Part- C: Power BI

1. Introduction to Power BI- Get Started with Power BI - Sign up for Power BI - Overview: Power BI data sources - Connect to a SaaS solution - Upload a local CSV file - Connect to Excel data that can be refreshed - Create a Report with Visualizations

1. Introduction to Power BI

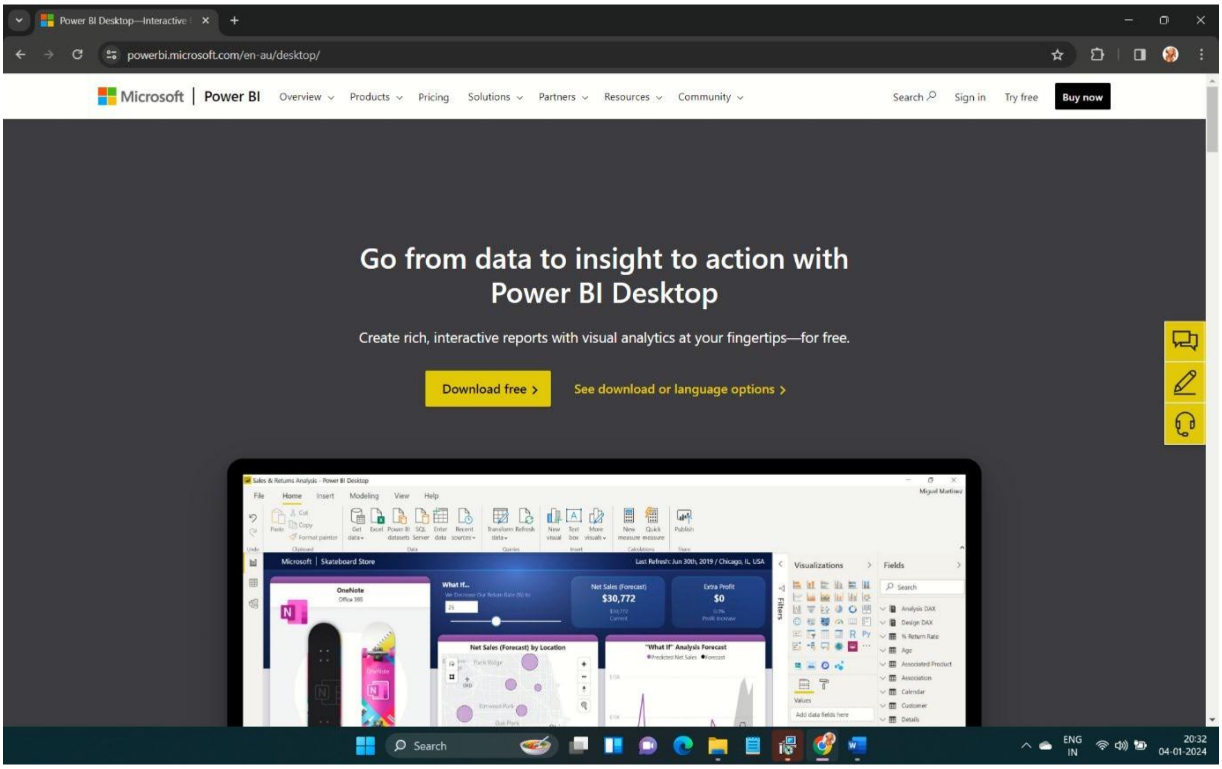
Power BI is a powerful business analytics tool developed by Microsoft that enables users to visualize and analyze data effectively, helping organizations make data-driven decisions.

<u>Power BI Desktop:</u>

This is a free application for Windows that allows users to create reports and data visualizations. It includes tools for data modelling, transforming data using Power Query, creating relationships, and designing interactive reports and dashboards.

