

Power BI Lab Report

Visualization of Business Data using Power BI

Description:

As part of the lab activity assigned, we were asked to prepare different visualizations in **Power BI** using random Excel data. The objective was to understand how to create, customize, and analyse data through various chart types. We successfully built multiple charts such as **Bar Chart, Column Chart, Pie Chart, Donut Chart, Funnel Chart, and Ribbon Chart** to represent **Revenue, Profit, Region, Salesperson count, and Category-wise analysis**.

This exercise helped us gain hands-on experience in:

- Importing Excel data into Power BI
- Selecting appropriate chart types for different insights
- Applying fields to Axis, Values, and Legends
- Understanding how visualizations help in business decision-making

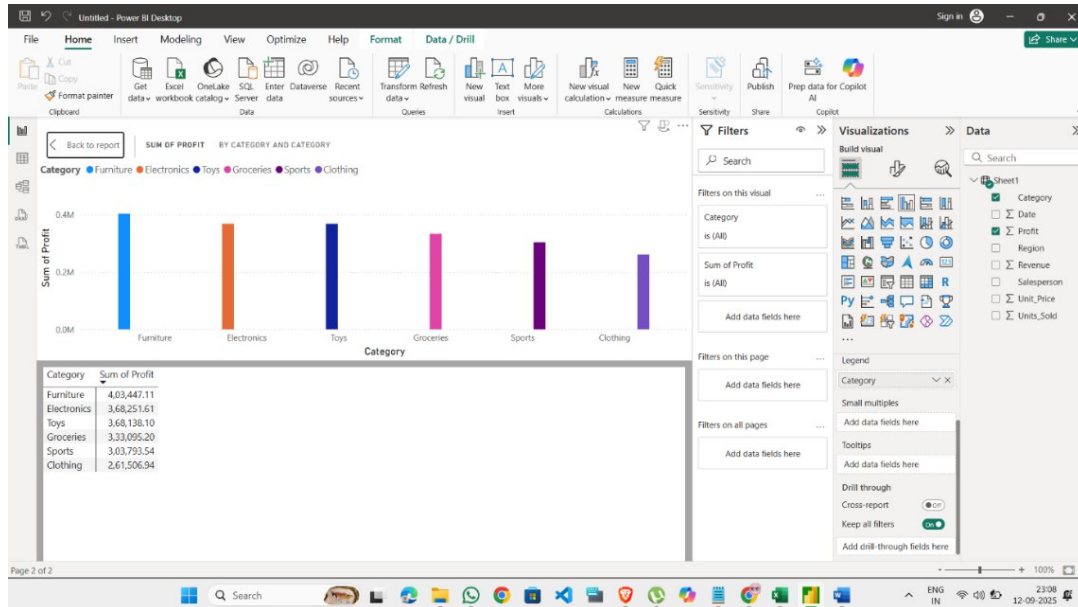
Finally, the completed lab activity has been documented and uploaded to the LMS portal.

Report:

D. Yajneswara Rao

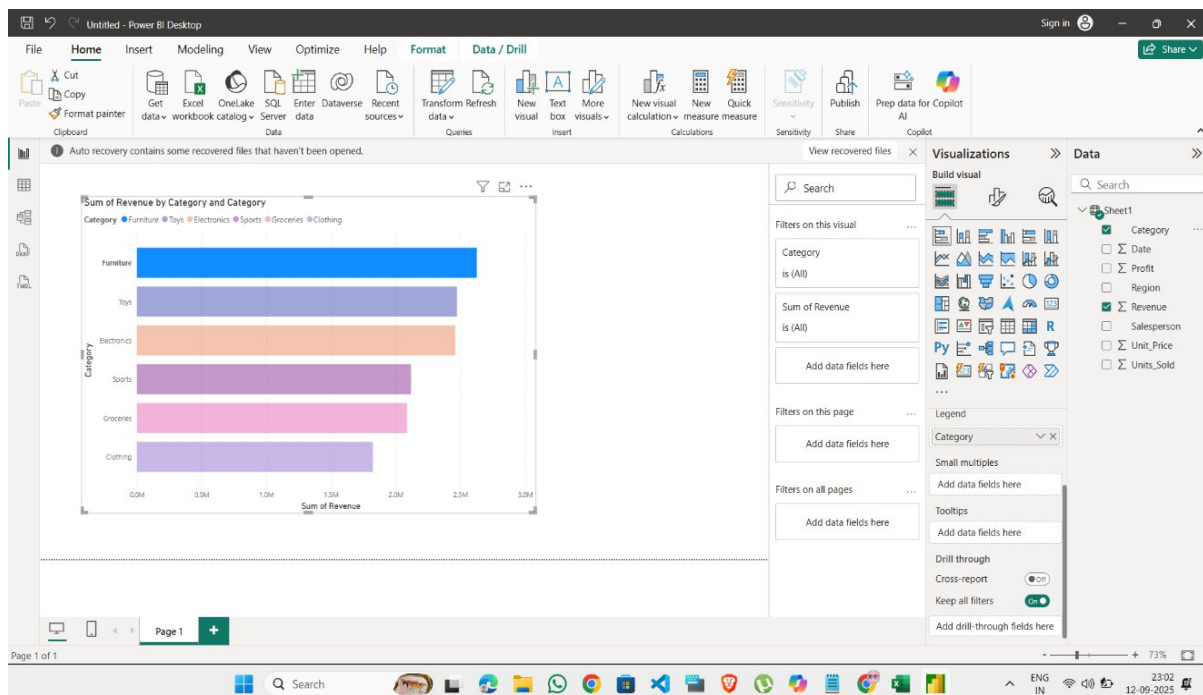
1. Clustered Column Chart (Profit by Category)

