Data Analytics Assignment – 2

Supermarket Sales Analysis using Tableau

Team Id: LTVIP2026TMIDS75097

Project Title: Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization

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**Tool Used:** Tableau
Dataset used: Supermarket Sales Dataset (Jan–Mar 2019) <u>Link</u>

➢ Dataset Overview

The dataset contains historical sales records of a supermarket company operating across three branches (A, B, and C). The data covers transactions from January 2019 to March 2019 and includes information such as product category, sales amount, payment method, customer type, and ratings. Each transaction record provides detailed insights including invoice ID, city, gender, unit price, quantity purchased, tax amount, total sales, cost of goods sold (COGS), gross income, and gross margin percentage. This structured data enables a comprehensive understanding of business performance at multiple levels.

Through visualizations such as bar charts, pie charts, line charts, stacked bar charts, and bubble charts, the dataset allows comparison of revenue contribution by product category, branch, and payment type. This helps in identifying profitable segments and areas that require improvement.

1. Donut Chart – Payment Distribution

Donut Chart (Payment Distribution)

Payment
- Cash
- Credit card
- Ewallet

109,993   112,207

100,767
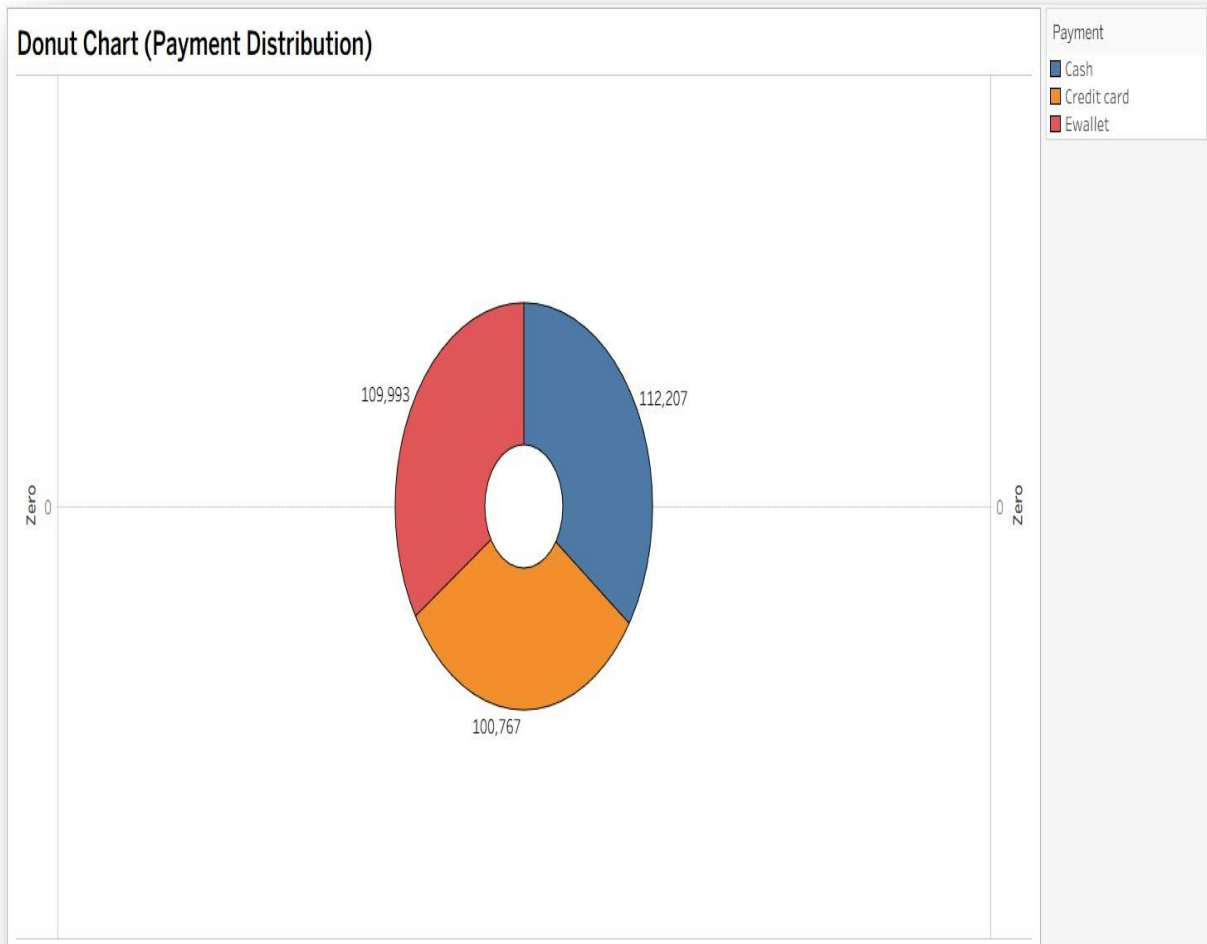
Insight:
E-wallet and Cash payments account for a major share of total sales, indicating that customers prefer convenient and flexible payment options. While cash remains a widely used traditional method, the significant share of E-wallet transactions reflects the growing adoption of digital payment systems.

