**Sales Analysis Power BI Project**

This project contains the necessary files and instructions to create a Power BI dashboard for analyzing sales performance of a fictional company.

**Project Structure**

* **SalesData.csv**: Sample dataset containing sales transactions.
* **SalesMeasures.dax**: DAX measures for calculations in Power BI.
* **SalesAnalysisReportDescription.md**: Description of the Power BI report layout and visuals.

**Setup Instructions**

1. **Import Data**:
   * Open Power BI Desktop.
   * Import SalesData.csv using "Get Data" > "Text/CSV".
   * Ensure columns are correctly typed (e.g., Date as Date, SalesAmount as Decimal Number).
2. **Create Measures**:
   * Open the "Model" view in Power BI.
   * Import or manually create measures from SalesMeasures.dax in the appropriate tables.
3. **Build Report**:
   * Follow the report layout described in SalesAnalysisReportDescription.md to create visuals.
4. **Save**:
   * Save the project as SalesAnalysis.pbix.

**SalesData.csv**

OrderID,OrderDate,Region,ProductCategory,ProductName,UnitsSold,SalesAmount,Cost

1001,2024-01-15,North,Electronics,Laptop,10,12000,8000

1002,2024-01-16,South,Furniture,Chair,25,2500,1500

1003,2024-02-01,East,Electronics,Phone,15,9000,6000

1004,2024-02-10,West,Furniture,Table,8,3200,2000

1005,2024-03-05,North,Office Supplies,Pen,100,500,300

1006,2024-03-12,South,Electronics,Tablet,12,4800,3000

1007,2024-04-01,East,Furniture,Sofa,5,5000,3500

1008,2024-04-15,West,Office Supplies,Paper,200,400,200

1009,2024-05-10,North,Electronics,Monitor,7,3500,2100

1010,2024-05-20,South,Furniture,Desk,10,4000,2500

**SalesMeasures.dax**

Total Sales = SUM('Sales'[SalesAmount])

Total Cost = SUM('Sales'[Cost])

Profit = [Total Sales] - [Total Cost]

Profit Margin =

DIVIDE([Profit], [Total Sales], 0)

Units Sold = SUM('Sales'[UnitsSold])

Average Sales per Order =

DIVIDE([Total Sales], COUNTROWS('Sales'), 0)

Mul \*

Sales YTD =

TOTALYTD([Total Sales], 'Sales'[OrderDate])

Previous Month Sales =

CALCULATE(

[Total Sales],

PREVIOUSMONTH('Sales'[OrderDate])

)

**SalesAnalysisReportDescription.md**

# Sales Analysis Report Layout

Page 1: Overview

- Clustered Column Chart:

- Sales by Region (X-axis: Region, Y-axis: Total Sales)

- Line Chart:

- Sales Trend (X-axis: OrderDate, Y-axis: Total Sales)

- Slicer:

- ProductCategory (to filter visuals by category)

Page 2: Product Analysis

- Table:

- Columns: ProductName, UnitsSold, SalesAmount, Profit

- Pie Chart:

- Sales by ProductCategory

- Slicer:

- Region (to filter by region)

Page 3: Time Analysis

- Area Chart:

- Sales YTD vs Previous Month Sales (X-axis: OrderDate, Y-axis: Sales YTD, Previous Month Sales)

- Slicer:

- Year (extracted from OrderDate)

Formatting

- Use a consistent theme (e.g., Power BI default or a custom theme).

- Apply filters at the page level for interactivity.

- Ensure tooltips are enabled for all visuals.

**Usage**

1. Load SalesData.csv into Power BI.
2. Create measures using SalesMeasures.dax.
3. Design the report pages as described in SalesAnalysisReportDescription.md.
4. Save as SalesAnalysis.pbix.

**Notes**

* The dataset is small for demonstration. In a real project, you can scale it with more data.
* Use Power BI's "Transform Data" (Power Query) to clean or reshape data if needed.
* Publish to Power BI Service for sharing (optional).