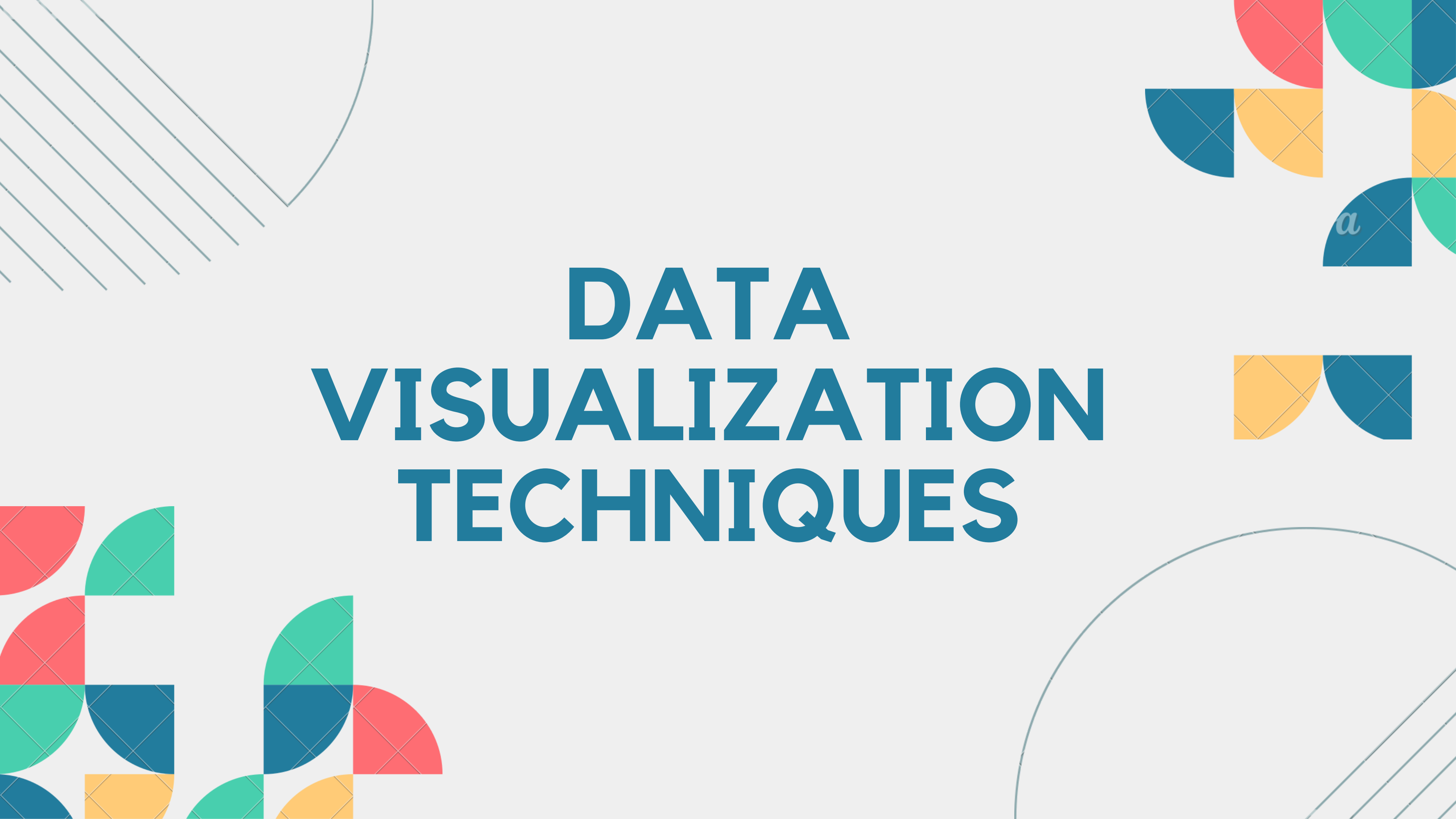
