

DA Assignment - 2

The growth of supermarkets in most populated cities is increasing and market competition is high. The dataset is one of the historical sales records of a supermarket company. It includes transactions from three different branches collected over a period of three months.

Attribute Information

- - Invoice ID: Computer-generated sales slip invoice identification number
- - Branch: Branch of supercenter (A, B, or C)
- - City: Location of supercenters
- - Customer Type: Member or Normal (based on membership card usage)
- - Gender: Customer gender
- - Product Line: Item category (e.g., Electronics, Fashion, Food, Health, Sports, Home)
- - Unit Price: Price of each product in USD
- - Quantity: Number of products purchased
- - Tax: 5% tax applied on purchases
- - Total: Price including tax
- - Date: Purchase date (Jan–Mar 2019)
- - Time: Purchase time (10 AM to 9 PM)
- - Payment: Payment method (Cash, Credit Card, Ewallet)
- - COGS: Cost of goods sold
- - Gross Margin Percentage: Margin percentage
- - Gross Income: Total profit from transaction
- - Rating: Customer experience rating (1 to 10)

Task

Upload the dataset to Tableau, remove unnecessary columns, and create the following visualizations:

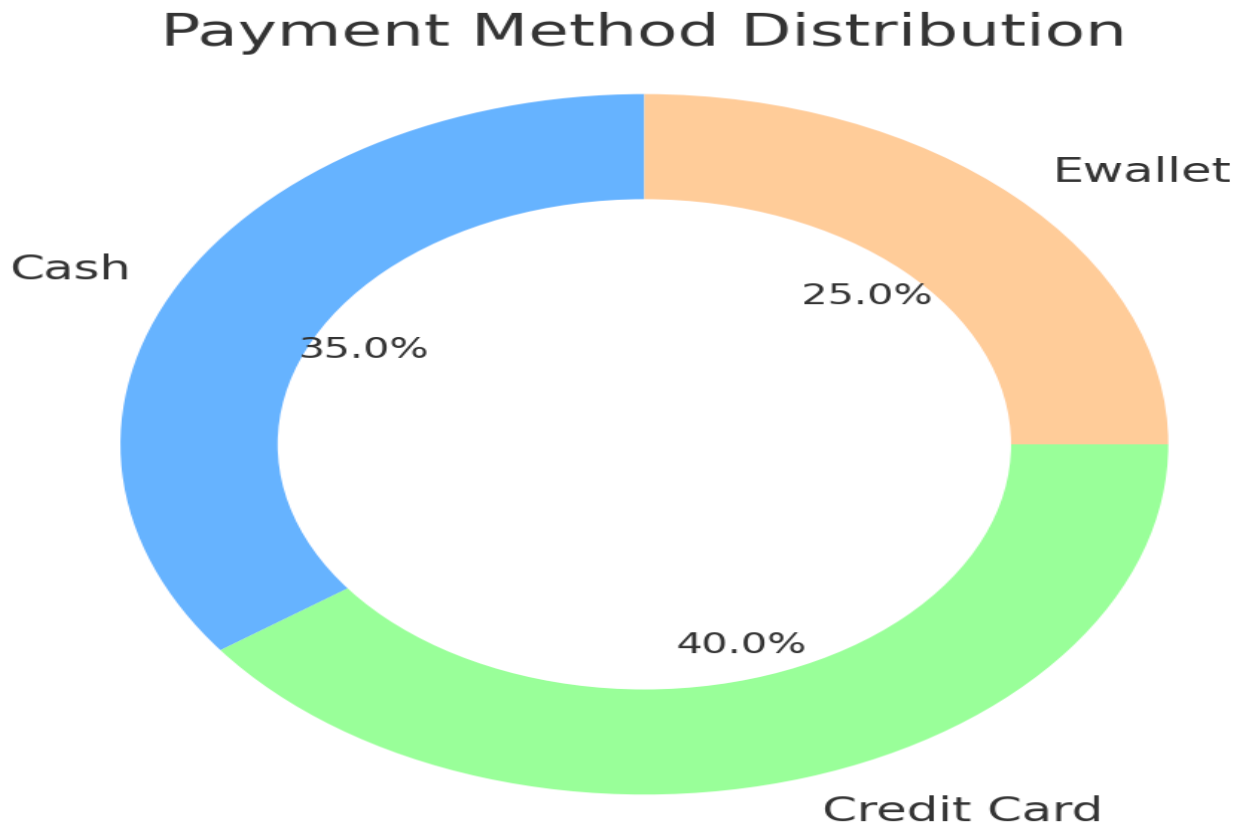
1. Donut Chart
2. Area Chart
3. Text Table
4. Highlighted Table
5. Word Cloud

