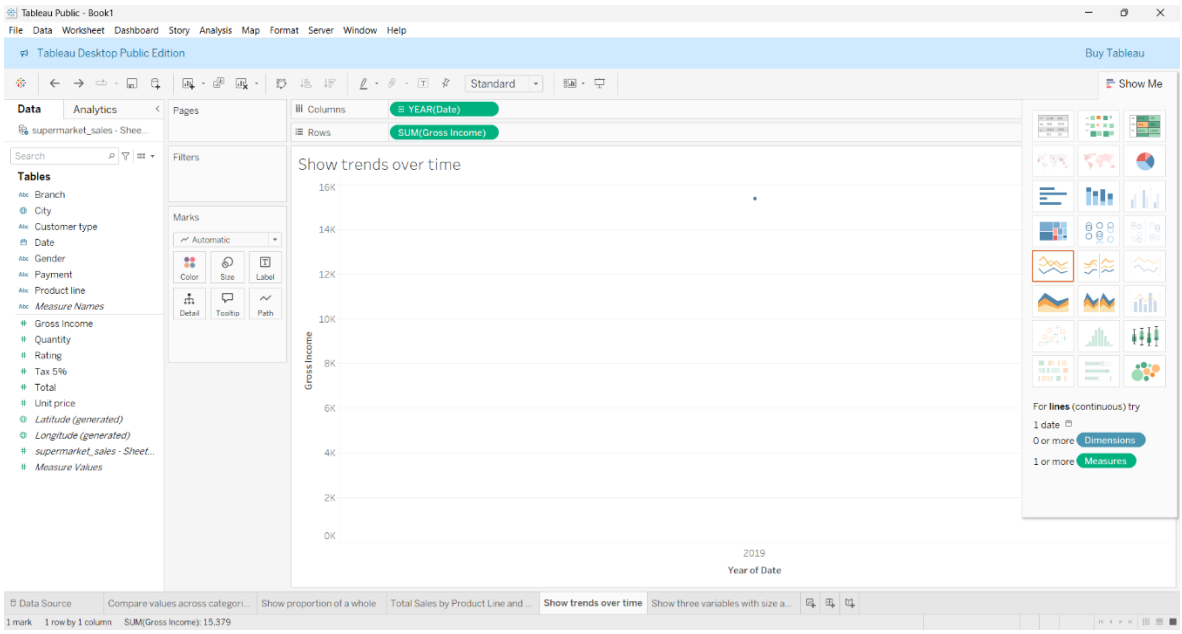
- **Main Dimension (X):** Product Line
- **Subcategory (Color):** Gender or Customer Type
- **Measure (Y):** Total or Quantity

📌 **Example:**
“Total Sales by Product Line and Gender”

💡 **Insight:** Reveal customer preferences by gender for each product type.

✅ 4. Line Chart

Screenshot:



Purpose: Show trends over time

Best Attribute Combination:

- **Dimension (X-axis):** Date (converted to Day or Month)
- **Measure (Y-axis):** Total or Gross Income

