Retail Consumer Behavior Analysis

Data-Driven Insights for Strategic Decision Making

Business Problem Statement

☐ Business Challenge

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.

Overarching Business Question

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

Key Focus Areas

- ✓ Demographics
- ✓ Product Categories
- ✓ Sales Channels
- ✓ Discounts
- ✓ Reviews
- ✓ Seasons
- ✓ Payment Preferences
- ✓ Repeat Purchases

Project Deliverables

1 Data Preparation & Modeling (Python)

Clean and transform the raw dataset for analysis.

2 ☐ Data Analysis (SQL)

Organize the data into a structured format, simulate business transactions, and run queries to extract insights on customer segments, loyalty, and purchase drivers.

3 Visualization & Insights (Power BI)

Build an interactive dashboard that highlights key patterns and trends, enabling stakeholders to make data-driven decisions.

4 Report and Presentation

Write a clear project report summarizing your key findings and business recommendations. Prepare a presentation that visually communicates insights and actionable recommendations to stakeholders.

5 GitHub Repository

Include all Python scripts, SQL queries, and dashboard files in a well-structured repository.

Project Goal: Leverage data analytics to drive retail excellence

Transform consumer insights into actionable business strategies