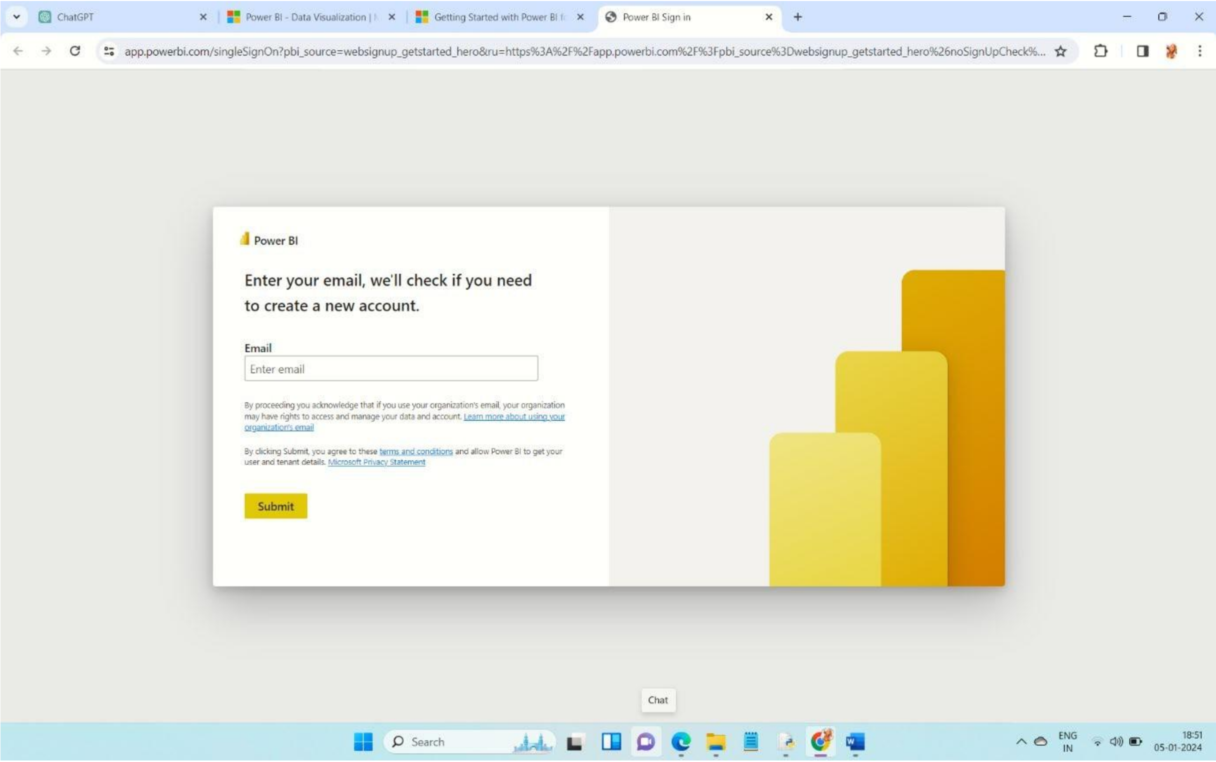
2. Get Started with Power BI

- Go to the official Power BI Desktop download page (https://powerbi.microsoft.com/en-us/desktop/).
- Download Power BI by clicking on the button indicating "Download free".
- Once the download is complete, follow the on-screen instructions provided by the installation wizard to install Power BI Desktop on your computer.
- After successful installation, you can launch Power BI Desktop.



3. Sign up for Power BI:

- Go to the Power BI website (powerbi.microsoft.com).
- Sign up for a Power BI account using your work or personal email.



4. Overview : Power BI Data Sources:

Power BI supports various data sources, including but not limited to:

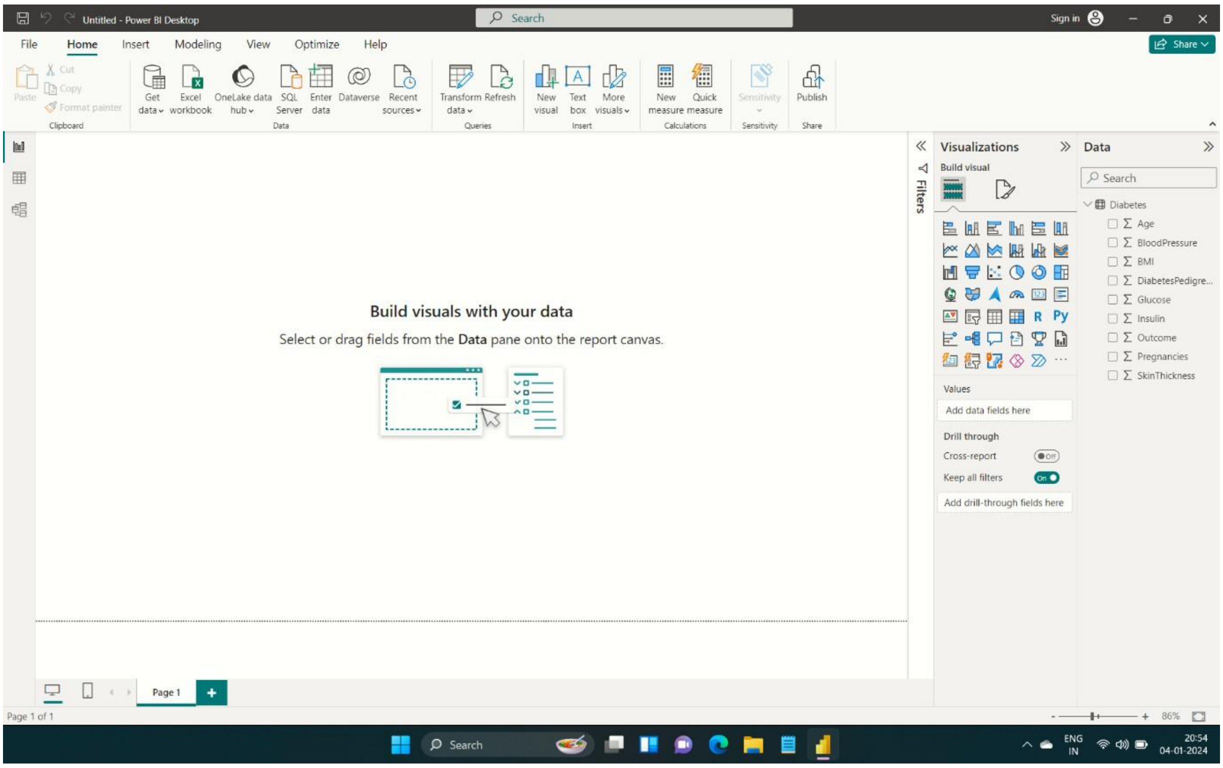
- **SaaS Solutions:** Connect to cloud-based services like Microsoft Dynamics 365, Google Analytics, Salesforce, etc.
- **Local Files:** Upload files from your computer, such as CSV, Excel, JSON, etc.
- **Databases:** Connect to databases like SQL Server, MySQL, PostgreSQL, etc.
- **Web Sources:** Extract data from web pages or APIs.
- **Azure Services:** Utilize Azure data services like Azure SQL Database, Azure Blob Storage, etc.

