

About the Dataset

Context

The **Customer Shopping Preferences** dataset offers rich insights into **consumer behavior** and **purchasing patterns**. Understanding these preferences is critical for businesses aiming to **tailor their products**, **marketing efforts**, and overall customer experience. The dataset captures a variety of customer attributes — including demographics, shopping frequency, product categories, and promotional engagement — allowing analysts to explore what drives purchase decisions.

By examining these trends, businesses can:

- **Optimize product offerings**
- **Improve marketing strategies**
- **Increase customer satisfaction and retention**

This dataset serves as a valuable resource for organizations that want to align their operations with customer needs using data-driven strategies.

 Dataset Content

The dataset includes **3,900 records** representing individual transactions, with each row reflecting:

- Who the customer is
- What they purchased
- How and when the transaction occurred
- Whether any promotions or discounts were involved
- Customer preferences and feedback

The dataset has been enhanced with an additional column called **processdate**, which is a **timestamp** representing when the transaction occurred. This enables deeper **time-based analysis** of shopping behavior.

Column Glossary

Column Name	Description
Customer ID	Unique identifier for each customer HOW MANY RETURNING CUSTOMERS
Age PRIMARY	Age of the customer GROUP PER AGE GROUP

Gender	PRIMARY	Gender of the customer (Male/Female)
Item Purchased		Name of the item bought
Category	PRIMARY	Category the item belongs to (e.g., Clothing, Footwear)
Purchase Amount (USD)	PRIMARY	Value of the transaction in USD
Location	PRIMARY	Geographical location where purchase was made
Size		Size of the item purchased
Color		Color of the item purchased
Season		Season in which the purchase was made
Review Rating		Customer's satisfaction rating for the product
Subscription Status		Whether the customer has an active subscription (Yes/No)
Shipping Type		Type of shipping selected (e.g., Express, Free Shipping)
Discount Applied		Indicates if a discount was applied to the purchase (Yes/No)
Promo Code Used		Indicates if a promo code was used (Yes/No)
Previous Purchases		Number of prior transactions by the customer before the current one
Payment Method		Customer's preferred payment method (e.g., Credit Card, PayPal, Venmo, etc.)
Frequency of Purchases		How often the customer typically makes purchases (e.g., Weekly, Monthly)
processdate		Timestamp of when the transaction occurred (added for time-based analysis)

Dashboard Task for Students

Objective

Use the shopping_trends_with_processdate.csv dataset to build an **interactive multi-page dashboard** using **both Power BI and Google Looker Studio**. The goal is to analyze the dataset and extract **meaningful business insights** through visual storytelling.

Task Instructions

Each student must:

1. **Import** the dataset into both Power BI and Google Looker Studio.
2. **Explore and prepare** the data by handling any formatting, filtering, or transformation needed.
3. **Create a dashboard** with at least **3 distinct pages or tabs**, each focusing on a different aspect of the customer shopping trends.
4. Incorporate **interactive elements** (like filters, slicers, dropdowns) to enhance user experience.
5. Use a **variety of visualizations** (e.g., bar charts, line graphs, pie charts, heatmaps, etc.) to communicate insights effectively.

6. Ensure the dashboard provides **clear and actionable insights**, appropriate for a business audience.
7. Submit both dashboards along with a **1–2 paragraph summary** describing your key insights and dashboard design approach.