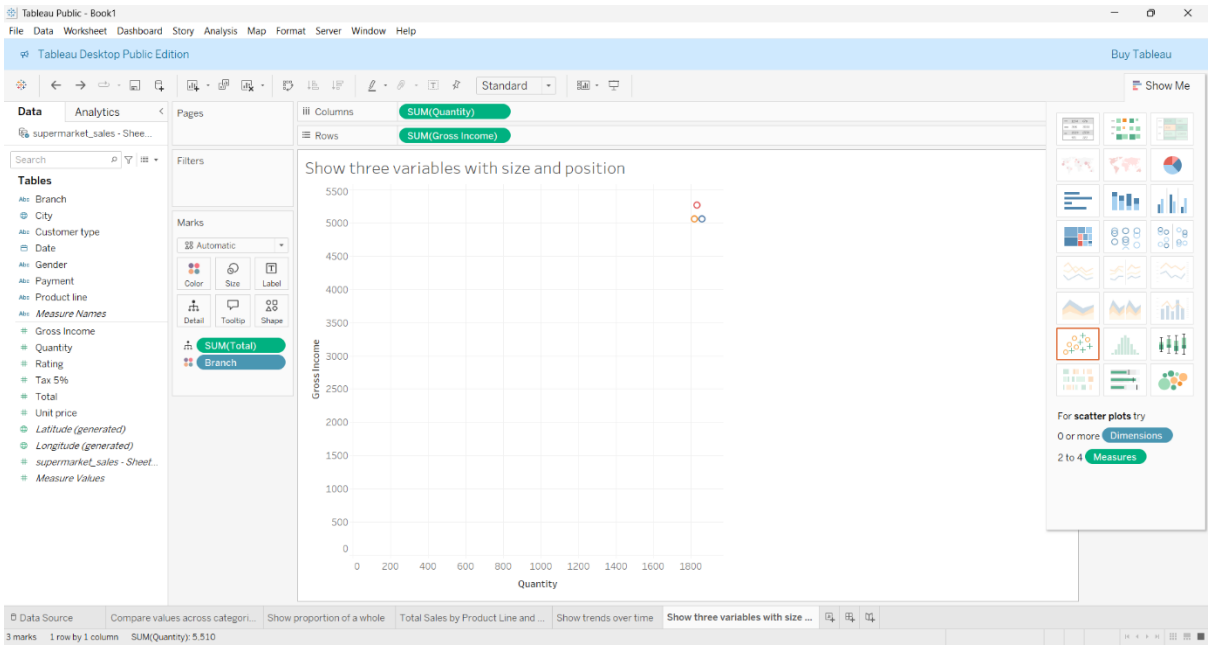
📌 **Example:**

"Daily Sales Trend Over 3 Months"

💡 **Insight:** Detect sales patterns, promotions impact, or end-of-month spikes.

✅ 5. Bubble Chart

Screenshot:



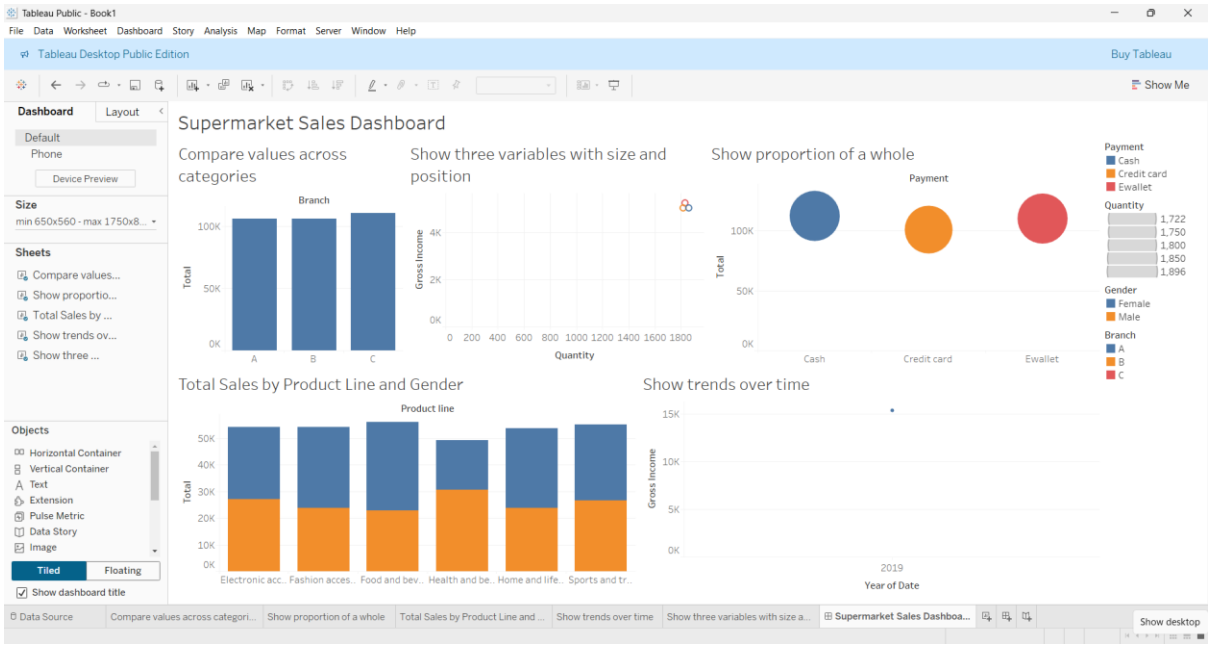
Purpose: Show three variables with size and position
Best Attribute Combination:

- **X-axis:** Quantity
- **Y-axis:** Gross Income
- **Size:** Total
- **Color:** Branch or Product Line

📌 **Example:**
"Gross Income vs Quantity by Product Line"

💡 **Insight:** Identify high-margin product lines or efficient selling items.

Supermarket Sales Dashboard



Conclusion

- Visualizations reveal valuable insights about branch performance, customer preferences, and sales behavior.
- Tableau helped quickly identify patterns such as peak sales periods, product popularity, and preferred payment methods.