I created a Column Chart to compare profit across different product categories. For this visualization, *Category* was placed on the Axis and *Profit* on the Values field. This chart helps to quickly identify which categories are generating the highest profit and which ones need improvement.



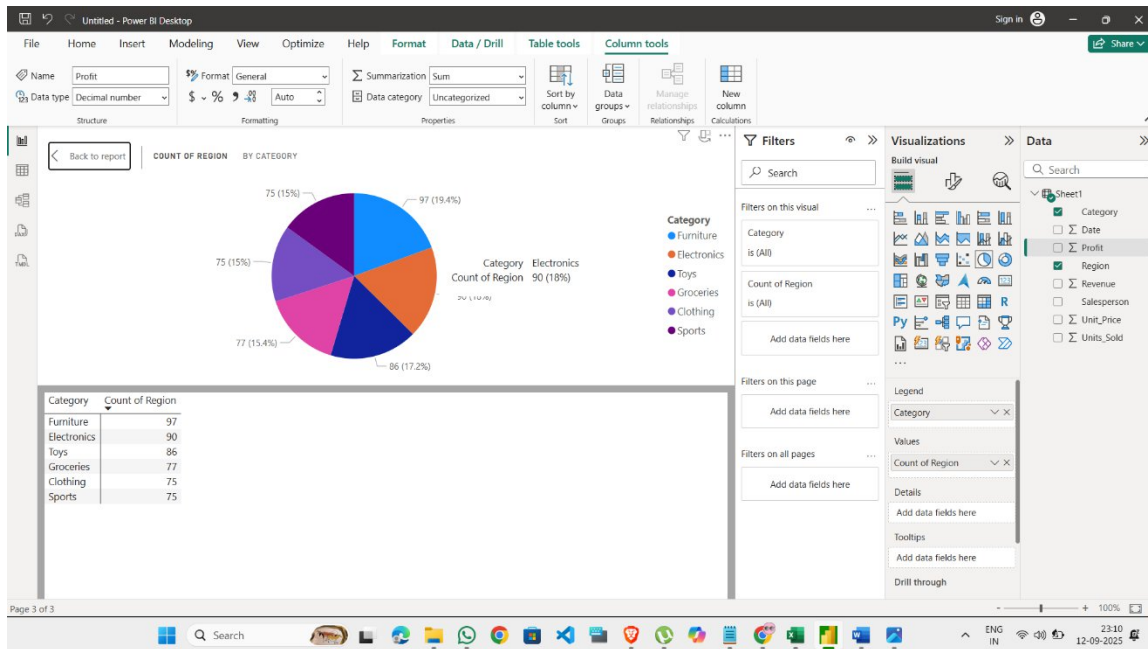
2. Bar Chart (Revenue by Category)

I used a Bar Chart to analyse revenue performance across categories. Here, *Category* was placed on the Axis and *Revenue* on the Values field. This visualization makes it easier to compare sales contributions across categories and identify the top and bottom performers.



