# Sales Analysis Dashboard

Consider a scenario related to sales and inventory management for a retail company. The dataset consists of multiple tables representing different aspects of the business.

# Dataset:

* Sales Table:

Columns: SaleID, ProductID, SaleDate, QuantitySold, UnitPrice, TotalSales

* Products Table:

Columns: ProductID, ProductName, CategoryID, ManufacturerID, CostPrice

* Categories Table:

Columns: CategoryID, CategoryName

* Manufacturers Table:

Columns: ManufacturerID, ManufacturerName, Country

* Inventory Table:

Columns: ProductID, StockDate, OpeningStock, ClosingStock

* Customers Table:

Columns: CustomerID, CustomerName, Email, Country

# Possible KPIs and Calculations:

* Total Sales:

Measure: Total Sales = SUM('Sales'[TotalSales])

* Average Unit Price:

Measure: Avg Unit Price = AVERAGE('Sales'[UnitPrice])

* Profit Margin:

Measure: Profit Margin = (Total Sales - Total Cost) / Total Sales

* Top Selling Products:

Table or Visual: Table with ProductName, Total Sales, and QuantitySold, sorted by Total Sales

* Sales by Category:

Visual: Stacked bar chart showing Total Sales for each category

* Inventory Analysis:

Measure: Inventory Turnover = Total Sales / Average Inventory

* Customer Geography:

Visual: Map showing customer distribution by country

* Year-over-Year Growth:

Measure: YoY Growth = (Total Sales - Total Sales LY) / Total Sales LY

* Customer Lifetime Value (CLV):

Measure: CLV = Total Sales / Number of Customers

* Sales Forecasting:

Time Intelligence: Forecast based on historical data using DAX functions like EARLIER, TOTALYTD, etc.

# Dashboard Components:

* Main Dashboard Page:

Overview visuals with Total Sales, Average Unit Price, and Profit Margin

* Product Analysis Page:

Top Selling Products table, Sales by Category chart, and Inventory analysis visuals

* Customer Insights Page:

Customer geography map, CLV analysis, and YoY growth visuals

* Forecasting Page:

Sales forecasting visuals and insights

This dataset and scenario provide a foundation for covering various Power BI concepts and can be customized based on your specific coaching goals.

# Sample Dataset:

**Sales Table:**

**SaleID ProductID SaleDate QuantitySold UnitPrice TotalSales**

**1 101 2024-01-01 10 20.00 200.00**

**2 102 2024-01-02 5 25.00 125.00**

**3 103 2024-01-03 8 15.00 120.00**

**Products Table**

**ProductID ProductName CategoryID ManufacturerID CostPrice**

**101 Laptop 1 201 1500.00**

**102 Smartphone 2 202 800.00**

**103 Headphones 3 203 50.00**

**Categories table:**

**CategoryID CategoryName**

**1 Electronics**

**2 Gadgets**

**3 Accessories**

**Manufacturers Table:**

**ManufacturerID ManufacturerName Country**

201 ABC Electronics USA

202 XYZ Technologies India

203 AudioTech Japan

**Inventory Stock:**

**ProductID StockDate OpeningStock ClosingStock**

101 2024-01-01 50 40

102 2024-01-01 100 95

103 2024-01-01 30 22

**Customers Table**

**CustomerID CustomerName Email Country**

1 John Doe [john.doe@email.com](mailto:john.doe@email.com) USA

2 Rohan Kirti [Rohan.Kirti@email.com](mailto:Rohan.Kirti@email.com) India

3 Robert Johnson [robert.j@email.com](mailto:robert.j@email.com) UK