

Customer Analysis Proposal – Revised Version

Project Name: Data Exploration for Decision Making

Selected Area: Area 1 – Customer Analysis

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Why Customer Analysis?

Understanding who our customers are—what they value, how they behave, and what influences their decisions—is key to building better strategies, personalizing campaigns, improving products, and strengthening loyalty. This analysis aims to help us discover meaningful patterns that lead to smarter decisions.

Data Tables and Relationships

For this dashboard, the following tables were used:

Table Name	Description
Customers	Contains personal attributes like gender, education, marital status, age, and family size
Orders	Includes purchase data such as quantity and total value

Key Metrics / KPIs

These are the primary indicators being used in the dashboard:

Metric	Description
Total Customers	Total number of distinct users
Total Revenue (USD)	Sum of all customer purchases
Average Revenue per Customer	$\text{Revenue} / \text{Total Customers}$
Total Quantity Sold	Total units sold across all orders
Average Quantity per Customer	$\text{Quantity} / \text{Total Customers}$

These indicators are displayed clearly at the top-left of the dashboard for easy access.

Visualizations and Graph Types

To bring this data to life and generate insights, I created the following visualizations:

Chart Title	Description	Chart Type
Customers by Gender	Breakdown of customers by gender	Donut Chart
Customers by Marital Status	Proportion of single vs. married customers	Pie Chart
Customers by Age	Age distribution of customers	Histogram
Customers by Education	Highest education level attained	Horizontal Bar
Education by Gender	Cross-tabulation of gender and education	Clustered Column
Customers by Family Size	Distribution of household size among customers	Column Chart

Each chart was selected to match the type of variable and expected insights. For example, pie charts were used for binary/categorical data like gender and marital status, while bar charts were ideal for numerical or grouped comparisons.

Analysis Goals

The main goal of this analysis is to **identify customer segments** with high potential. We aim to understand how purchasing behavior varies by gender, education level, and family size. This will inform future recommendations in the following areas:

- Personalized marketing efforts
- Targeted product offerings
- Improved customer experience initiatives