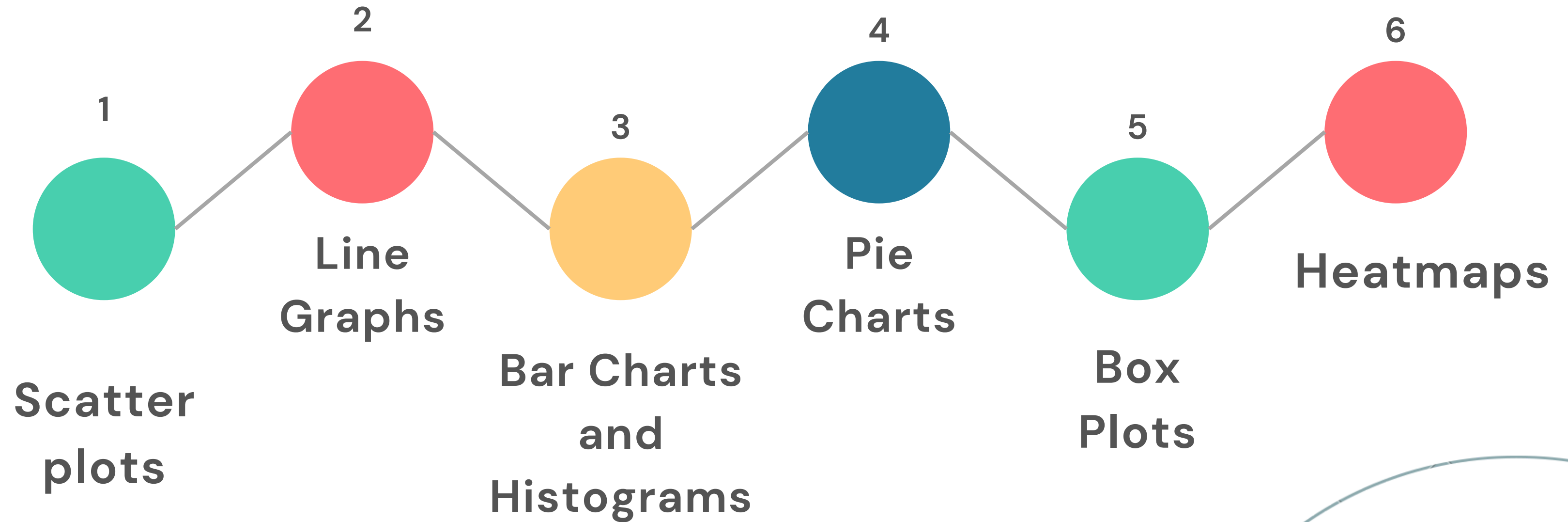


