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
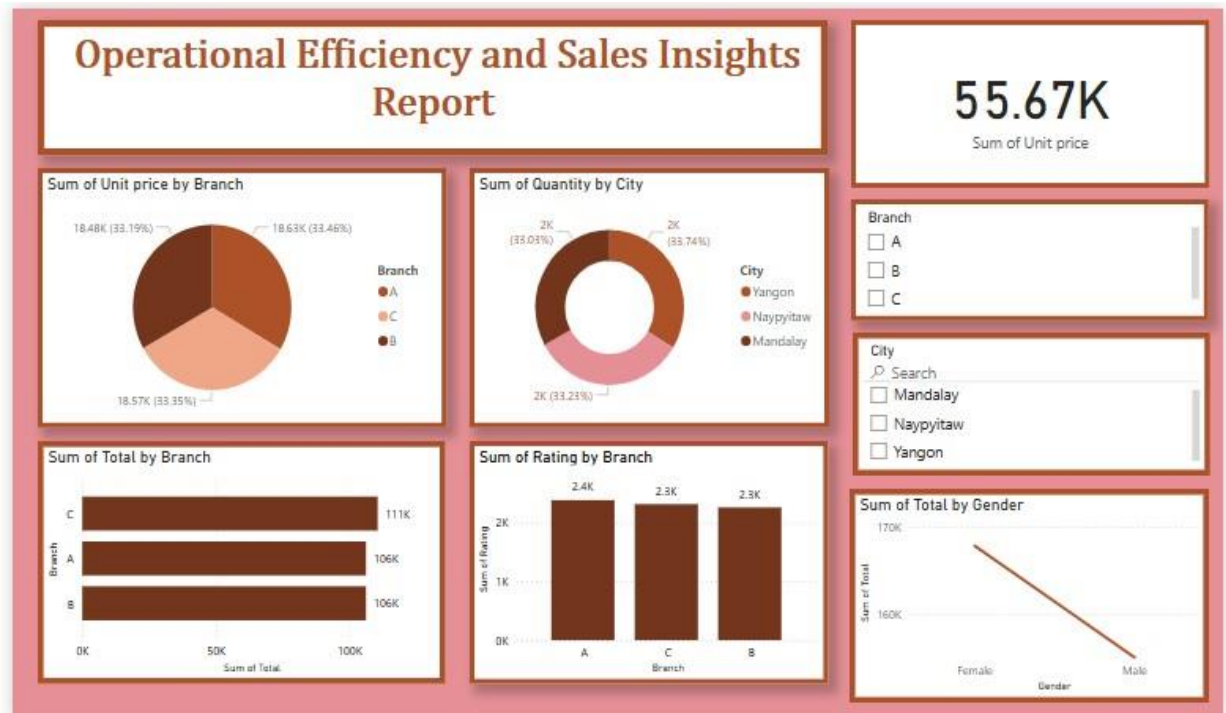
Key findings and insights

1. Overall Performance Metrics:

- The total sum of unit price is 55.67K.

- Sales appear evenly distributed across branches and cities, with no significant outliers.

2. Branch Performance:

- Unit Price Distribution:

- o Branch A: 33.19%

- o Branch B: 33.46%

- o Branch C: 33.35%

- Total Sales by Branch:

    - o Branch C has the highest total sales (111K), followed closely by Branch A (106K) and Branch B (106K).

- Customer Ratings:

    - o Ratings are relatively uniform, with Branch A (2.4K), Branch B (2.3K), and Branch C (2.3K).

    - o This indicates consistent customer satisfaction across branches.

3. City-Wise Sales Distribution:

- Sales quantities are nearly equal across the three cities:

    - o Yangon: 33.03%

    - o Naypyitaw: 33.74%

    - o Mandalay: 33.23%

- This suggests a balanced demand across locations, with no significant sales gaps between cities.

4. Gender-Based Sales Trends:

- There is a significant gap between male and female sales, with male customers contributing a much higher total sales amount.

- This suggests an opportunity to improve sales among female customers through targeted marketing campaigns.