

Business Problem and Deliverables

Business Problem Statement

A leading retail company aims to gain deeper insights into its customers' shopping behavior to enhance sales, boost customer satisfaction, and foster long-term loyalty. The management team has observed shifts in purchasing trends across demographics, product categories, and sales channels (online vs. offline). They are particularly keen on understanding which factors such as discounts, product reviews, seasonal variations, or payment methods - influence consumer choices and encourage repeat purchases.

Your task is to analyze the company's consumer behavior dataset to address the following central business question:

"How can the company utilize consumer shopping data to uncover trends, enhance customer engagement, and optimize marketing and product strategies?"

Deliverables

1. **Data Preparation & Modeling (Python):** Clean and transform the raw data so it is ready for analysis.
2. **Data Analysis (SQL):** Organize the data, simulate business transactions, and run queries to uncover insights about customer segments, loyalty, and what drives purchases.
3. **Visualization & Insights (Power BI):** Create an interactive dashboard that shows key patterns and trends, helping stakeholders make informed decisions.
4. **Report and Presentation:** Write a project report summarizing your main findings and recommendations. Prepare a presentation that clearly shares insights and actionable suggestions with stakeholders.
5. **GitHub Repository:** Share all Python scripts, SQL queries, and dashboard files in a neat and organized repository.