DATA VISUALIZATION TECHNIQUES

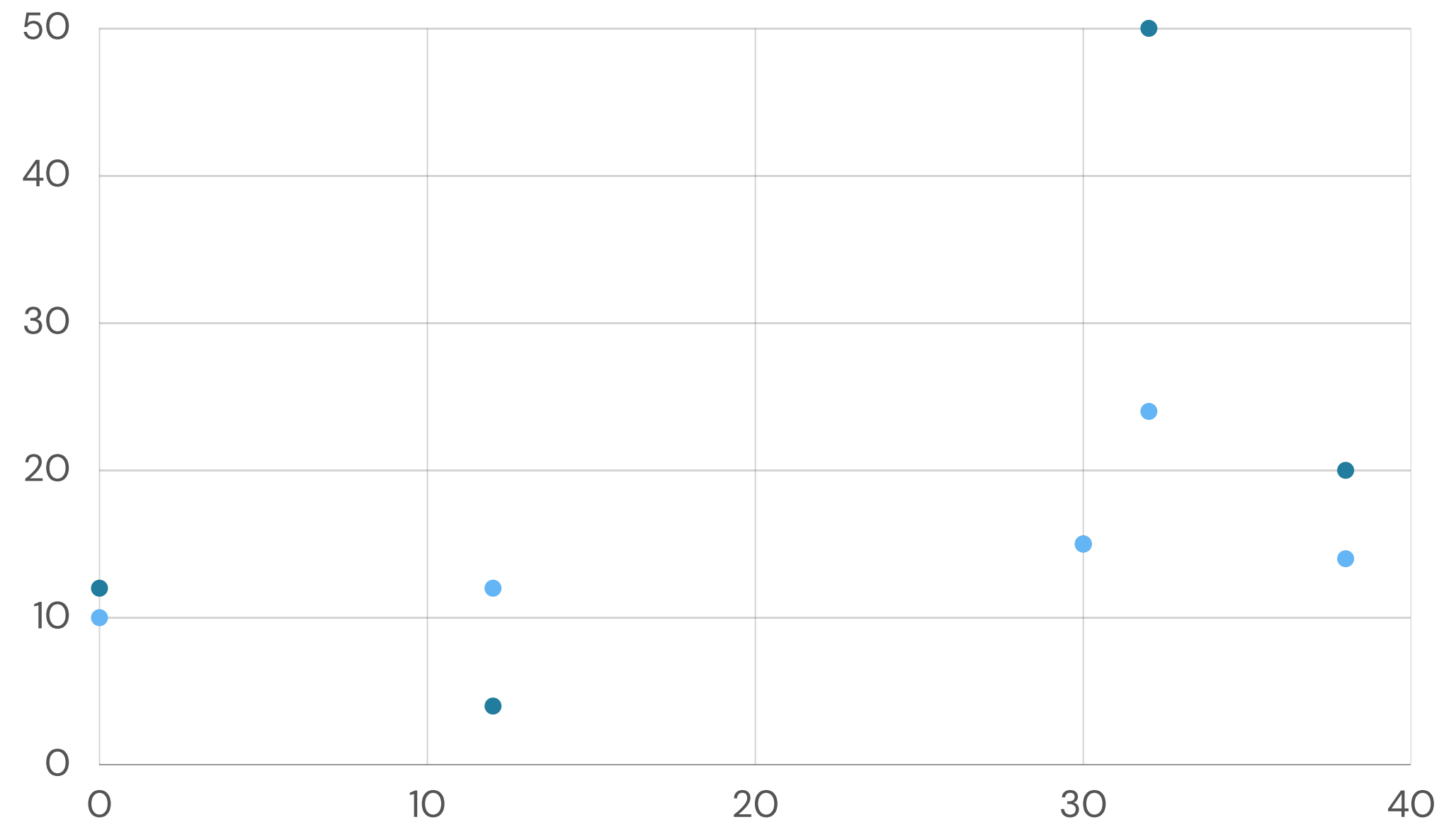


IMPORTANT VISUALIZATION TECHNIQUES



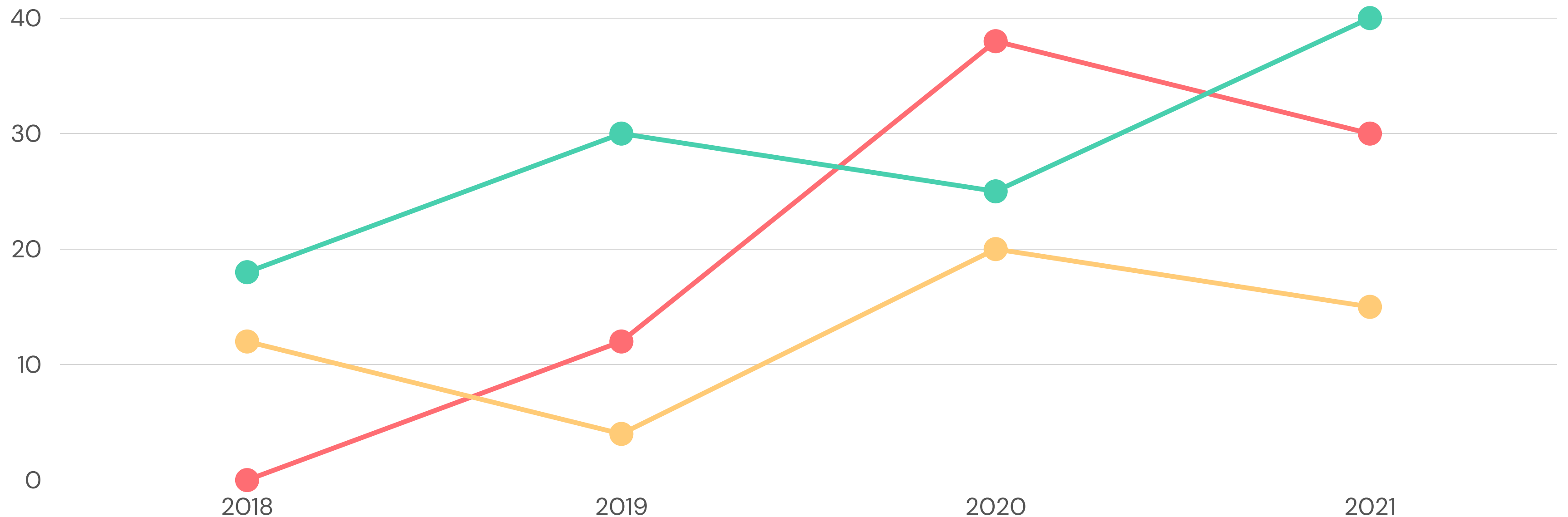
SCATTER PLOT

Scatter plots help us to recognize patterns or correlations between variables. They present the data as a point on the graph and it also provides a relation between two continuous variables.



LINE GRAPHS

Line graphs are useful for showcasing various trends or comparing variables. They illustrate the relationship between two continuous variables.

