

Business Problem Statement

A leading retail company wants to better understand its customers' shopping behavior in order to improve sales, customer satisfaction, and long-term loyalty. The management team has noticed changes in purchasing patterns across demographics, product categories, and sales channels (online vs. offline). They are particularly interested in uncovering which factors, such as discounts, reviews, seasons, or payment preferences, drive consumer decisions and repeat purchases.

You are tasked with analyzing the company's consumer behavior dataset to answer the following overarching business question:

"How can the company leverage consumer shopping data to identify trends, improve customer engagement, and optimize marketing and product strategies?"

Key Deliverables

To address this problem, the project outlines several key steps:

- **Data Preparation & Modeling (Python):** Clean and transform raw data.
- **Data Analysis (SQL):** Extract insights on customer segments and purchase drivers.
- **Visualization & Insights (Power BI):** Build an interactive dashboard for data-driven decisions.
- **Report and Presentation:** Summarize findings and provide actionable recommendations.