

Business Problem Statement

A leading retail company wants to understand customer shopping behavior to improve sales, customer satisfaction, and long-term loyalty.

The company has noticed changes in purchasing patterns based on demographics, product categories, and sales channels (online and offline). They want to identify the main factors that influence customer decisions and repeat purchases such as discounts, reviews, seasons, and payment methods.

Main Question:

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

Deliverables

1. **Data Preparation & Modeling (Python):** Clean and prepare the dataset for analysis.
2. **Data Analysis (SQL):** Organize data and run queries to find insights about customers and sales.
3. **Visualization & Insights (Power BI):** Create an interactive dashboard to show trends and patterns.
4. **Report & Presentation:** Write a report with findings and recommendations.
5. **GitHub Repository:** Upload Python code, SQL queries, and dashboard files in a structured format