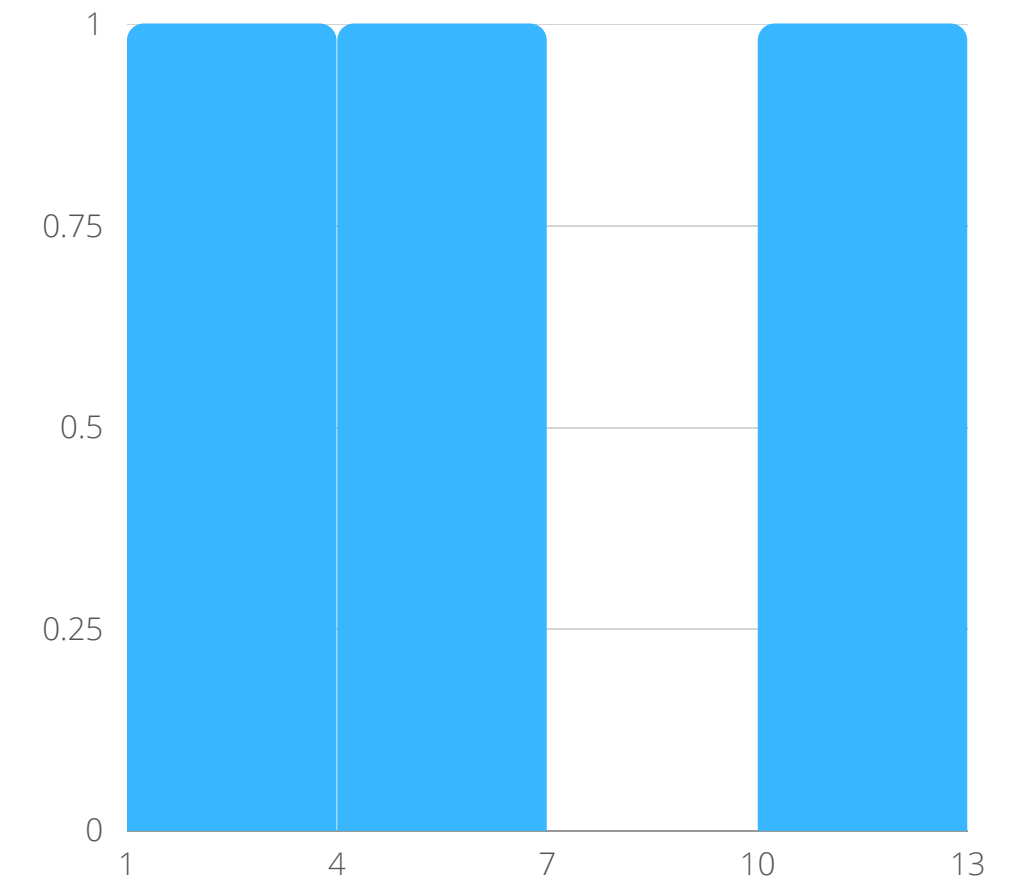
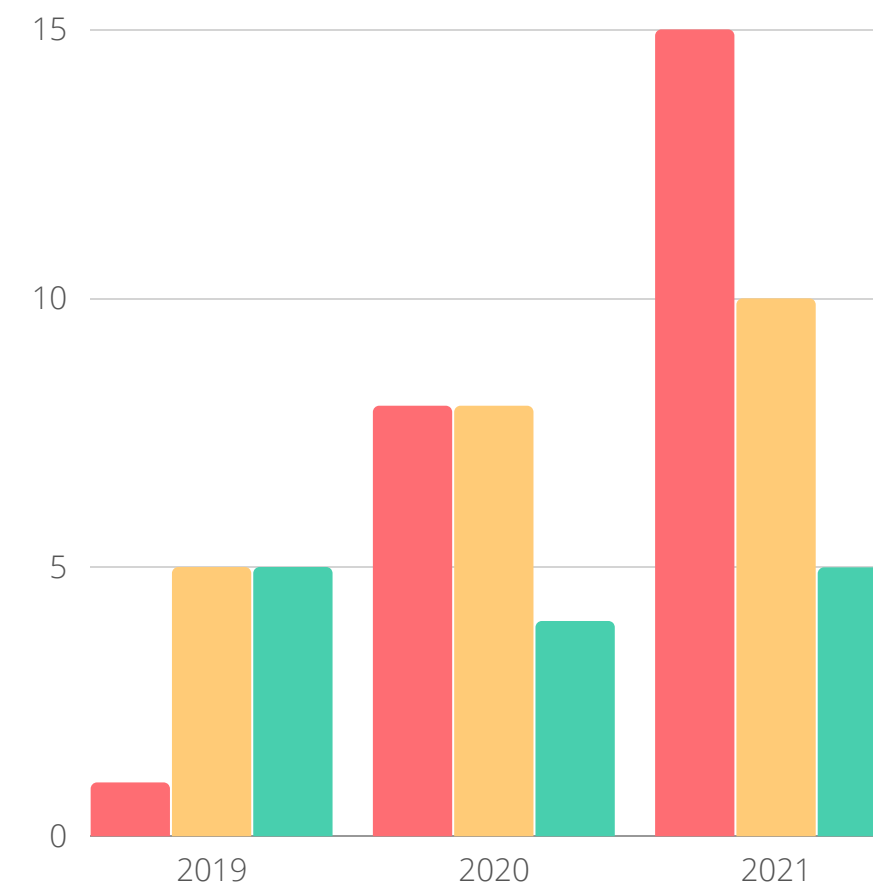


BAR CHARTS AND HISTOGRAMS

Bar charts present the frequency or the proportion of the data and its categories using rectangular bars,

