E commerce Sales Analysis Report

**Project Objective :**

**To develop a comprehensive E commerce Sales Analysis dashboard that provides real-time insights into key performance metrics and trends, enabling stakeholders to monitor and analyze Sales & operations effectively.**

**Tools used in Project :**

1. **Power BI**
2. **Excel**
3. **SQL**

**Steps Following to Create a E commerce Sales Analysis Dashboard in PowerBI :**

**1️. Data Collection & Storage**

* 📥 **Download CSV data** from **Kaggle**.
* 🗄️ **Import CSV files into Power BI**.

**2. Data Cleaning & Transformation (Power Query)**

* ✅ **Check for NULL values** and handle missing data.
* 🔄 **Remove duplicates** for data integrity.
* 🏷️ **Correct data types** (e.g., Date, Numeric, Text).
* 📊 **Assess data quality** using Power Query profiling tools.

**3. Data Modeling & Relationships**

* 🔗 **Create relationships** between tables (orders,Returns,Customers).
* 🧮 **Define DAX Measures & Columns** :

**Return Rate** = DIVIDE( CALCULATE(COUNT('E commerce merge'[Returned]),'E commerce merge'[Returned] = "Yes"),COUNT('E commerce merge'[Returned]))

**shipping time in days** = DATEDIFF('E commerce merge'[Order Date],'E commerce merge'[Ship Date],DAY)

**Avg Shipping Days** = AVERAGE('E commerce merge'[shipping time in days])

**% of Shipping Cost** = SUM('E commerce merge'[Shipping Cost])/SUM('E commerce merge'[Sales])

**mom sales %** =

var pp = CALCULATE(SUM('E commerce merge'[Sales]),DATEADD('E commerce merge'[Order Date].[Date],-1,MONTH))

var cp = SUM('E commerce merge'[Sales])

return

divide(cp,pp) -1

**yoy sales %** =

var pp = CALCULATE(SUM('E commerce merge'[Sales]),DATEADD('E commerce merge'[Order Date].[Date],-1,YEAR))

var cp = SUM('E commerce merge'[Sales])

return

divide(cp,pp) -1

**4 Building the Dashboard**

* 📌 **KPI Cards** → Total Sales, Total Profit, Return Rate, Avg Shipping Days, % of Shipping Cost.
* 📊 **Visuals** → Bar Chart, Line Chart, Treemap, Pie Chart, Donut Chart.
* 🎛 **Filters & Slicers** → Order Date, Return Status.

**Steps Following to Create a E commerce Sales Analysis Dashboard in Excel :**

**1️. Data Collection & Storage**

* 📥 **Download CSV data** from **Kaggle**.
* 🗄️ **Import CSV files into Excel**.

**2. Data Cleaning & Transformation (Power Query)**

* ✅ **Check for NULL values** and handle missing data.
* 🔄 **Remove duplicates** for data integrity.
* 🏷️ **Correct data types** (e.g., Date, Numeric, Text).
* 📊 **Assess data quality** using Power Query profiling tools.

**3. PivotTable & PivotCharts in Excel.**

* **Pivot table for** Analyze & Summarize Data.
* **Pivot Chart for** Data Visulization.

**4. Building the Dashboard**

* 📌 **KPI Cards** → Total Sales, Total Profit, Return Rate, Avg Shipping Days, % of Shipping Cost.
* 📊 **Visuals** → Bar Chart, Line Chart, Treemap, Table,Column Chart.

**Project Insights :**

**• Revenue increases by 18%, 27% ,26% respectively from last 3 Years**

**• Total Sales – 12.64M**

**• Total profit is 1.47M**

**• 80% Sales Comes from Standard & Second Class Shipping Mode**

**• 90% Orders comes from Medium & High Order Priority**

**• Total Distinct Customers are 1590**

**• Average Shipping Days are 4**

**• Return rate is 5.96%**

**• Shipping Cost 10.70% of Total Sales**