5. Connect to a SaaS Solution:

- Open Power BI Desktop or sign in to the Power BI service online.
- Click on "Get Data" from the Home tab.
- Choose the type of SaaS solution you want to connect to (e.g., Salesforce, Google Analytics).
- Follow the prompts to sign in and connect to your SaaS solution. You'll likely need to provide credentials or permissions to access the data.

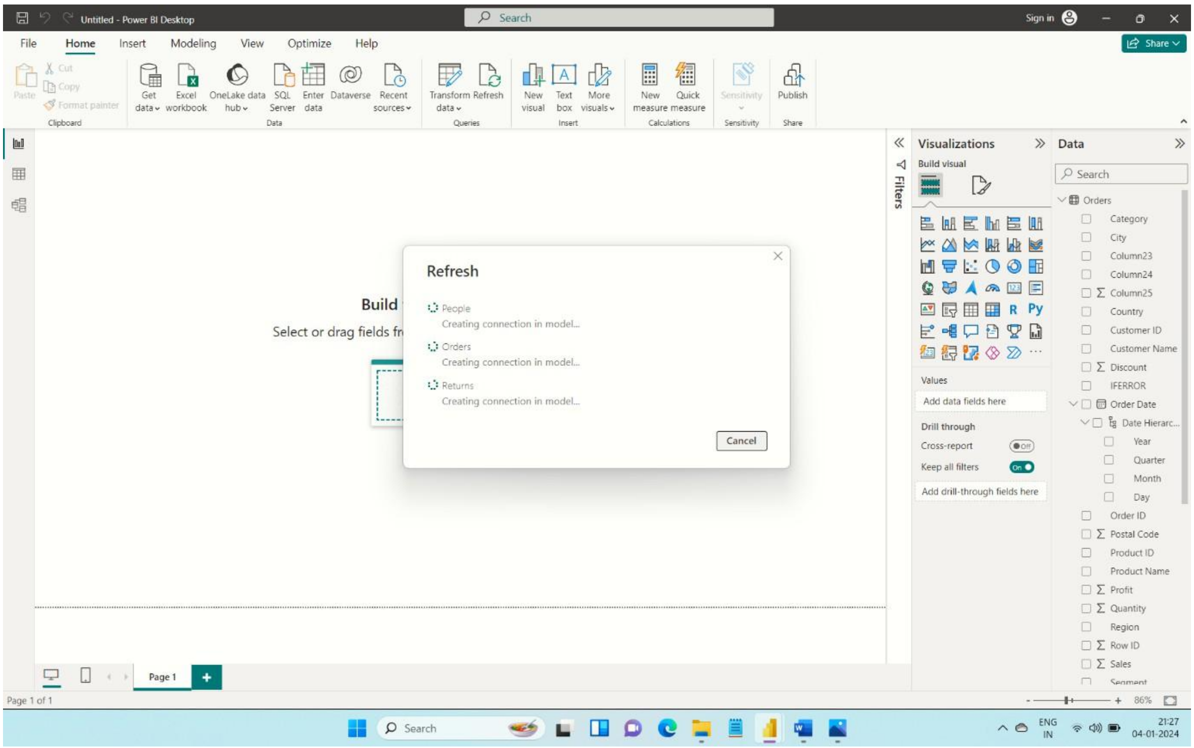
6. Upload a local CSV file:

- Click on "Get Data" from the Home tab.
- Select "Text/CSV" from the available data sources.
- Browse to locate and select the CSV file from your computer.
- Power BI will import the data from the CSV file.



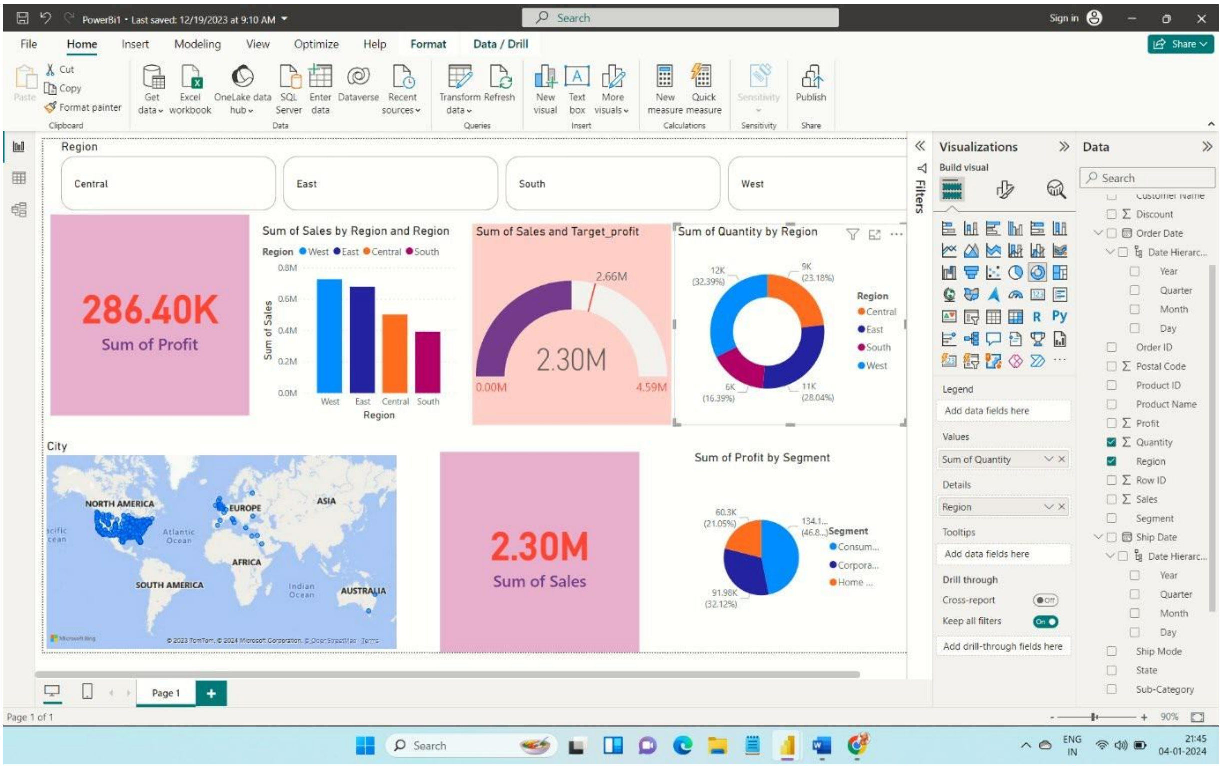
7. Connect to Excel dthat can be refreshed:

- Click on "Get Data" from the Home tab.
- Choose "Excel" as the data source.
- Browse to select the Excel file or specify the file path.
- Power BI will import data from the Excel file.
- To refresh the data, go to "Home" > "Queries" > "Refresh."



8. Create a Report with Visualizations:

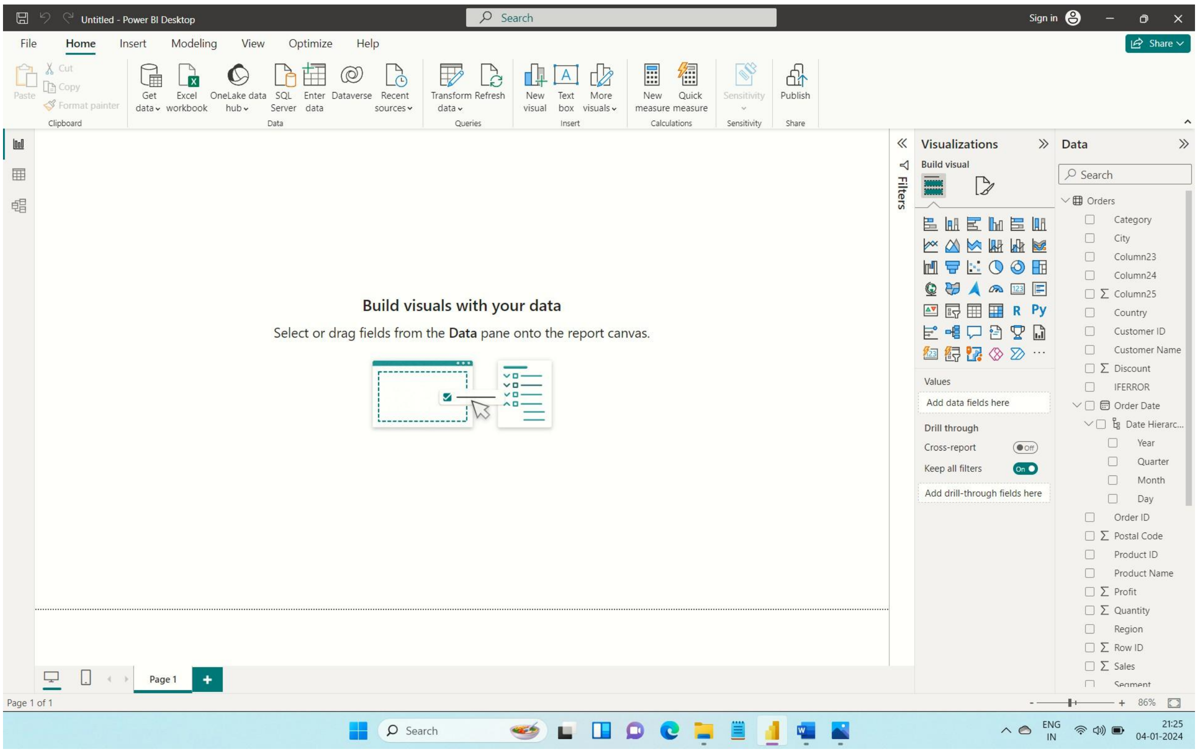
- Select the appropriate type of visualization (e.g., bar chart, line chart, pie chart) from the Visualizations pane on the right-hand side.
- Drag and drop fields from your datasets onto the report canvas to create visualizations such as charts, graphs, tables, etc.
- Customize the visualizations by formatting, sorting, and adding additional elements like slicers, text boxes, etc.
- Repeat the process to create multiple visualizations for various insights.
- Save your report.