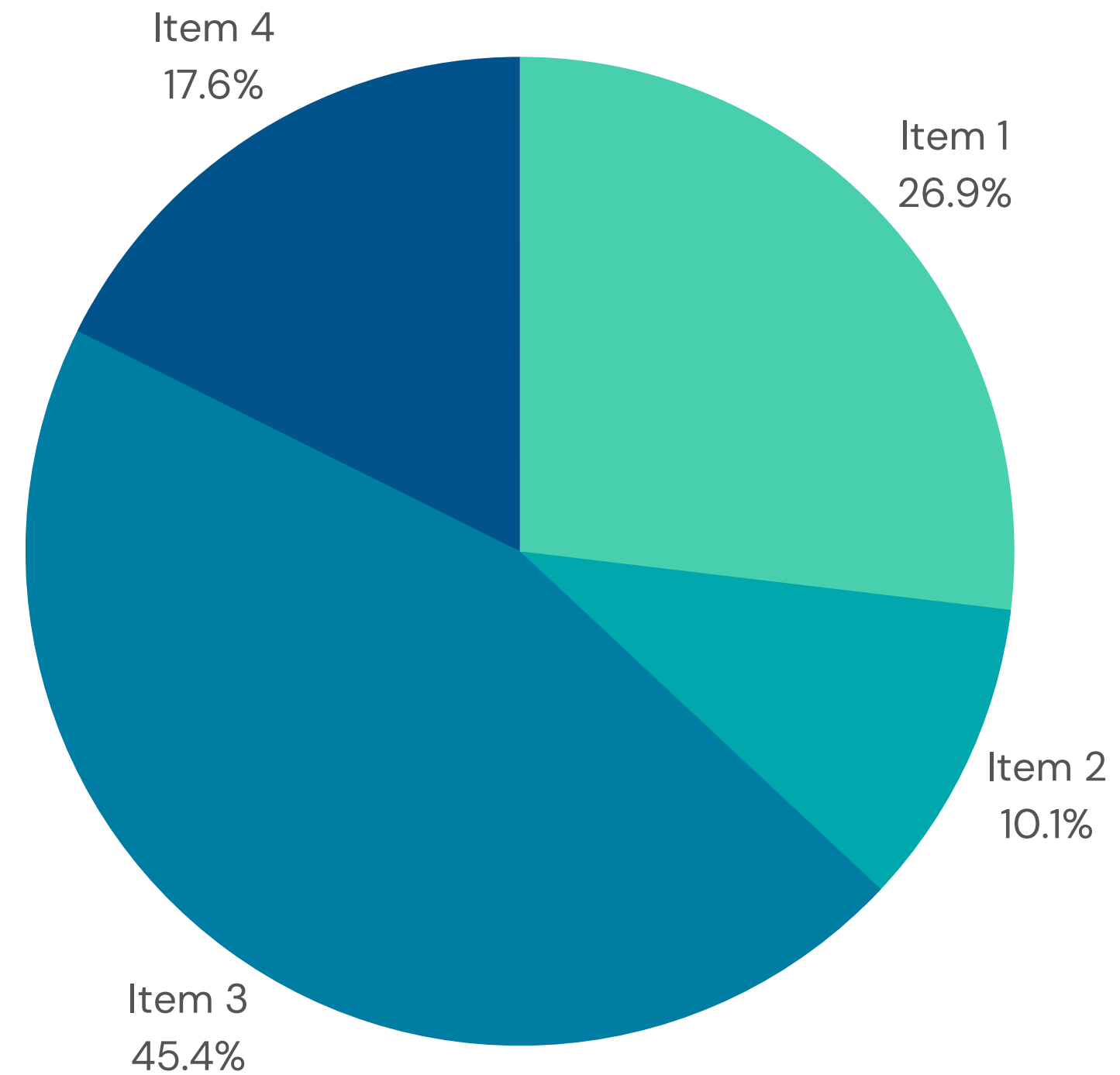
whilst **histograms** show the distribution of numerical data by grouping it into intervals.

These techniques are used to exemplify categorical or discrete data.



