

Gráficos

- Servem como uma forma de apresentar os dados de maneira visual, de fácil compreensão e prática.

- Existem diversos tipos de gráfico, e seus usos vão depender da intenção

Tipos:

1) Line chart:

- Line charts are used to show time series data/ trend over time

- A single variable time series data/ that changes at regular intervals

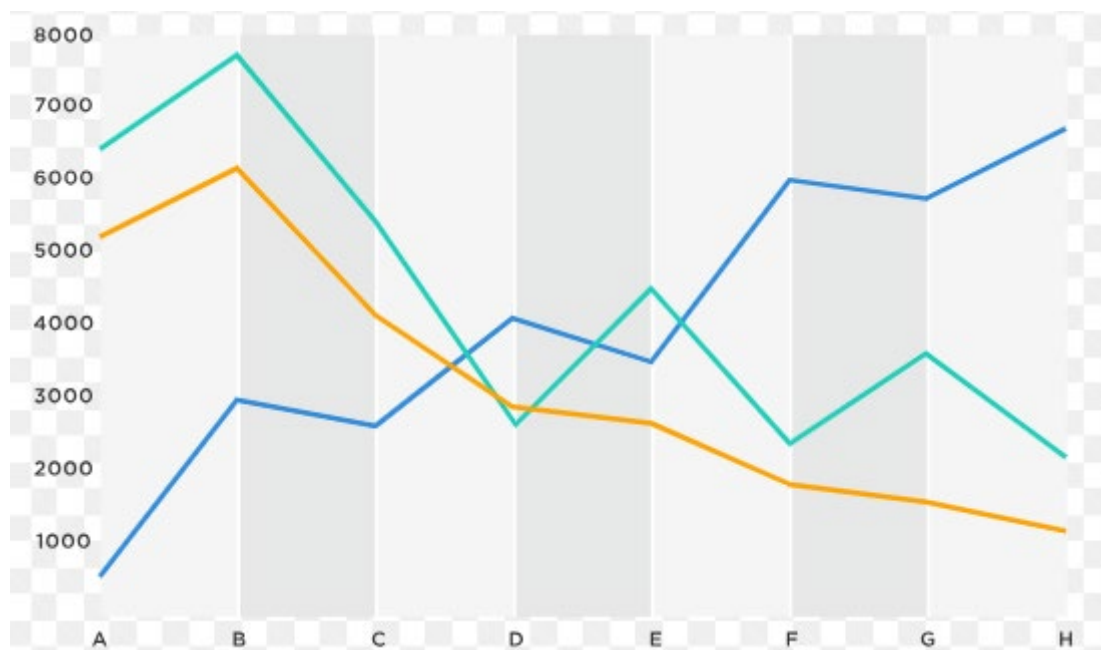
- Multiple-line chart is to compare and contrast different data series

Best Practice:

- Multiple Lines should be labeled to help quickly identify lines, should have different colors

- Don't plot more than 4 lines in one chart

- Highlight critical information by using a color or context



2) Bar chart:

- Used to display nominal variables like favorite employment settings NGO, Consulting Government

Best Practice:

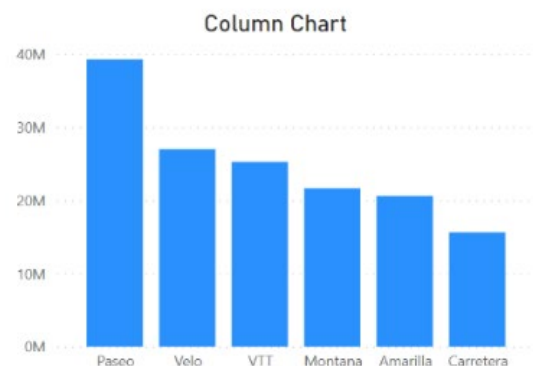
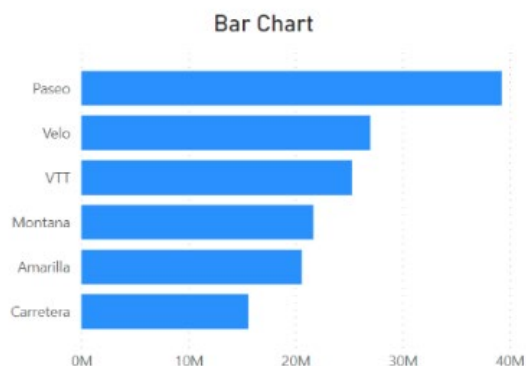
- Sort usually largest to smallest so that users can easily compare
- When comparing diferente categories use diferente colors
- Avoid grid lines used within the viz