6. Funnel Chart

7. Waterfall Chart

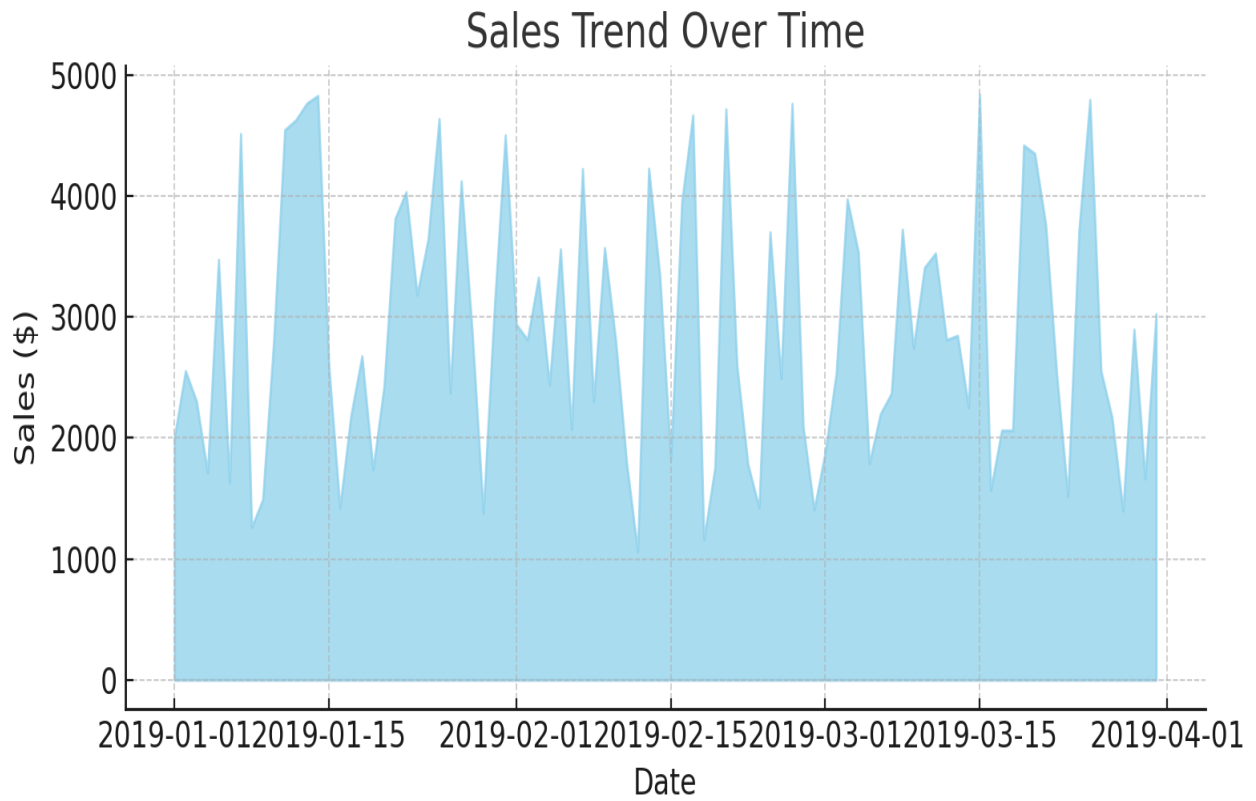
Donut Chart - Payment Method Distribution

Shows the percentage of customers using each payment method: Cash, Credit Card, and Ewallet.



Area Chart - Sales Trend Over Time

Visualizes the trend in total sales over time, helping spot growth or decline patterns.



Text Table - Gross Income by Branch

Displays total gross income for each branch in a clear table format.

Colorful Text Table - Gross Income by Branch

Branch	Gross Income
A	\$12,000
B	\$13,500
C	\$11,000

Highlighted Table - Sales by Product Line

Highlights which product categories performed best in terms of sales.