2. Using visualizations - Create a new report - Create and arrange visualizations - Format a visualization - Use text, map, and gauge visualizations and save a report - Use a slicer to filter visualizations - Sort, copy, and paste visualizations

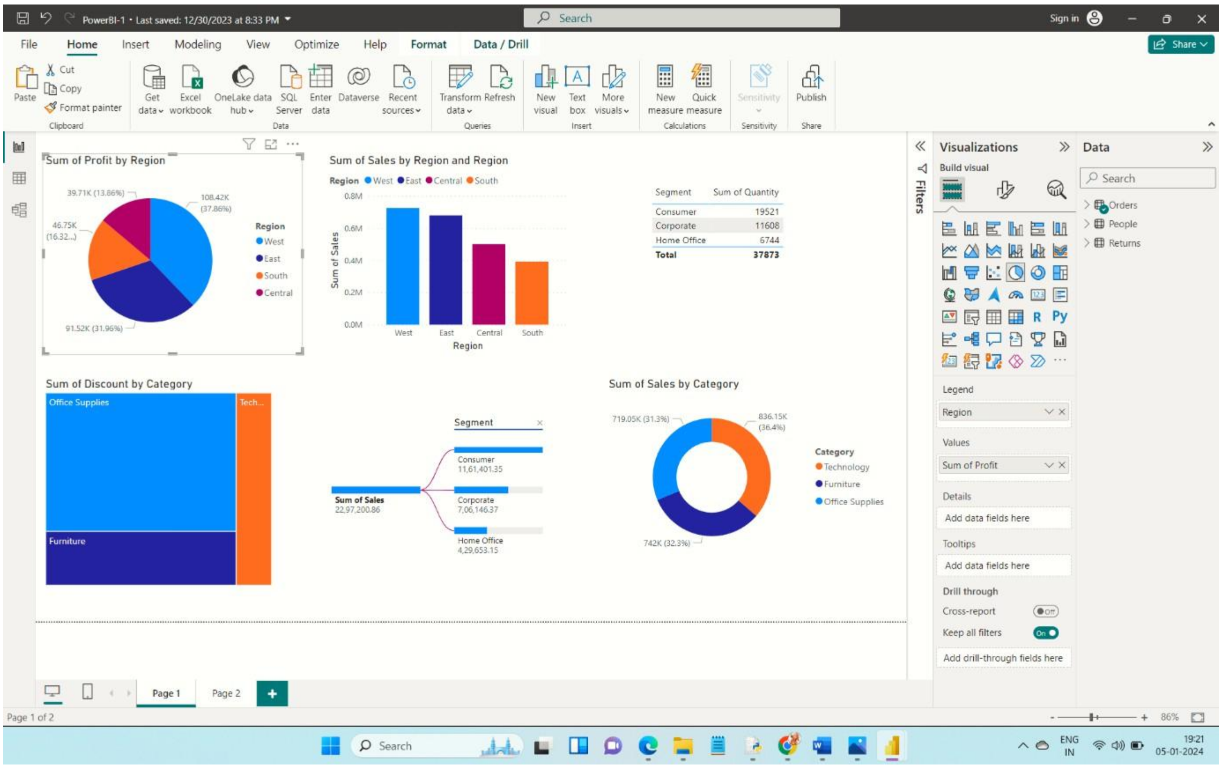
1. Create a New Report:

- Open Microsoft Power BI Desktop.
- Click on "File" > "New"
- Import your data into Power BI by connecting to a data source.



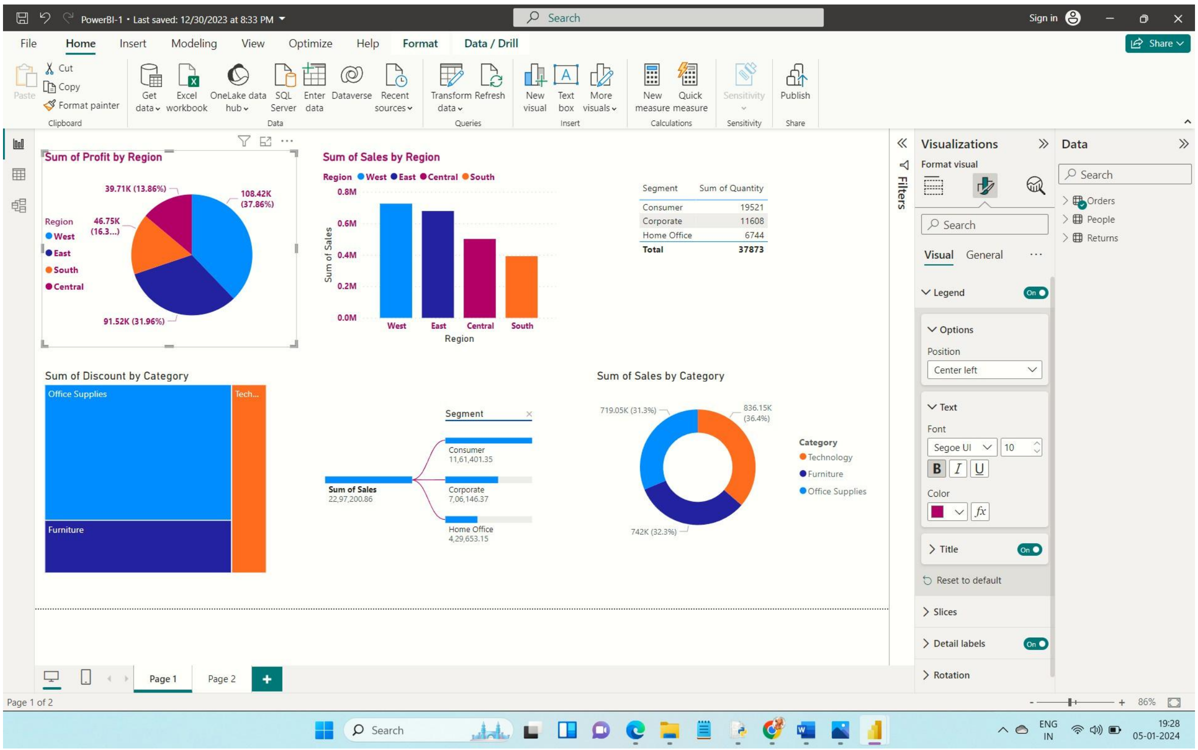
2. Create and Arrange Visualizations:

- Select the appropriate type of visualization (e.g., bar chart, line chart, pie chart) from the Visualizations pane on the right-hand side.
- Drag and drop fields from your dataset onto the visual to create different visualizations like bar charts, line graphs, etc.
- Arrange the visualizations by clicking and dragging them to desired locations on the canvas.



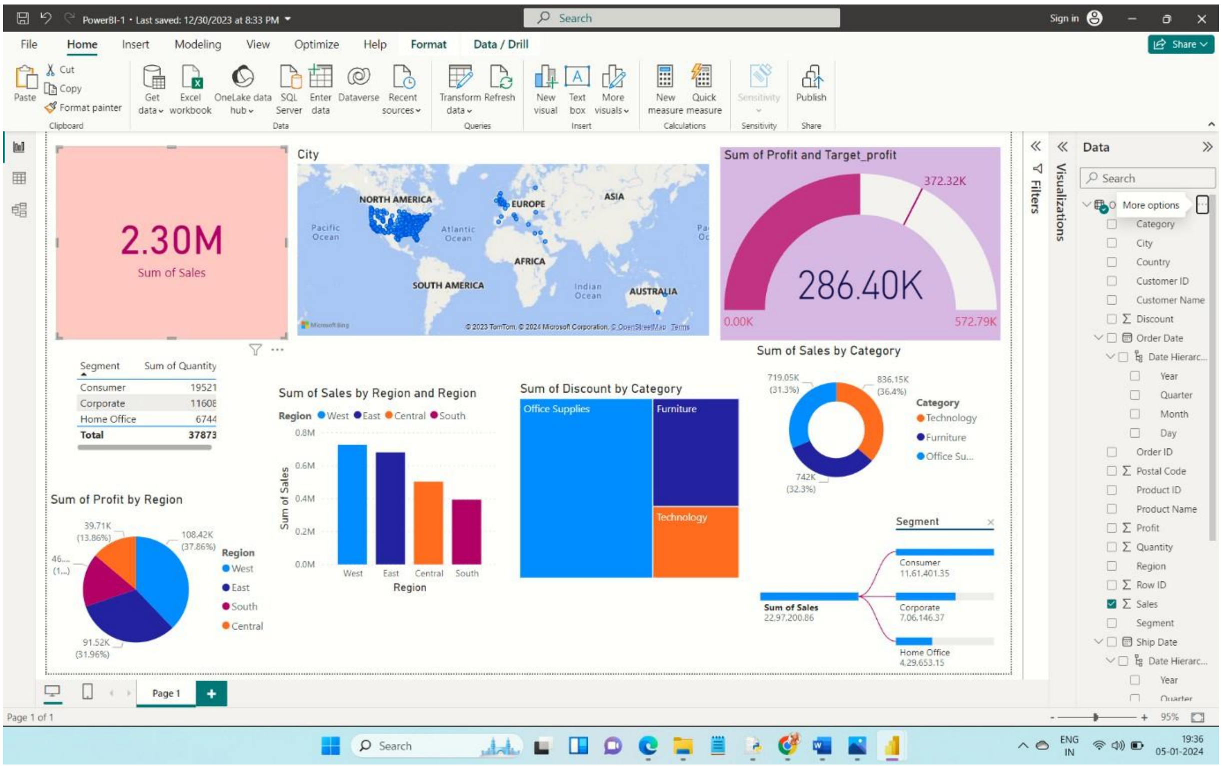
3. Format a Visualization:

- Click on a visualization to select it.
- Use the "Format" or "Visualizations" pane to modify the appearance, colors, labels, and other settings of the selected visualization.