2. Area Chart – Monthly Sales Trend

Area Chart (Monthly Sales Trend)

Month of Date: March
Total: 109,456
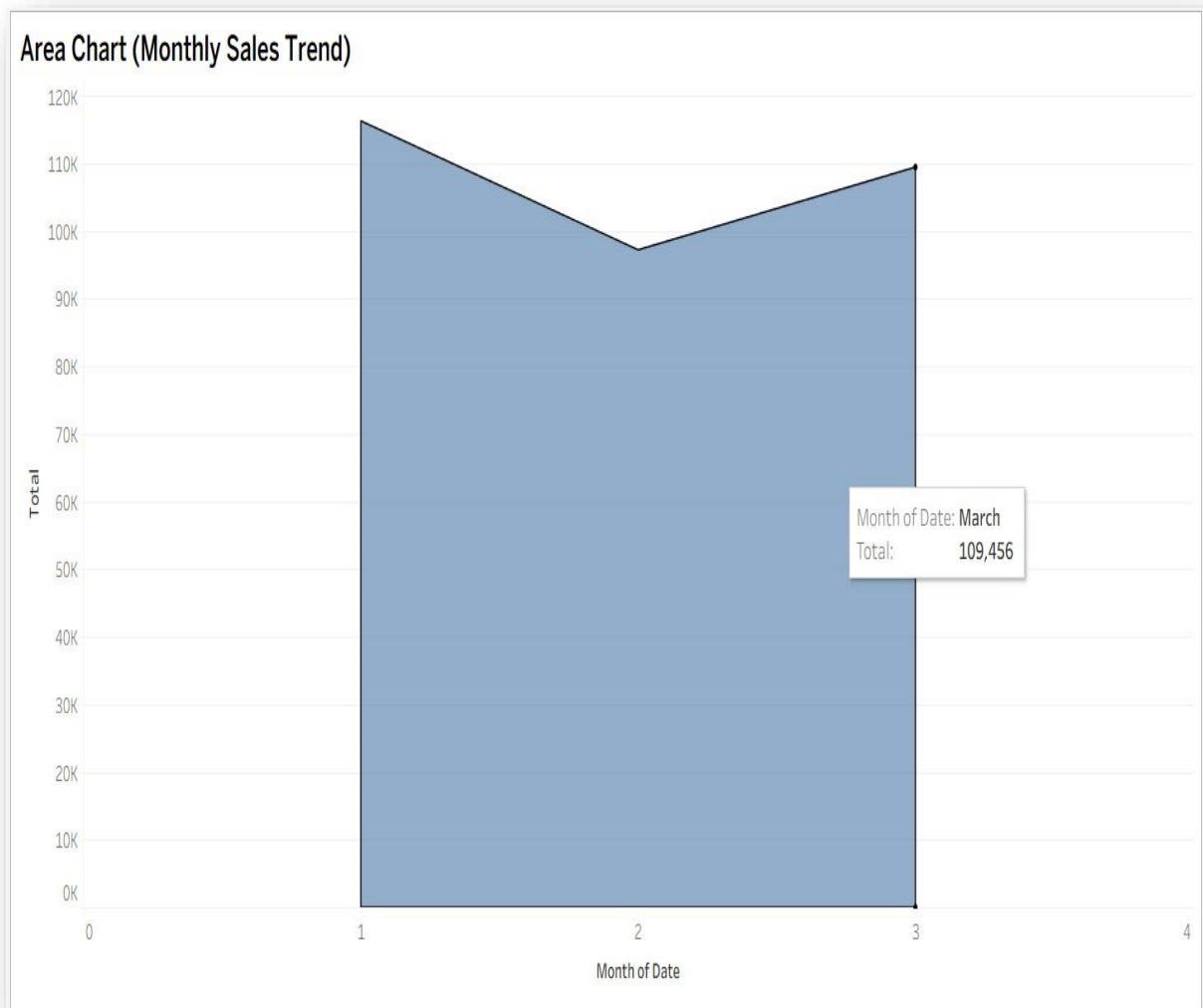
Insight:

Sales show variation across January to March, reflecting changes in customer demand, seasonal purchasing behaviour, and possible promotional activities during different months. These fluctuations provide insights into how external and internal factors influence business performance.