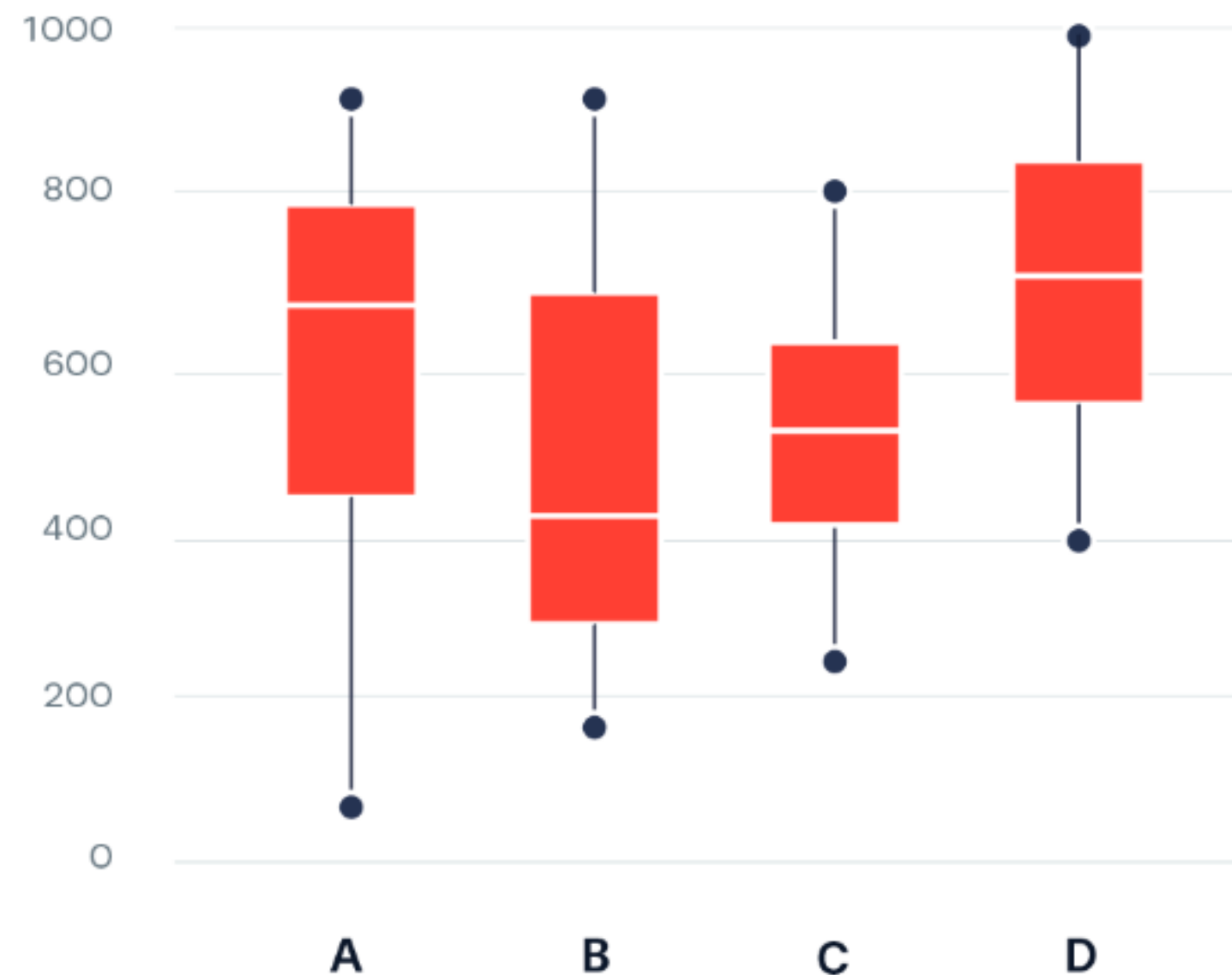
PIE CHARTS

Pie charts constitute a dataset that has different categories and displays the proportion or percentages of it. They succour to demonstrate the relative contributions of data or as part of a whole.

