About Dataset

❖ Introduction

Welcome to the Retail Sales and Customer Demographics Dataset! This synthetic dataset has been meticulously crafted to simulate a dynamic retail environment, providing an ideal playground for those eager to sharpen their data analysis skills through exploratory data analysis (EDA). With a focus on retail sales and customer characteristics, this dataset invites you to unravel intricate patterns, draw insights, and gain a deeper understanding of customer behavior.

❖ Dataset Overview

This dataset is a snapshot of a fictional retail landscape, capturing essential attributes that drive retail operations and customer interactions. It includes key details such as Transaction ID, Date, Customer ID, Gender, Age, Product Category, Quantity, Price per Unit, and Total Amount. These attributes enable a multifaceted exploration of sales trends, demographic influences, and purchasing behaviors.

❖ Why Explore This Dataset?

Realistic Representation: Though synthetic, the dataset mirrors real-world retail scenarios, allowing you to practice analysis within a familiar context.

Diverse Insights: From demographic insights to product preferences, the dataset offers a broad spectrum of factors to investigate.

Hypothesis Generation: As you perform EDA, you'll have the chance to formulate hypotheses that can guide further analysis and experimentation.

❖ Questions to Explore

1. Find the Total Quantity of Product sold
2. How many are the Product Category?
3. How does customer age and gender influence their purchasing behavior?
4. Are there discernible patterns in sales across different time periods?
5. Which product categories hold the highest appeal among customers?
6. What are the relationships between age, spending, and product preferences?
7. How do customers adapt their shopping habits during seasonal trends, having the season: Spring (March, April, and May), Summer (June, July, and August) Autumn (September, October, and November), Winter (December, January, and February)
8. Are there distinct purchasing behaviors based on the number of items bought per transaction?

Note: The above insights are to be visualized using Power BI Desktop