3. Text Table – Branch-wise Total Sales

Text Table (Branch-wise Sales)

Branch	
A	106,200
B	106,198
C	110,569

Insight:

Branch C generates comparatively higher revenue, making it the leading contributor to the company's overall business performance during the analyzed period. This indicates that Branch C has strong market presence and customer demand compared to Branch A and Branch B.

4. Highlight Table – Branch vs Product Line

Highlighted Table (Branch vs Product Line)

Branch	Electronic accessories	Fashion accessories	Food and beverages	Health and beauty	Home and lifestyle	Sports and travel
A	18,317	16,333	17,163	12,598	22,417	19,373
B	17,051	16,413	15,215	19,981	17,549	19,988
C	18,969	21,560	23,767	16,615	13,896	15,762

SUM(Total)
12,598   23,767

Insight:

Food and Beverages category performs consistently well across all branches, indicating strong and stable customer demand regardless of location. This category appears to be one of the primary revenue drivers for the supermarket.
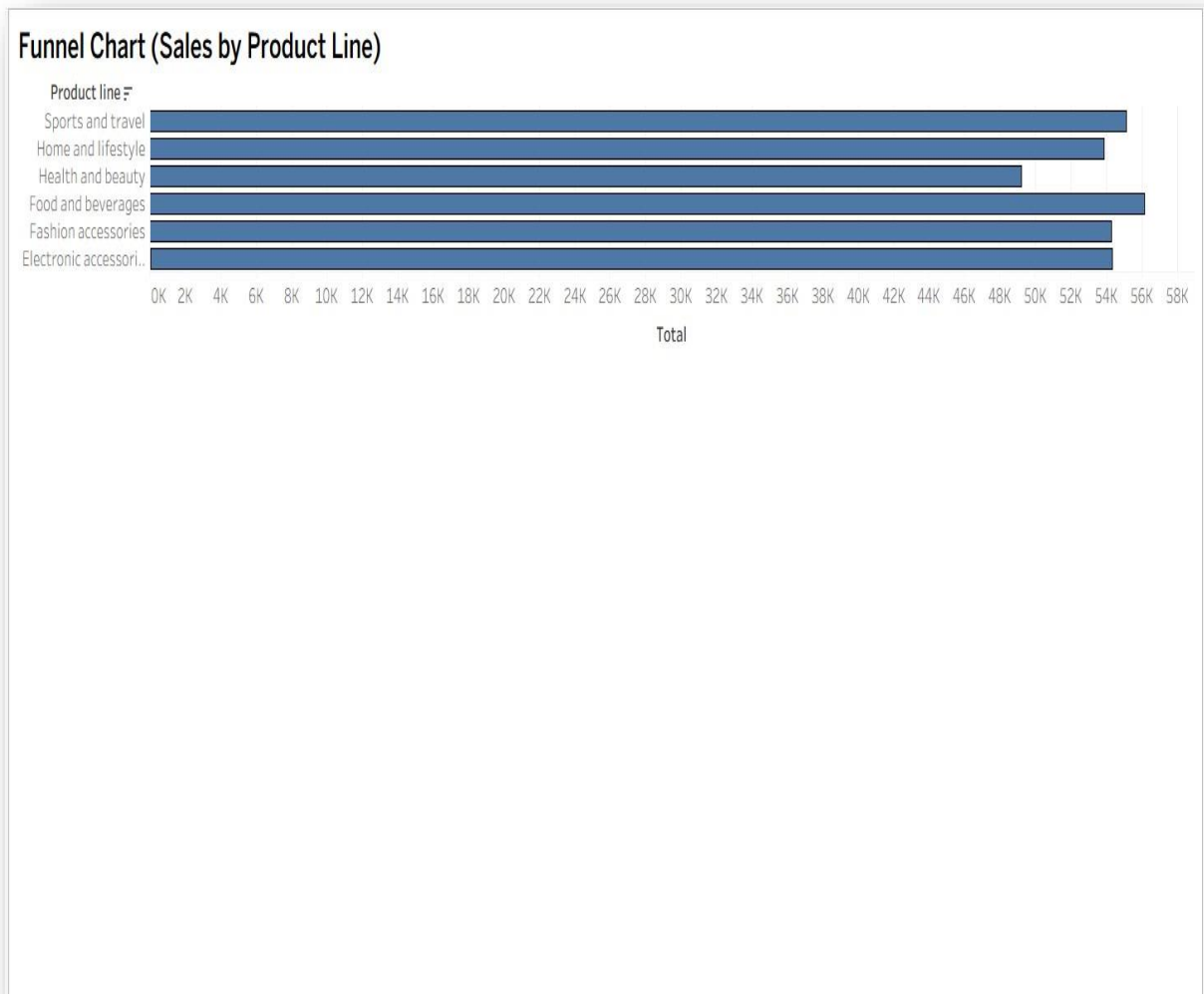
5. Word Cloud – Product Line Sales Impact
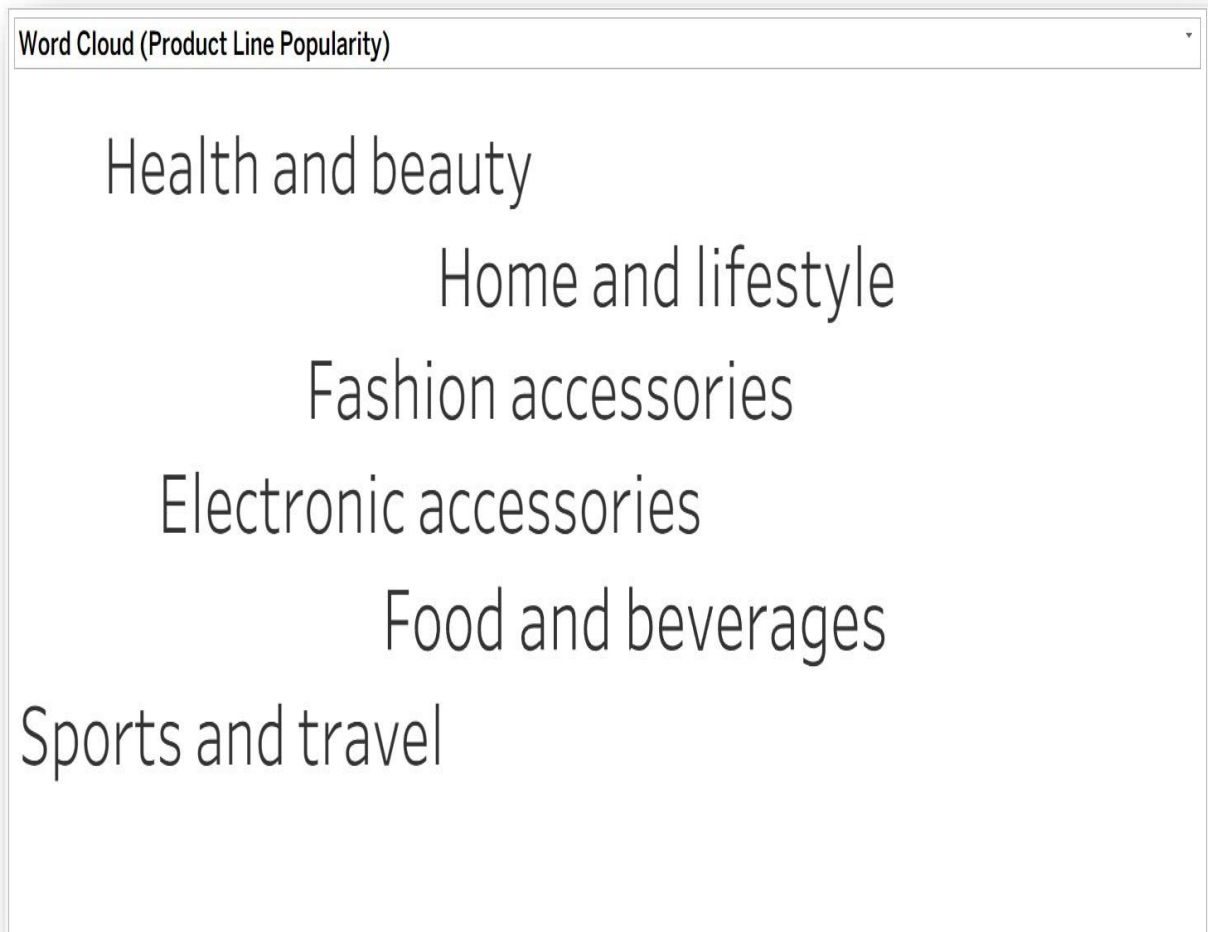
Insight:

In the **word cloud visualization**, larger product category names represent higher sales contribution. The size of each word is directly proportional to the total sales generated by that category.

