# DA Assignment - 3

Title: Interactive Supermarket Sales Dashboard using Tableau

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Course: Data Analysis using Tableau

Assignment Number: 3

Date of Submission: 30/06/2025

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## Objective

To analyze the growth of supermarkets and market competition using historical sales data, creating an interactive dashboard in Tableau to visualize sales trends and insights across three branches over three months.

## Dataset Overview

The dataset is one of the historical sales of a supermarket company, recorded in 3 different branches for 3 months. It includes information related to customer demographics, transaction details, pricing, and satisfaction ratings.

Dataset: [Link]

Attributes Used:
Branch
City
Customer Type
Gender
Product Line
Unit Price
Quantity
Total
Date
Time
Payment

Gross Income
Rating

Attributes Removed:
Invoice ID
Tax
COGS
Gross Margin Percentage

## Data Cleaning Process in Tableau

Opened Tableau.
Uploaded the dataset from the provided link into Tableau.
Removed unnecessary columns: Invoice ID, Tax, COGS, Gross Margin Percentage.
Validated and adjusted data types where needed for accurate analysis.

## Visualizations

### Interactive Dashboard: Supermarket Sales Overview

Goal: To create an interactive dashboard that allows exploration of sales trends, branch performance, and customer preferences.

Steps in Short:

- - Created multiple worksheets with key visualizations (e.g., Bar Chart for Total Sales by Branch, Line Chart for Sales Trends, Pie Chart for Payment Distribution).
- - Added filters (e.g., Branch, Date, Product Line) to enable interactivity.
- - Dragged worksheets to the Dashboard workspace.
- - Arranged layouts with titles, legends, and tooltips for user-friendly navigation.
- - Tested interactivity (e.g., filter responses, hover details).

## DASHBOARD_1
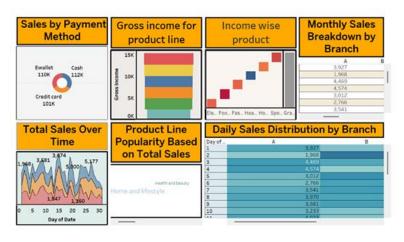
### Total Sales by Product Line

| Electr.. | Fashio.. | Food a.. | Health.. | Home | Sports. |
|----------|----------|----------|----------|------|---------|
| 54K | 54K | 56K | 49K | 54K | 55K |

### Branch-wise Sales with Gender Distribution

| | A | B | C |
|--|------|------|------|
| (top) | 53,269 | 52,928 | 61,685 |
| (bottom) | 52,931 | 53,269 | 48,883 |

### payment Method Distribution

- Ewallet 110K
- Cash 112K
- Credit card

### Daily Sales Trend

3,633   3,449   2,650   2,060

11 Jan   26 Jan   10 Feb   25 Feb   12 Mar   27 Mar
**Day of Date [2019]**

### Gross Income by Product Line (Bubble Chart)

- Health and beauty
- Home and lifestyle
- Electronic
- Fashion accessories
- Sports and travel

Sheet 1   Sheet 2   Sheet 3   Sheet 4   Sheet 5   Sheet 6   Sheet 7   Sheet 8   Sheet 9   Sheet 10   Sheet 11   Sheet 12   Dashboard 1   Dashboard 2

## DASHBOARD_2

### Sales by Payment Method

- Ewallet 110K
- Cash 112K
- Credit card 101K

### Gross income for product line

15K, 10K, 5K, 0K — Gross Income

### Income wise product

Ele.. Foo.. Fas.. Hea.. Ho.. Spo.. Gra..

### Monthly Sales Breakdown by Branch

| A | B |
|------|---|
| 3,927 | |
| 1,968 | |
| 4,469 | |
| 4,574 | |
| 3,012 | |
| 2,766 | |
| 3,541 | |

### Total Sales Over Time

3,581   3,674   5,177   1,968   5,000   1,847   1,360

0   5   10   15   20   25   30
**Day of Date**

### Product Line Popularity Based on Total Sales

- Health and beauty
- Home and lifestyle

### Daily Sales Distribution by Branch

| Day of .. | A | B |
|-----------|------|---|
| 1 | 3,927 | |
| 2 | 1,968 | |
| 3 | 4,469 | |
| 4 | 4,574 | |
| 5 | 3,012 | |
| 6 | 2,766 | |
| 7 | 3,541 | |
| 8 | 3,970 | |
| 9 | 3,581 | |
| 10 | 3,233 | |

Sheet 1   Sheet 2   Sheet 3   Sheet 4   Sheet 5   Sheet 6   Sheet 7   Sheet 8   Sheet 9   Sheet 10   Sheet 11   Sheet 12   Dashboard 1   **Dashboard 2**

## Insights

The Interactive Dashboard highlights top-performing branches and product lines, aiding in competitive analysis.
Sales trends over the three months reveal seasonal peaks, useful for inventory planning.
Customer preferences (e.g., payment methods, gender distribution) are easily explorable through filters.

## Conclusion

Using Tableau, we developed an interactive dashboard that effectively visualizes supermarket sales data, providing actionable insights into branch performance, sales trends, and customer behavior amidst growing market competition.

## Attachments:

Visualizations: Screenshots embedded above!