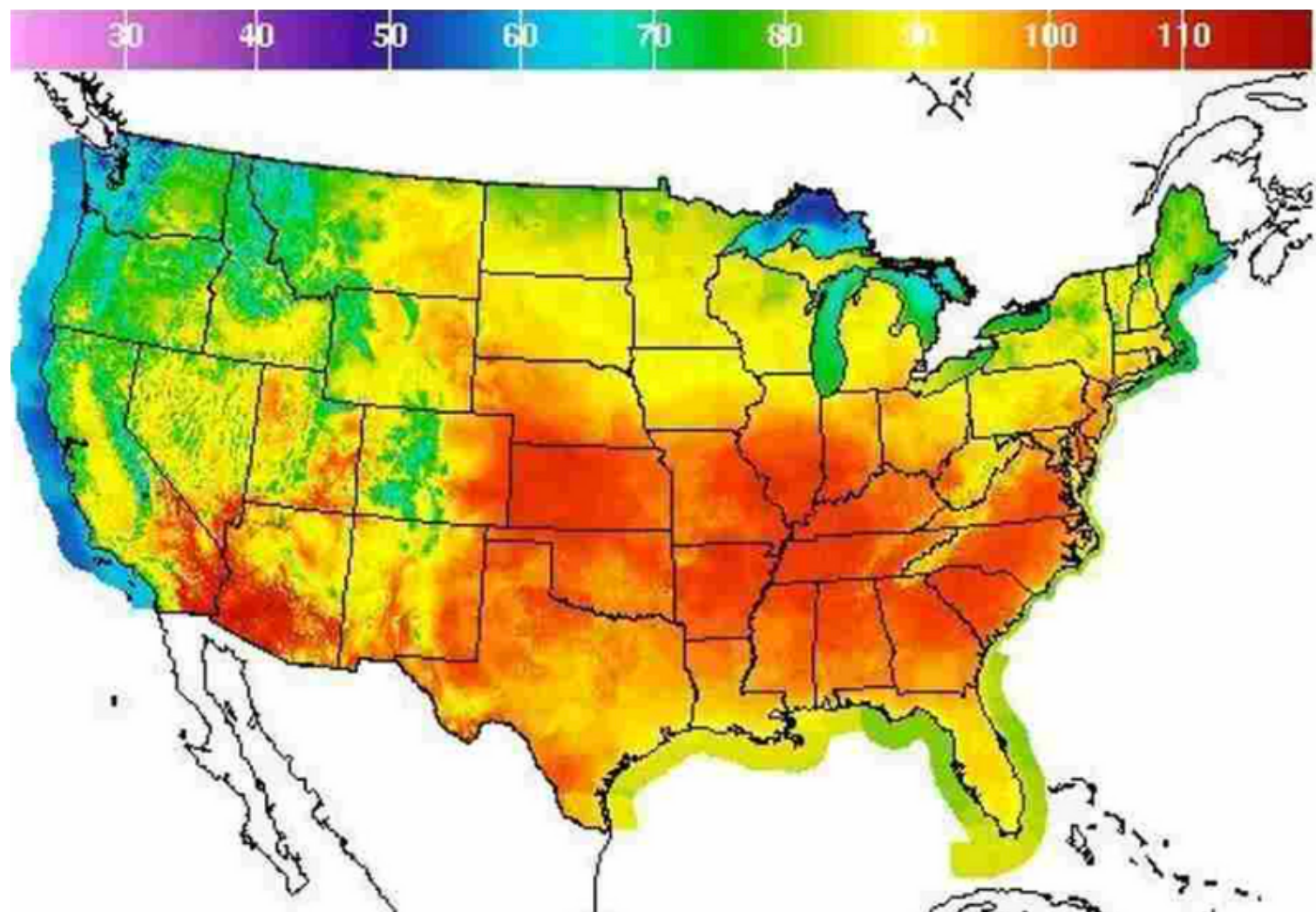


BOX PLOTS

A **box plot** or a whisker plot displays the five-number summary of the data. It shows the distribution of numerical data. Especially, they showcase the key statistics such as minimum, first quartile, median, third quartile, and maximum.



HEATMAPS



A **heatmap** is a 2-dimensional data visualization technique that uses color-coding to represent data in a matrix format. As it is making easy to visualize complex data and understand it at a glance.



SUMMARY

Understanding such techniques will be useful in designing and creating easy-to-communicate visual representations of a complex qualitative or quantitative data.