

Data Visualization Lab 8

Power BI Data Visualization with Legends and Customization

Objective:

Connect to the provided dataset and create various visualizations using legends in Power BI with customization options.

Requirements:

- Power BI Desktop installed on your laptop.
- "orders.xlsx" dataset containing the necessary data fields.

Tasks:

1. Connect to the Data:

- Import the orders.xlsx file into Power BI.
- Review the data and ensure all columns are imported correctly.

2. Create a Pie Chart:

- Create a pie chart to show the distribution of sales by category.
- Customize the colors of the segments in the pie chart.
- Include a legend with a custom title and position.

3. Create a Donut Chart:

- Create a donut chart to show the distribution of sales by region.
- Customize the colors and labels in the donut chart.
- Include a legend with a custom icon shape.

4. Create a Funnel Chart:

- Create a funnel chart to visualize the sales pipeline.
- Customize the colors and labels of the funnel stages.
- Include a legend with a custom background color.

5. Create a Ribbon Chart:

- Create a ribbon chart to show the sales trend over time.
- Customize the color gradient and transparency of the ribbon.
- Include a legend with a custom font style and size.

6. Create a Line Chart:

- Create a line chart to visualize the trend of sales over time.
- Customize the line styles (e.g., dashed, dotted) and markers.
- Include a legend with custom symbols for each line.

7. Create an Area Chart:

- Create an area chart to compare sales and profit by product category.
- Customize the area fill colors and transparency.
- Include a legend with custom labels and symbols.

8. Create a Scatter Plot:

- Create a scatter plot to visualize the relationship between discount and profit.
- Customize the marker shapes and sizes based on product category.
- Include a legend with a custom title and layout.

9. Create a Waterfall Chart:

- Create a waterfall chart to analyze the net profit for each order.
- Customize the colors of the bars and connectors in the waterfall chart.
- Include a legend with a custom position and orientation.

10. Create a Treemap:

- Create a treemap to visualize sales by country and city.
- Customize the color scheme and layout of the treemap.
- Include a legend with custom tooltips and interactivity options.