6. Funnel Chart – Sales by Product Line

Funnel Chart (Sales by Product Line)

Product line

- Sports and travel
- Home and lifestyle
- Health and beauty
- Food and beverages
- Fashion accessories
- Electronic accessori..

0K 2K 4K 6K 8K 10K 12K 14K 16K 18K 20K 22K 24K 26K 28K 30K 32K 34K 36K 38K 40K 42K 44K 46K 48K 50K 52K 54K 56K 58K

Total

Insight:

The top two product categories contribute the majority of total revenue, showing sales concentration in specific segments.

7. Waterfall Chart – Gross Income Contribution
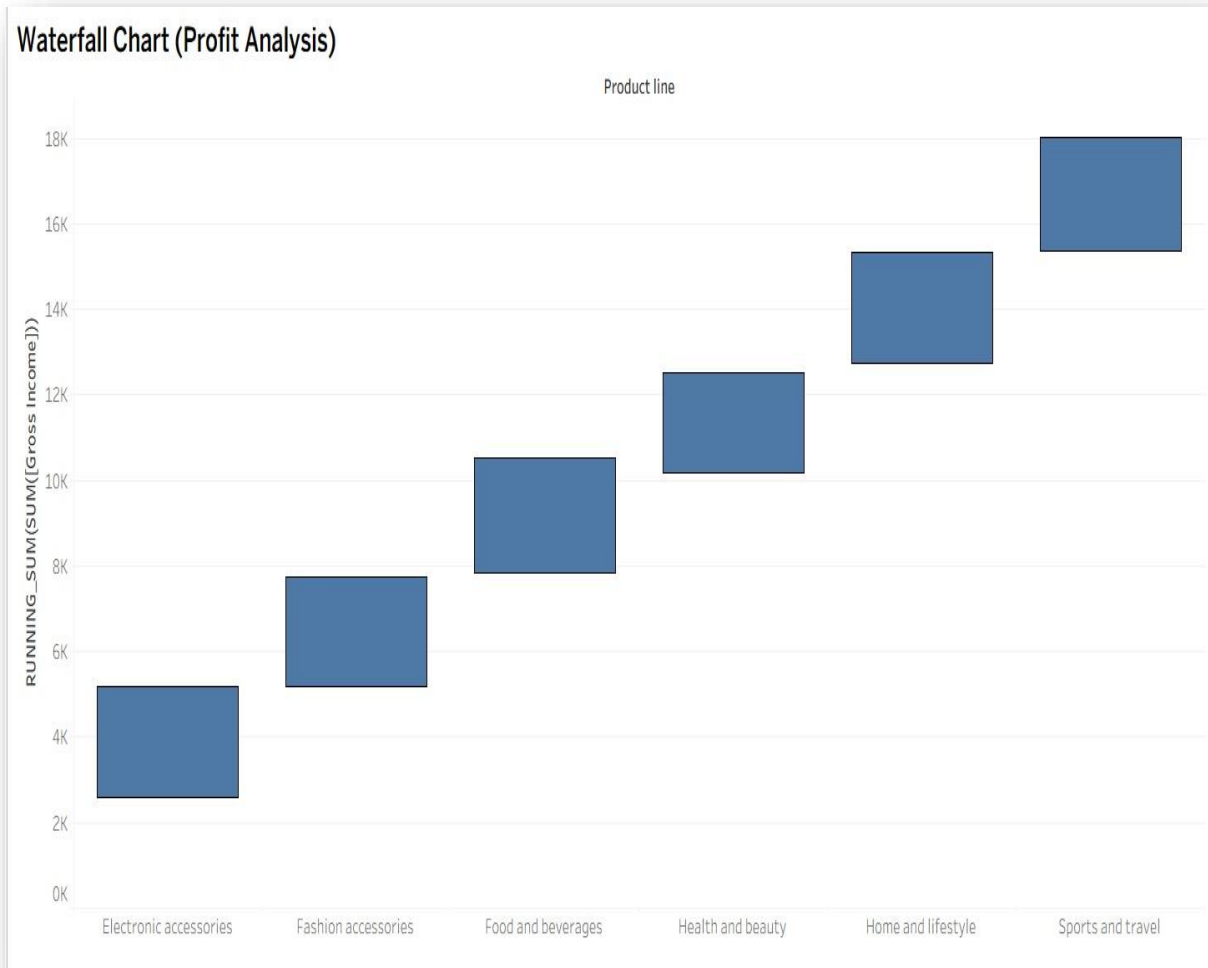
Insight:

The **waterfall chart illustrates the cumulative gross income contribution by product categories**, clearly showing how each category adds to the overall profitability of the supermarket.