### ■ DATA ANALYTICS ASSIGNMENT – 1

### Supermarket Sales Data Analysis using Tableau

Internship Platform: SmartInternz

**III** Date: 28 June 2025

Organization: ABC Company

# **\*** ASSIGNMENT OVERVIEW

This assignment involves analyzing historical sales data from a supermarket chain operating in three branches across different cities over a 3-month period. The objective is to visualize key business metrics using Tableau and derive actionable insights that help enhance marketing and operational strategies.

#### **DATASET DETAILS**

• Dataset Title: Supermarket Sales Data

• Duration Covered: January 2019 – March 2019

• Number of Branches: 3 (A, B, C)

• \* Cities Covered: 3 Urban Locations

• Record Count: 1,000 transactions

• Data Format: CSV

• U Source: Provided by the Internship Organizer

### **Q** ATTRIBUTE INFORMATION

### **Attribute Name** Description

Invoice ID Computer-generated unique sales slip number
Branch Branch code of the supercenter (A, B, or C)

City City in which the branch is located

Customer Type Member (uses card) / Normal (walk-in)

Gender Gender of the customer

Product Line Category: Electronics, Food & Beverage, Fashion, etc.

Unit Price (\$) Price of each product

Quantity Number of items purchased
Tax (5%) Calculated tax on purchase
Total (\$) Total amount paid including tax

#### **Attribute Name**

#### **Description**

Date Date of purchase

Time Time of purchase (between 10 AM and 9 PM)

Payment Method Cash, Credit Card, or E-wallet

COGS Cost of Goods Sold

Gross Margin (%) Gross margin earned on the transaction

Gross Income Profit earned after cost and tax

Rating Customer satisfaction score (1 to 10 scale)

# **©** TASK OBJECTIVES

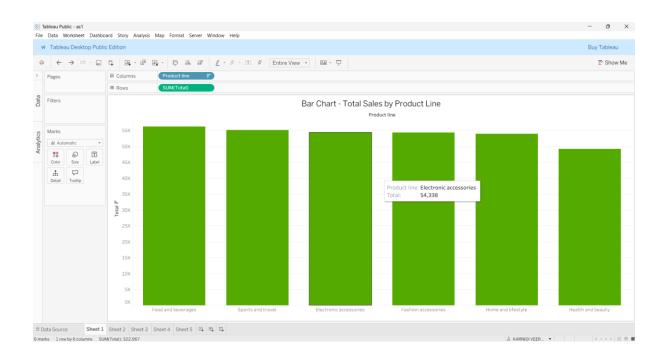
Upload and analyze the dataset in Tableau by performing the following:

- ✓ Step 1: Data Upload & Cleaning
- Remove any unnecessary columns
- Validate data types and formats
- Check for missing or inconsistent values
- ✓ Step 2: Create the following Visualizations in Tableau
  - 1. Bar Chart
    - → Compare total sales across different branches or product lines
  - 2. ☐ Pie Chart
    - → Distribution of customer types or payment methods
  - 3. Stacked Bar Chart
    - → Show gender-wise product preference by category
  - 4. Line Chart
    - → Analyze sales trends over 3 months
  - 5. Bubble Chart
    - → Visualize rating vs. gross income or COGS
- ✓ Step 3: Screenshot & Report
- Take high-resolution screenshots of all visualizations
- Paste them into a report document
- Save the document as PDF

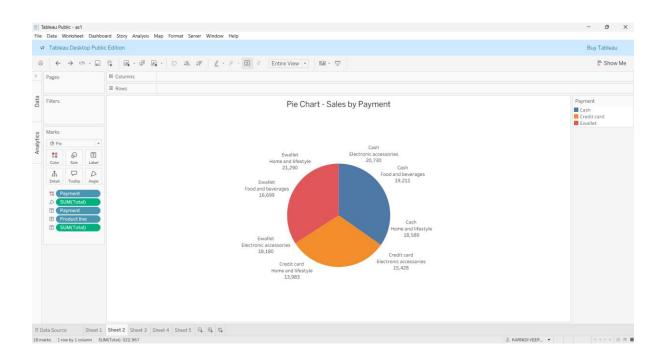
#### SUBMISSION FORMAT

- Your submitted folder should include:
  - Assignment\_1\_Report.pdf
  - All Tableau Visualizations Screenshots
  - Cleaned Dataset (optional)

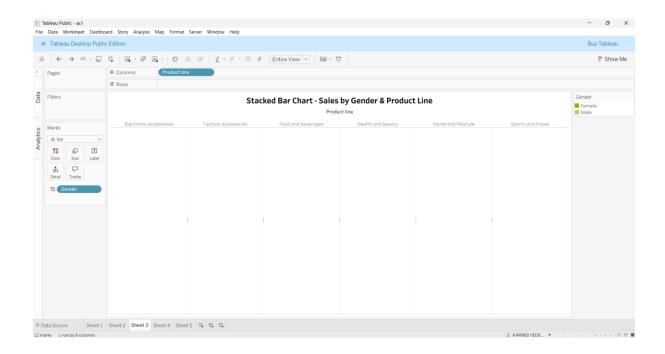
# **Bar Chart - Total Sales by Product Line**



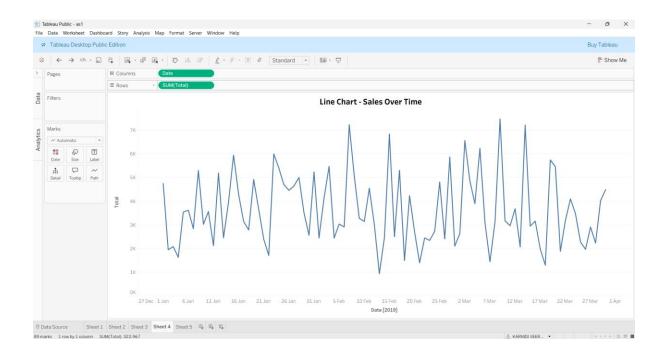
### **Pie Chart - Sales by Payment**



# Stacked Bar Chart - Sales by Gender & Product Line



#### **Line Chart - Sales Over Time**



**Bubble Chart - Product Sales & Quantity** 

