R Programming helps us to learn this art by offering a set of inbuilt functions and also libraries to build visualizations and present data. Moreover, before we move forward for the technical implementations of the visualization, let’s see first how to select the right chart type.

Selecting the Right Chart Type

**There are four basic presentation types**:

* Comparison
* Composition
* Distribution
* Relationship

In your day-to-day activities, you’ll come across the below listed 7 charts most of the time.

* Scatter Plot
* Histogram
* Bar & Stack Bar Chart
* Box Plot
* Area Chart
* Heat Map
* Correlogram

Now we will go to discuss each of them:

**a. Scatter Plot**

**When to use**:

To see the relationship between two continuous variables.

**b. Histogram**

**When to use:**

A histogram is used to plot continuous variable. Also, It helps to break the data into bins and shows frequency distribution of these bins. Thus, we can always change the bin size and see the effect it has on visualization.

**c. Bar & Stack Bar Chart**

**When to use**:

We use Bar charts to plot a categorical variable.

**d. Box Plot**

**When to use**:

Box Plots are used to plot a combination of categorical and continuous variables. Also, used for visualizing the spread of the data and detect outliers. Moreover, it shows five statistically significant numbers;

the minimum;

the 25th percentile;

the median;

the 75th percentile and

the maximum.

**e. Area Chart**

**When to use**:

We use it to show the continuity across a variable or data set. Almost it is same as a line chart. Also, we can use it for time series plots. Alternatively, also we can use it to plot continuous variables and analyze the underlying trends.

**f. Heat Map**

**When to use**:

We use it for an intensity of colors. it is also used to display a relationship between two or three or many variables in a two-dimensional image. Thus, it allows us to explore two dimensions of the axis and the third dimension by an intensity of color.

**g. Correlogram**

**When to use**:

We use it to test the level of correlation and also among the variable available in the dataset. Thus, the cells of the matrix can be shaded or colored to show the co-relation value.