

Business Problem

The retail company is facing challenges in optimizing its sales strategies and improving overall business profitability. Despite having a diverse product range and operating in various states, the company struggles with identifying key sales trends, understanding customer behavior, and measuring the performance of different product categories and payment modes. This lack of insight hampers their ability to make informed decisions, target the right customer segments, and enhance operational efficiency.

Objective

The objective is to analyze the sales and operational data of a retail company to identify trends, measure performance, and uncover insights that can drive strategic decision-making. This analysis aims to optimize sales strategies, improve customer satisfaction, and enhance overall business profitability.

Specific Problems:

1. Sales Performance Variability:

- The company lacks a clear understanding of which products, categories, and sub-categories are driving sales and profit.
- There is a need to identify trends and patterns in sales over different time periods to better forecast future sales.

2. Customer Insights:

- The company has limited visibility into customer purchasing behaviors and preferences.
- There is no effective segmentation of customers to tailor marketing and sales strategies.

3. Payment Mode Efficiency:

- The impact of different payment modes on sales and profitability is not well understood.
- Optimizing payment mode offerings could potentially improve sales and customer satisfaction.

4. Operational Inefficiencies:

- The return rates for products are not being analyzed, leading to potential losses and inefficiencies in inventory management.
- Understanding the profit margins for different products is crucial to improving overall profitability.

5. Strategic Decision-Making:

- The company lacks actionable insights to drive strategic decisions that can enhance customer satisfaction, boost sales, and increase profit margins.
- There is a need for a robust analytical framework to monitor and evaluate business performance continuously.

The data is divided into two primary datasets:

1. **Details.csv**

- **Order ID:** Unique identifier for each order.
- **Amount:** Sales amount for the order.
- **Profit:** Profit generated from the order.
- **Quantity:** Quantity of items sold in the order.
- **Category:** Product category (e.g., Electronics, Furniture).
- **Sub-Category:** Sub-category of the product (e.g., Electronic Games, Chairs).
- **PaymentMode:** Mode of payment used for the order (e.g., COD, EMI, Credit Card).

2. **Orders.csv**

- **Order ID:** Unique identifier for each order.
- **Order Date:** Date when the order was placed.
- **CustomerName:** Name of the customer who placed the order.
- **State:** State where the customer is located.
- **City:** City where the customer is located.

Beginner Level Tasks

1. **Import Data into Power BI**

- Task: Import the `Details.csv` and `Orders.csv` files into Power BI.

2. **Data Cleaning in Power Query**

- Task: Ensure the date column in the `Orders` table is in Date format.

3. **Total Sales Calculation**

- Task: Calculate the total sales amount.

4. **Total Orders Count**

- Task: Count the total number of orders.

5. **Total Quantity Sold**

- Task: Calculate the total quantity of items sold.

6. **Create a Basic Sales Dashboard**

- Task: Create a dashboard displaying total sales, total orders, and total quantity sold.

Intermediate Level Tasks

1. **Sales by Category**

- Task: Calculate the total sales for each product category.

2. **Monthly Sales Trend**

- Task: Calculate the total sales for each month and visualize it.

3. **Top 5 Cities by Sales**

- Task: Identify the top 5 cities with the highest sales.

4. **Sales by Payment Mode**

- Task: Calculate the total sales amount for each payment mode.

5. **Customer Segmentation**

- Task: Segment customers based on their total sales.

6. Create an Interactive Sales Dashboard

- Task: Create a dashboard with slicers for category and payment mode, displaying total sales, sales by category, and top 5 cities by sales.

Advanced Level Tasks

• Year-over-Year Sales Growth

- Task: Calculate the year-over-year growth in sales.

Dynamic Top N Products by Sales

- Task: Create a dynamic calculation to show the top N products by sales based on user input.

• Customer Lifetime Value (CLV)

- Task: Calculate the customer lifetime value, defined as the total profit generated by each customer.

• Return Rate Calculation

- Task: Calculate the return rate for each product category.

• Create a Sales Forecast

- Task: Create a sales forecast for the next 12 months using historical data.

• Advanced Interactive Dashboard

- Task: Create an advanced interactive dashboard that includes year-over-year sales growth, dynamic top N products, and customer lifetime value.