**Task One Work Description**

**Superstore Sales Dataset Details**

Predict Sales using Time Series

## **About Dataset**

### Context

### Retail dataset of a global superstore for 4 years. Perform EDA and Predict the sales of the next 7 days from the last date of the Training dataset!

### **Content**

Time series analysis deals with time series-based data to extract patterns for predictions and other characteristics of the data. It uses a model for forecasting future values in a small-time frame based on previous observations. It is widely used for non-stationary data, such as economic data, weather data, stock prices, and retail sales forecasting.

**Sales Performance Dashboard in Excel**

**Task Description and Implementation Steps**

## **Introduction**

This report outlines the detailed steps followed in the development of a Sales Performance Dashboard using Microsoft Excel. The dashboard provides key business insights by visualizing total revenue trends, customer order volume, and sales distribution by region and category. The process involved data cleaning, analysis through PivotTables, and building an interactive dashboard interface.

## **1. Data Import and Preparation**

The process began with importing a structured retail dataset into Microsoft Excel. The dataset included essential fields such as Order Date, Sales, Region, Category, Sub-Category, and Order ID. Data preparation involved:

* Removing any blank rows or unnecessary formatting
* Ensuring consistent data types for fields (especially for dates and sales figures)
* Formatting Order Date as an Excel-recognized date and Sales as a currency value for accurate aggregation

These steps ensured the dataset was ready for reliable analysis in PivotTables.

## **2. Data Structuring and Helper Columns**

To facilitate temporal grouping and chronological sorting, additional helper columns were added using Excel formulas:

* **Month Name:** =TEXT(column letter and number , "mmmm") — to extract full month names
* **Year:** =YEAR((column letter and number) — to extract the year
* **Month Number:** =MONTH((column letter and number) — to allow correct month sorting

These columns enabled flexible time-based groupings in PivotTables and made trend analysis over months and years more intuitive.

## **3. Creating PivotTables**

Three main PivotTables were constructed to explore sales performance:

### a. **Total Revenue by Month**

* Order Date was added to the **Rows** area and grouped by **Month** and **Year**
* Sales was added to the **Values** area and aggregated using **Sum**
* This PivotTable revealed trends in monthly revenue and was formatted using currency number formatting

### b. **Units Sold per Month**

* Since no Quantity column was available, the **Count of Order ID** was used as a proxy for units sold
* Order ID was added to the **Values** area and aggregated using **Count**
* Grouping by Order Date (Months and Years) allowed tracking of monthly order volume

### c. **Sales by Region or Category**

* Region or Category was added to the **Rows** area
* Sales was added to the **Values** area (Sum)
* This PivotTable enabled comparison of total sales across regions or product categories

Each PivotTable was formatted for readability and clarity using number formatting and consistent layout alignment.

## **4. Building the Dashboard**

A new worksheet titled **Dashboard** was created to consolidate the analysis and present it in an interactive format. All PivotTables and associated PivotCharts (Line and Column charts) were copied to this sheet and arranged visually in separate sections.

### Key Features:

* **Slicers** were added for fields such as Region, Category, and Year
* Slicers were connected to all relevant PivotTables via the **Report Connections** option to allow synchronized filtering
* Section titles and labels were added using **Text Boxes** and **Shapes** for better visual organization
* Charts and tables were consistently sized and aligned to create a clear, user-friendly interface

## **5. Finalization and Testing**

To ensure functionality:

* Slicer filters were tested to verify dynamic interactivity across PivotTables
* Layouts were reviewed for alignment and readability
* Data refresh settings were configured to allow future updates
* The final dashboard provided a visual summary of monthly sales trends, customer order volume, and regional/category sales breakdowns

## **Conclusion**

The Excel Sales Performance Dashboard effectively summarizes key sales data and presents it in a professional, interactive format. Through the use of PivotTables, helper columns, slicers, and charts, the dashboard enables stakeholders to explore sales patterns and draw data-driven conclusions for decision-making.