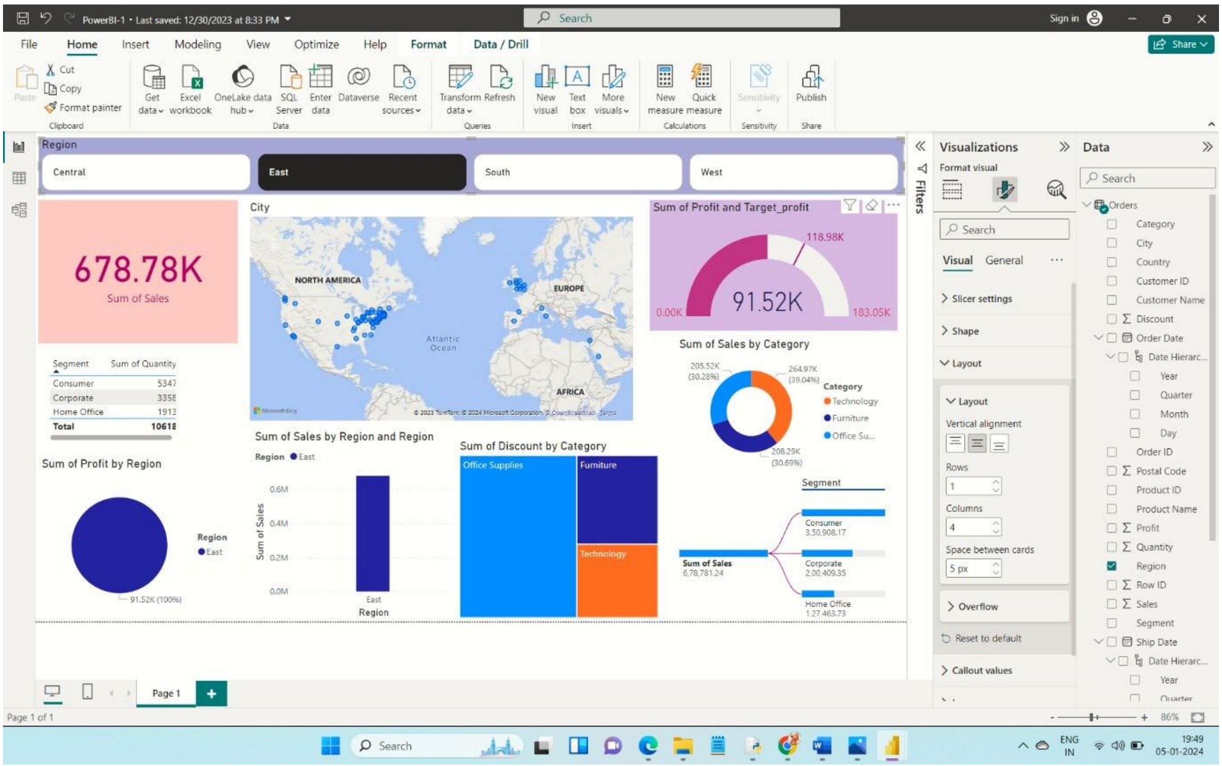
4. Use text, map, and gauge visualizations and save a report:

- Include a text visualization by selecting "Card" from the "Visualizations" pane and drag and drop fields from your dataset onto the visual
- Add a map visualization using the map visual from the visualization pane and dragging a geographical field onto the visual.
- Include a gauge visualization by selecting "Gauge" from the "Visualizations" pane and configuring it with appropriate data.
- Click on "File" > "Save" to save the report in your desired location and format.



6. Use a Slicer to Filter Visualizations:

- Select “Slicer (new)” from the Visualization pane and drag a field you want to use as a filter into the slicer visual.
- Use the slicer to interactively filter the other visualizations on the report by selecting specific values.



7. Sort, Copy, and Paste Visualizations:

- To sort visualizations, select a visualization and use the sort options available in the "Format" or "Visualizations" pane.
- To copy and paste visualizations, select the visualization, right-click, and choose "Copy." Then, right-click on the canvas and select "Paste."

3. Modify and Print a Report - Rename and delete report pages - Add a filter to a page or report Set visualization interactions - Send a report to PowerPoint

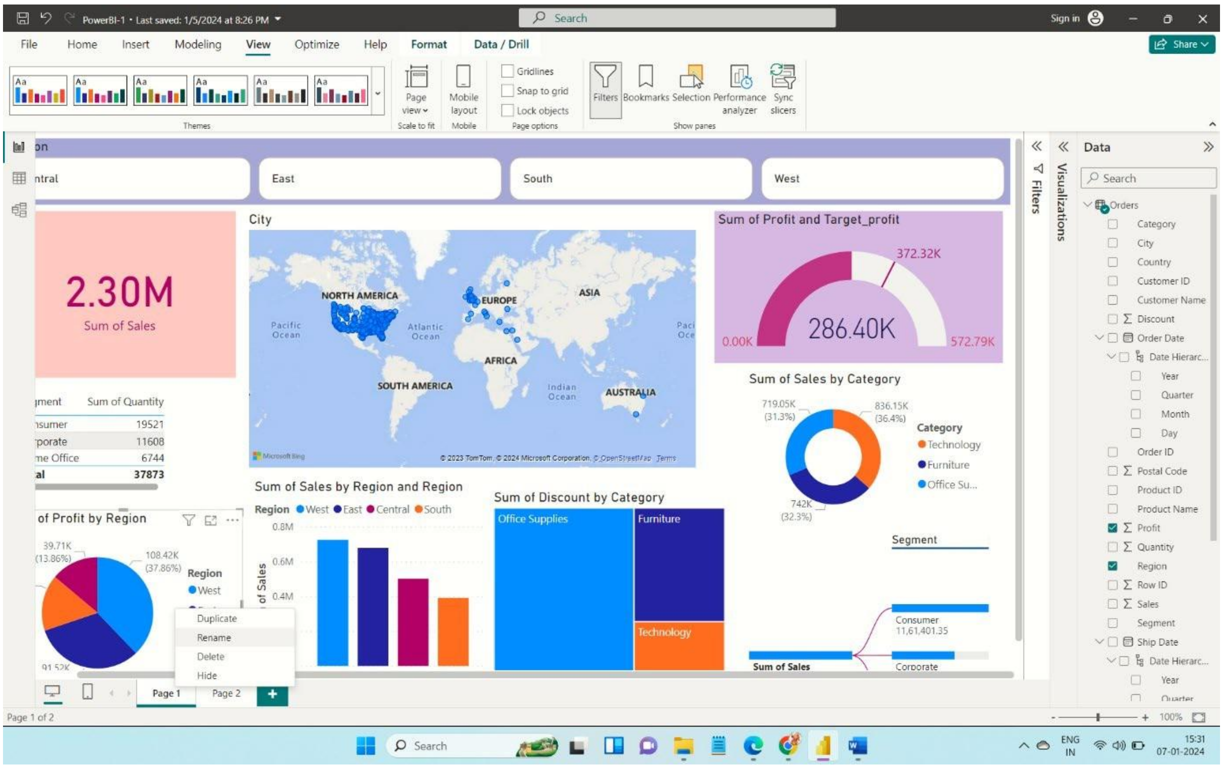
1. Modify and Print a Report:

To modify a report in Power BI, you can edit existing visuals, add new visuals, change formatting, and adjust data connections.

- Open your report in Power BI Desktop or Power BI Service.
- Make the necessary modifications to the visuals by editing their properties, formatting, or data.
- To print the report, click on "File" and then select "Print" to configure the printing settings and print the report.

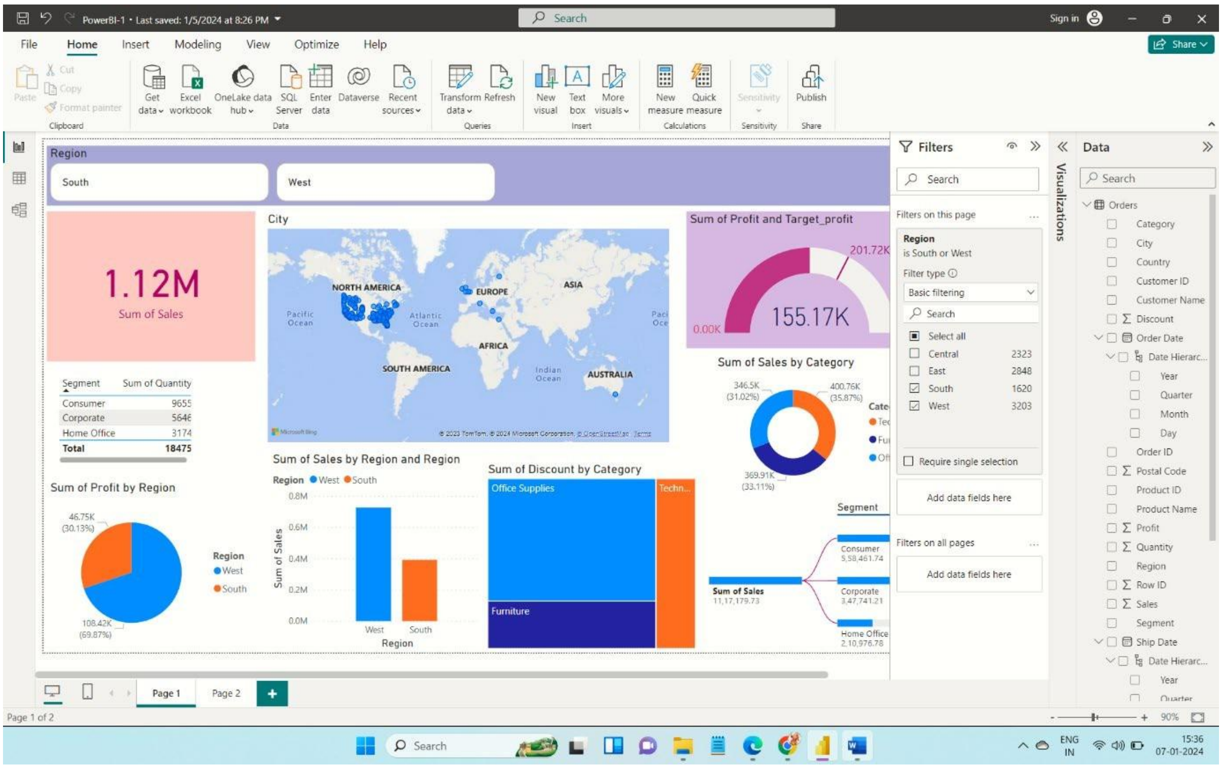
2. Rename and Delete Report Pages:

- In Power BI Desktop or Service, navigate to the report page.
- To rename a report page, right-click on the page name in the Pages pane, select "Rename," and enter the new name.
- To delete a report page, right-click on the page name in the Pages pane and select "Delete."



3. Add a Filter to a Page or Report:

- In Power BI Desktop, select the page or visual you want to apply the filter to.
- Go to the "Filters" pane and click on "Add a filter."
- Choose the field you want to use as a filter and configure its settings (e.g., filter type, values).



4. Set Visualization Interactions:

- Click on the visual you want to set interactions for.
- Go to the "Format" pane (or right-click and select "Format") and navigate to the "Edit interactions" option.

- Adjust the interactions between visuals by selecting the interaction type (e.g., highlighting, filtering) for each visual.

5. Send a Report to PowerPoint:

- In Power BI Service, open the report you want to export.
- Click on "File" and select "Export" > "PowerPoint (.pptx)."
- Configure the export settings and click "Export" to generate the PowerPoint file with the report visuals.