

## 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

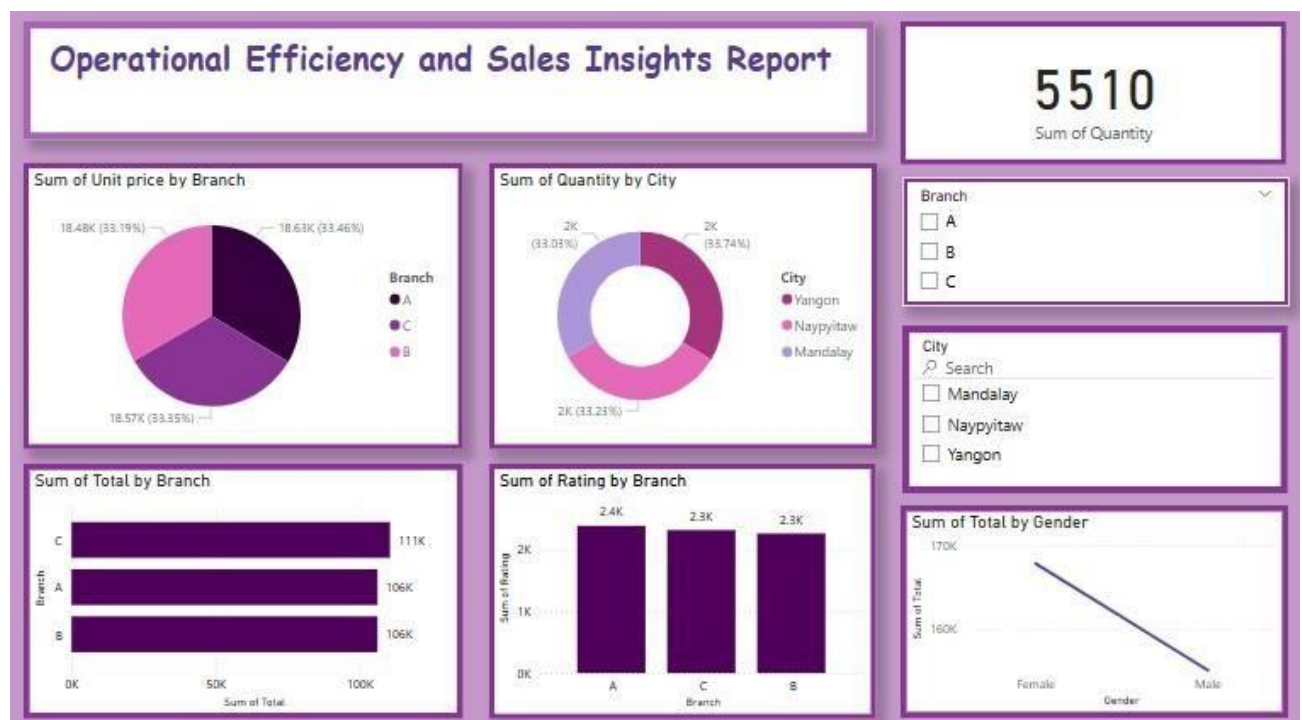
Gross margin percentage: Gross margin percentage

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:
  - Branch A: 33.19%
  - Branch B: 33.46% ◦ Branch C: 33.35%
- Total Sales by Branch:
  - Branch C has the highest total sales (111K), followed closely by Branch A (106K) and Branch B (106K).
- Customer Ratings:
  - Ratings are relatively uniform, with Branch A (2.4K), Branch B (2.3K), and Branch C (2.3K). ◦ This indicates consistent customer satisfaction across branches.

## 3. City-Wise Sales Distribution:

- Sales quantities are nearly equal across the three cities:
  - Yangon: 33.03%
  - Naypyitaw: 33.74%
  - 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.