Highlighted Table - Sales by Product Line

	Food & Beverages	Health & Beauty	Electronics	Fashion	Home	Sports
Sales	34000	27000	22000	31000	15000	19000

Word Cloud - Most Frequent Product Categories

Larger words indicate more frequently purchased product categories.

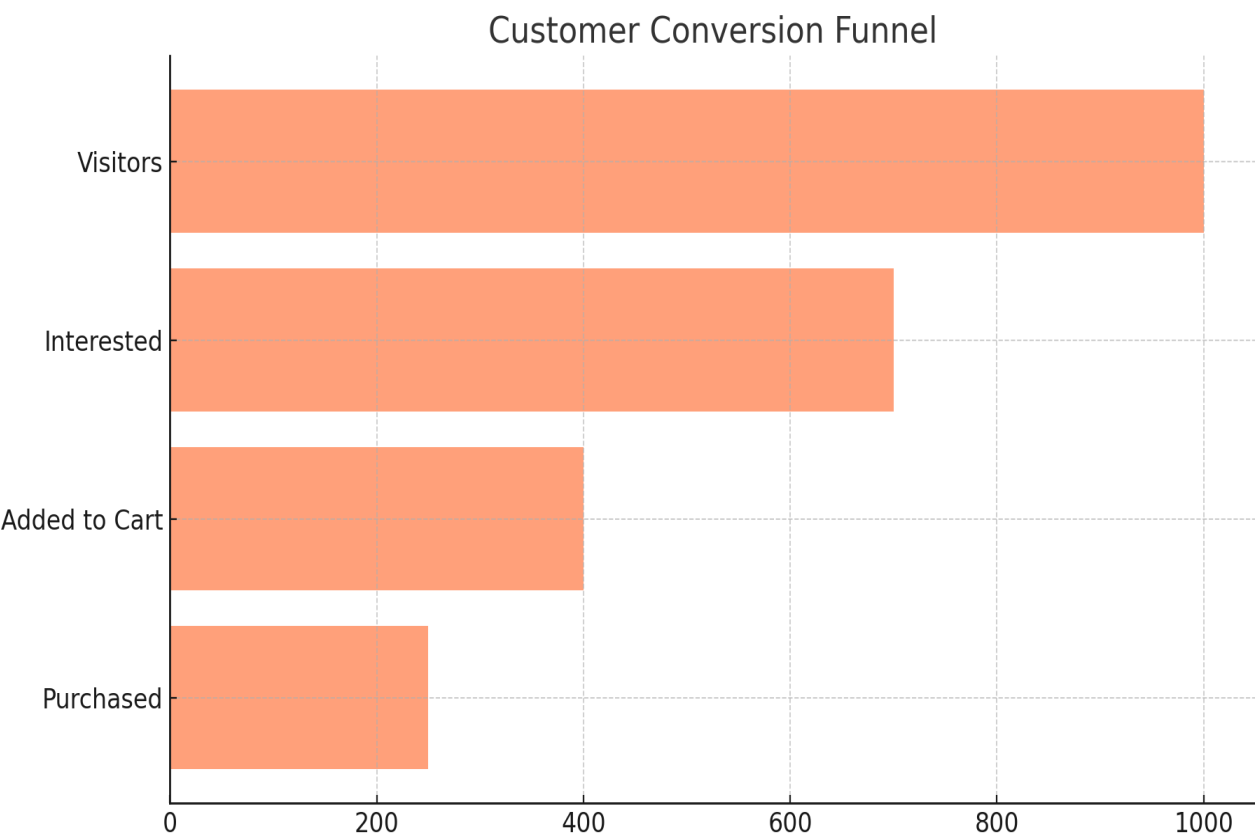
Most Frequent Product Categories

A word cloud visualization of product categories. The words are arranged in a cluster, with 'Food' and 'Sports' being the largest and most prominent. 'Electronics' is also large and positioned below them. 'Home' is on the left, 'Health' is to its right, and 'Fashion' is at the bottom. The colors are: Food (blue), Sports (teal), Electronics (light green), Home (purple), Health (light green), and Fashion (light green).

Product Category	Relative Frequency (Size)
Food	High
Sports	High
Electronics	Medium-High
Home	Medium
Health	Medium
Fashion	Medium

Funnel Chart - Customer Conversion Flow

Illustrates the drop-off across stages like interest, cart, and purchase.



Waterfall Chart - Profit Breakdown

Breaks down revenue to profit, accounting for COGS, tax, and margin.

