■ DATA ANALYTICS ASSIGNMENT – 2

Supermarket Sales Advanced Visualization using Tableau

★ Student Name: Karnidi Veera Venkata Durga Praveen Kumar

Internship Platform: SmartInternz

III Date: 28 June 2025

Organization: ABC Company

***** ASSIGNMENT OVERVIEW

This assignment builds upon the foundational analysis from Assignment 1 and aims to explore advanced data visualization techniques using Tableau. By analyzing supermarket transaction data, this task focuses on enhancing interpretability through visually engaging charts such as donut, funnel, waterfall, and others.

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 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

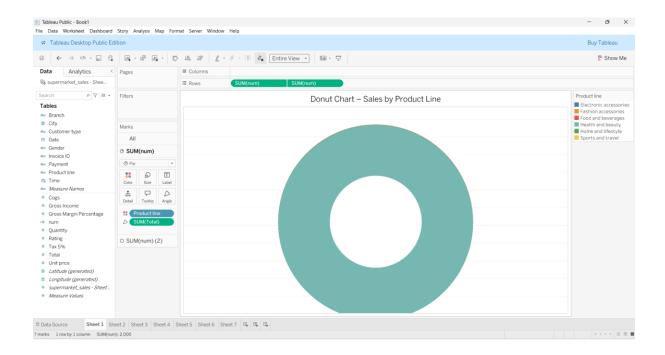
Gross Income Profit earned after cost and tax

Rating Customer satisfaction score (1 to 10 scale)

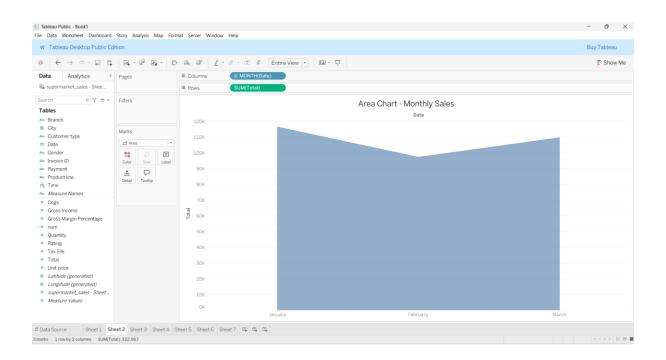
© TASK OBJECTIVES

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

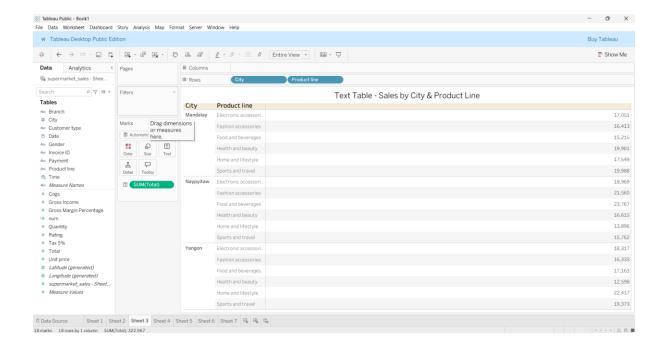
- Remove unnecessary or unused columns
- Validate and transform data as needed
- Ensure data consistency and formatting
- ✓ Step 2: Create the following Visualizations in Tableau
 - 1. Donut Chart
 - → Sales by Product Line
 - 2. Area Chart
 - → Sales trends over time (days or weeks)
 - 3. Text Table
 - → Detailed summary of sales by branch or category
 - 4. ★ Highlighted Table
 - → Compare ratings or gross income across product lines
 - 5. CD Word Cloud
 - → Display frequently purchased product categories
 - 6. ▼ Funnel Chart
 - → Sales progression or conversion across steps
 - 7. Waterfall Chart
 - → Impact of unit price and tax on final total
- Capture all visualizations as images
- Paste into a clean report with captions
- Export the final report as a PDF



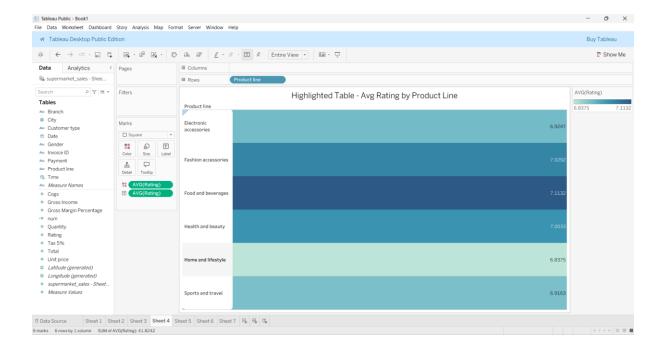
Area Chart - Monthly Sales



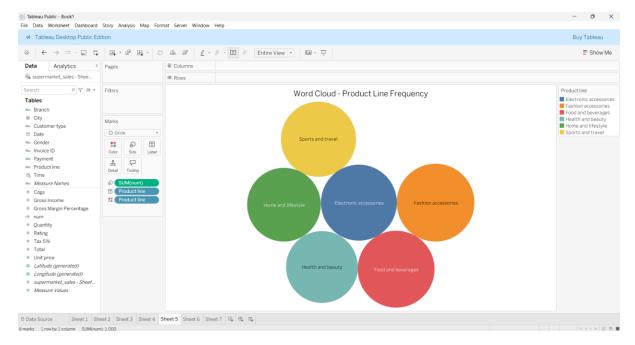
Text Table - Sales by City & Product Line



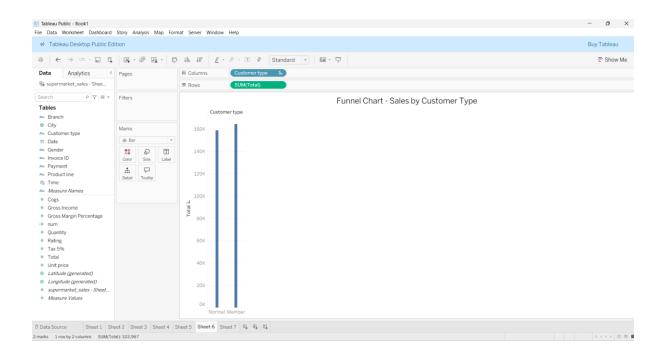
Highlighted Table - Avg Rating by Product Line



Word Cloud - Product Line Frequency



Funnel Chart - Sales by Customer Type



Waterfall Chart - Monthly Gross Income

