

# Business Problem Statement

A well-known retail company wants to **understand its customers' shopping patterns** more deeply to **boost sales, customer satisfaction, and loyalty**. Recently, the management team has observed **changes in buying habits** across different **age groups, regions, and product types** — both in online and offline purchases.

They want to discover what factors (like **discounts, customer reviews, seasons, or payment choices**) most influence **customer decisions and repeat purchases**.

Your task is to analyze the company's **customer behavior dataset** to answer the main question:

**“How can customer shopping data be used to find patterns, improve engagement, and design better marketing and product strategies?”**

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## Project Deliverables

### Data Preparation (Python)

- Clean and organize the raw dataset using Python.
- Handle missing values, remove duplicates, and prepare data for analysis.

### Data Analysis (SQL)

- Create structured tables in MySQL or PostgreSQL.
- Run SQL queries to understand **customer segments, loyalty, and purchase trends**.

### Dashboard & Visualization (Power BI)

- Design an interactive Power BI dashboard to show **key insights** such as top customers, product performance, and seasonal trends.

### Report & Presentation

- Summarize the full project with visuals and insights in a short report.
- Create a PowerPoint or Gamma presentation to share findings and business recommendations.

### GitHub Repository

- Upload all files — Python scripts, SQL queries, and Power BI dashboard — in a clear folder structure for easy access and review.