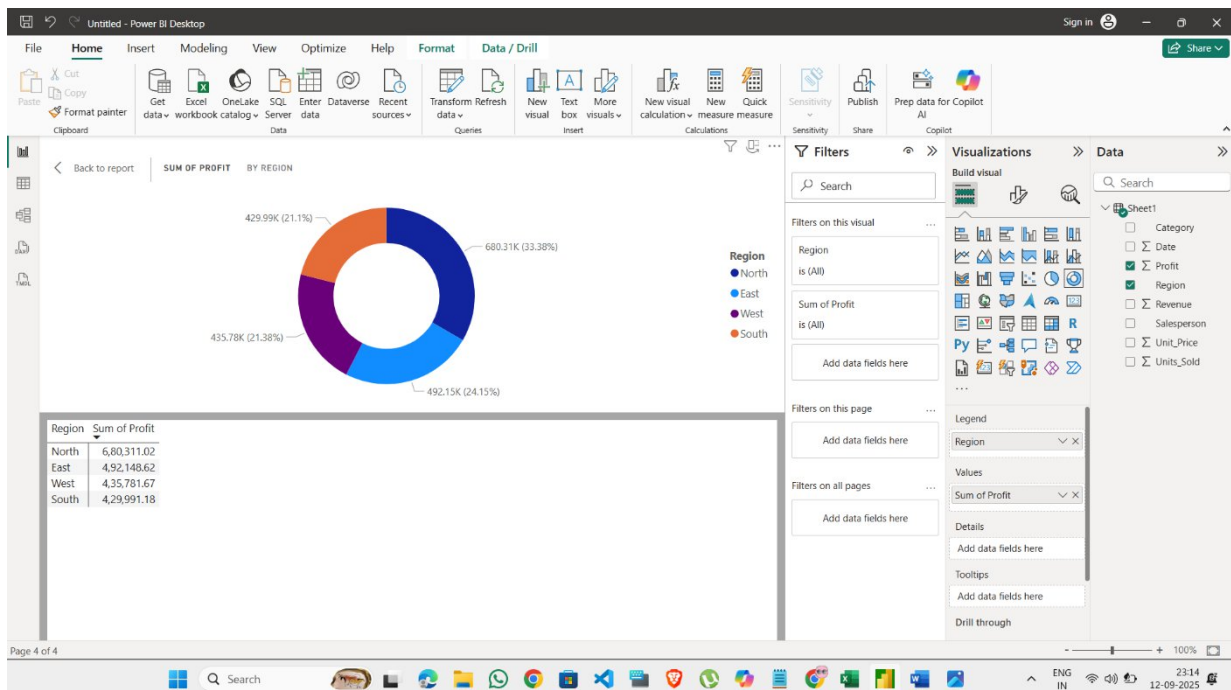
3. Pie Chart (Count of Region by Category)

A Pie Chart was created to show the distribution of region counts across categories. In this chart, *Category* was used as the Legend and *Count of Region* was placed in the Values field. This visualization highlights the share of each category in terms of region presence.



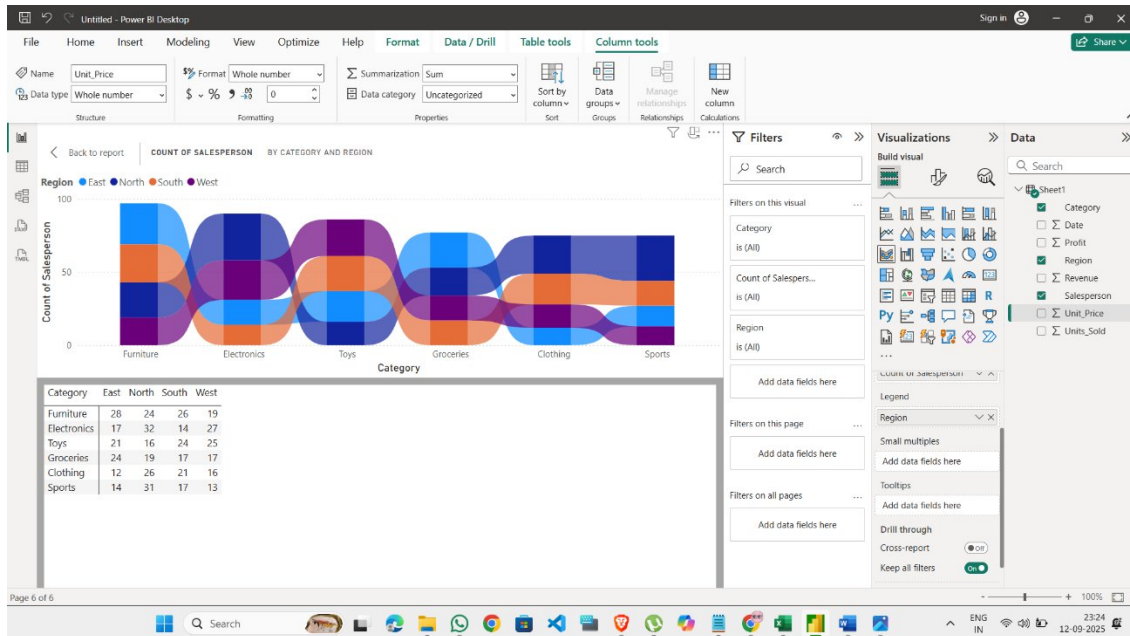
4. Donut Chart (Profit by Region)

I designed a Donut Chart to represent profit distribution across regions. For this, *Region* was placed in the Legend and *Profit* in the Values field. This chart provides a clear view of the percentage contribution of each region to the overall profit.



5. Ribbon Chart (Salesperson Count by Category and Region)

I created a Ribbon Chart to show the count of salespersons across product categories and regions. *Category* was placed on the Axis, *Count of Salespersons* in the Values field, and *Region* in the Legend. This visualization helps to analyse how salesperson distribution varies across categories and regions over time.



6. Funnel Chart (Revenue by Category)

I created a Funnel Chart to display the sum of revenue across different product categories. For this visualization, *Category* was placed on the Axis and *Revenue* on the Values field. The Funnel Chart helps to visualize the ranking of categories in terms of revenue, starting from the highest contributor down to the lowest. This makes it easy to identify which categories dominate sales and which require focus for improvement.

