

Business Problem:

The retail company has observed stagnant growth and declining customer engagement metrics over the past quarters. Initial assessments indicate potential issues in product performance variability, ineffective customer segmentation, and lack of insights into customer purchasing behavior. The company seeks to leverage its sales transaction data, customer profiles, and product inventory information to address the following key business problems:

- **Product Performance Variability:** Identifying which products are performing well in terms of sales and which are not. This insight is crucial for inventory management and marketing focus.
- **Customer Segmentation:** The company lacks a clear understanding of its customer base segmentation. Effective segmentation is essential for targeted marketing and enhancing customer satisfaction.
- **Customer Behaviour Analysis:** Understanding patterns in customer behavior, including repeat purchases and loyalty indicators, is critical for tailoring customer engagement strategies and improving retention rates.

Objectives:

- To utilize SQL queries for data cleaning and exploratory data analysis to ensure data quality and gain initial insights.
- To identify high and low sales products to optimize inventory and tailor marketing efforts.
- To segment customers based on their purchasing behavior for targeted marketing campaigns. Create Customer segments -

Total Quantity of Products Purchased	Customer Segment
0	No Orders
1-10	Low
10-30	Mid
>30	High Value

- To analyze customer behavior for insights on repeat purchases and loyalty, informing customer retention strategies.