

### **Project: "The Importance of Data Visualization"**

In this project, I aim to emphasize the importance of data visualization in decision-making processes. Today, a large amount of data is produced, but the right visualization techniques must be used to effectively understand and communicate this data.

Incorrect or inadequate visualization can cause the data to be misinterpreted, which can lead to wrong decisions.

In my project, I want to show how critical visualization types are by considering both good and bad visualization examples for the same data set. While bar graphs are effective for some data, alternative visualizations such as scatter plots or heatmaps may be more appropriate for more complex data. I will do detailed analysis on these visuals to show how different types of graphs can lead to different interpretations of the same data.

For example:

- **Bar Graphs:** Suitable for categorical data; clearly shows the differences between sales or groups. However, when there is a large amount of data, the information can become complex.
- **Dot Plot:** Better shows the density and distribution of data, but may not be suitable for categorical data.
- **Scatter Plot and Line Chart:** When used for time series or relational data, it helps to see trends clearly, but if used incorrectly, false trends may occur.

This project will allow us to understand how powerful data visualization can be and the effects of the right choices on decision processes. In our poster, we will support this situation with visuals and show how each type of chart contributes to the data story.