DA Assignment - 3

Objective:

Students will design an interactive **Dashboard** using the provided dataset. The goal is to analyze key metrics and provide insights into trends, performance and sales.

Dataset: Link

Attribute information

Invoice id: Computer-generated sales slip invoice identification number

Branch: Branch of supercenter (3 branches are available identified by A, B and C).

City: Location of supercenters

Customer type: Type of customers, recorded by Members for customers using member

cards and Normal for those without member cards.

Gender: Gender type of customer

Product line: General item categorization groups - Electronic accessories, Fashion

accessories, Food and beverages, Health and beauty, Home and lifestyle, Sports and

travel

Unit price: The price of each product in $

Quantity: Number of products purchased by the customer

Tax: 5% tax fee for customers buying

Total: Total price including tax

Date: Date of purchase (Record available from January 2019 to March 2019)

Time: Purchase time (10 am to 9 pm)

Payment: Payment used by the customer for the purchase (3 methods are available –

Cash, Credit card and Ewallet)

COGS: Cost of goods sold

Gross margin percentage: Gross margin percentage

Gross income: Gross income

Rating: Customer stratification rating on their experience (scale of 1 to 10)

Task:

1. **Import the Dataset**: Load the provided dataset into **Power BI**.

2. **Data Cleaning**: Ensure data consistency and Create new Columns if required

3. **Interactivity**: Ensure the Report is interactive

Screenshot of Dashboard
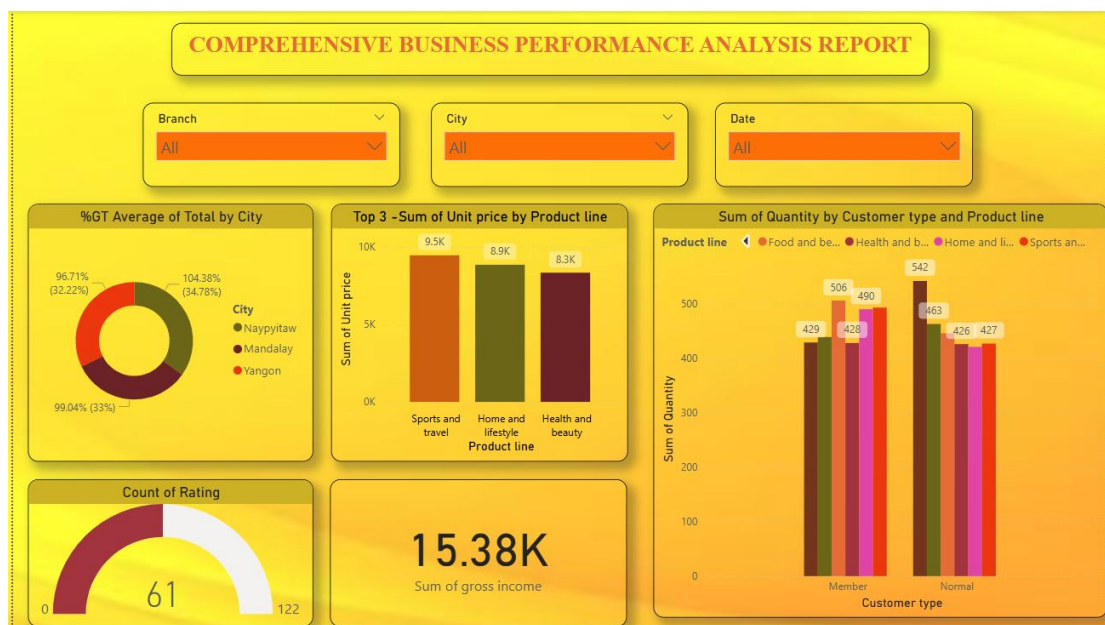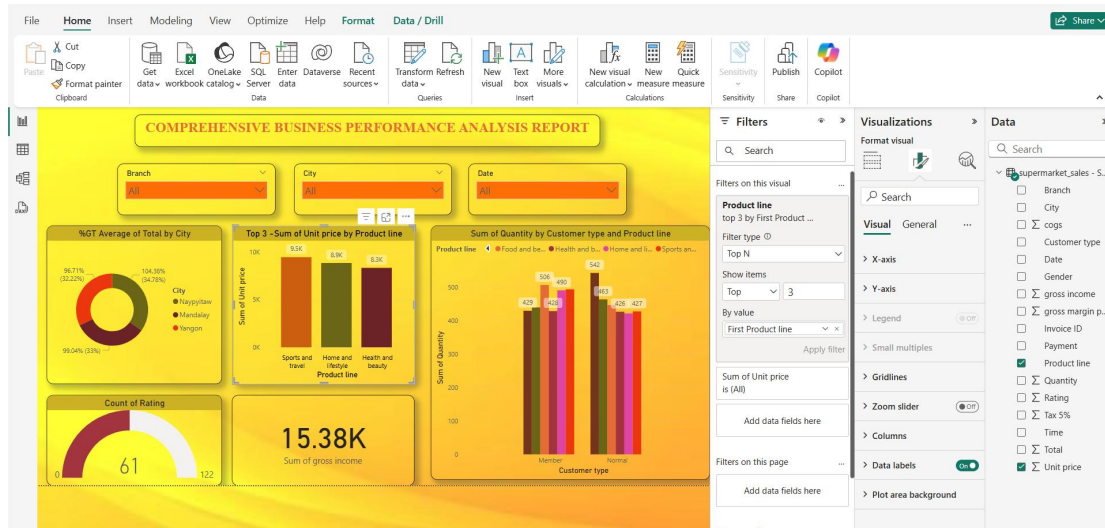
Key findings and insights

Overall Business Performance

- The total **gross income** is **15.38K**, indicating strong revenue performance.

Sales Performance by City

- **Mandalay** has the highest %GT Average of Total at **104.38% (34.78%)**.
- **Yangon** follows with **99.04% (33%)**, while **Naypyitaw** has **96.71% (32.22%)**.
- This suggests that Mandalay contributes the most to total sales performance.

Top 3 Product Lines by Unit Price

- **Sports and Travel** leads with the highest sum of unit price at **9.5K**.
- **Home and Lifestyle** follows with **8.9K**, and **Health and Beauty** is third with **8.3K**.
- These product lines generate high value per unit sold.

Customer Type and Quantity Sold

- **Normal customers** purchase more items than **members** across all product lines.
- The highest quantity sold for normal customers is **542**, while for members, it is **506**.
- Suggests that non-members contribute significantly to sales volume.

Customer Rating Analysis

- **Total ratings recorded: 61 out of 122**, indicating moderate customer engagement in rating products/services.

User Controls:

- Filters for **Branch, City, Date** allow for dynamic data analysis.