2.1) Vertical bar chart

- Bar chart is used to shows change over time, when you have small data set
- Also to show comparison among ordinal data/ data that have sequential pattern/ , age-group, salary range,

Best Practice:

- The series data is organized from left to right, following the natural sequence of reading
- For columnar bar chart should start at zero y-axis
- Avoid grid lines used within the viz

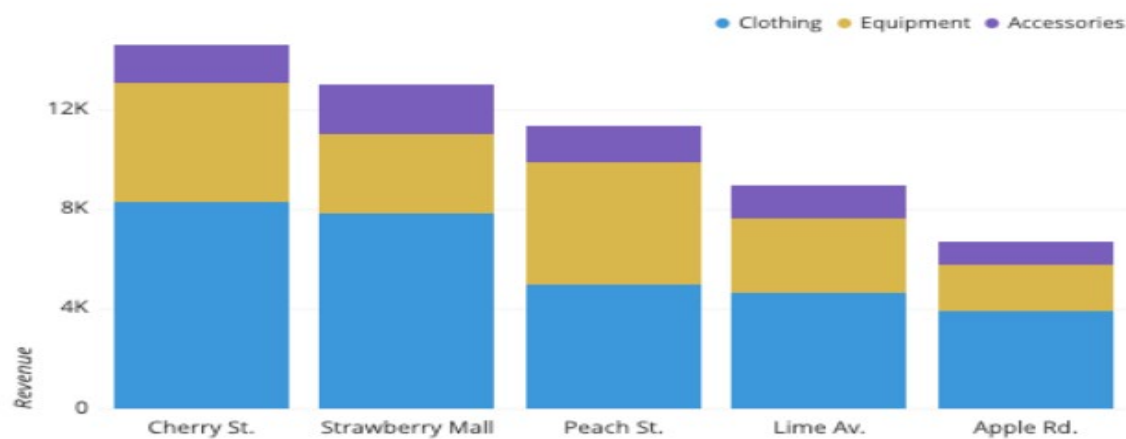


3) Stacked bar charts

- Stacked bar charts are used to compare totals and be able to see their breakdowns
- Can be oriented either vertically or horizontally as of the bar charts

Best Practice:

- Each componente can be identified by diferente colors, patterns or shading
- Sort the data with the total
- Vertical stack chart should start from zero y-axis

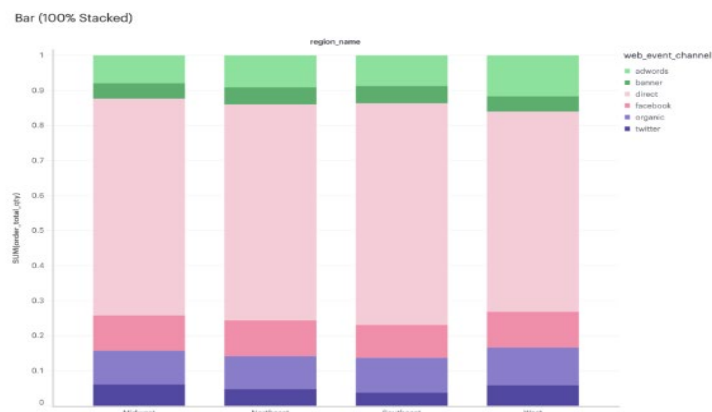


4) 100% Stacked bar chart

- 100% Stacked Bar Chart compares the contribution of each of individual items value to a total across categories
- Can be oriented either vertically or horizontally

Best Practice:

- Use colors to differentiate to clearly separate categorical values
- Use horizontal or diagonal labels, avoid vertical labels

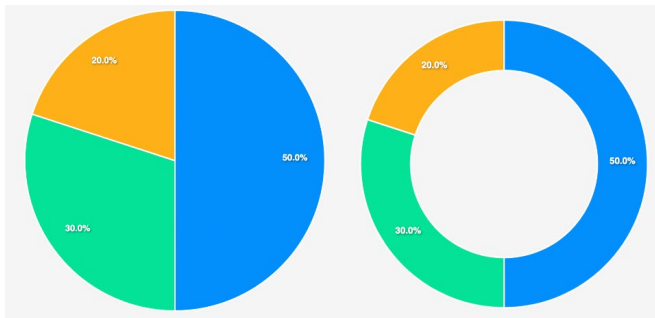


5) Pie & Doughnut chart

- Pie chart shows the composition of something
- Doughnut chart is a pie chart with hole inside used for the same purpose

Best Practice

- Make sure all data adds up to 100%
- Label the chart clearly
- Don't compare more than 6 components in one pie chart, better to plot the 5 important ones and group the remaining into an "other category". Do not use multiple pie chart for comparison

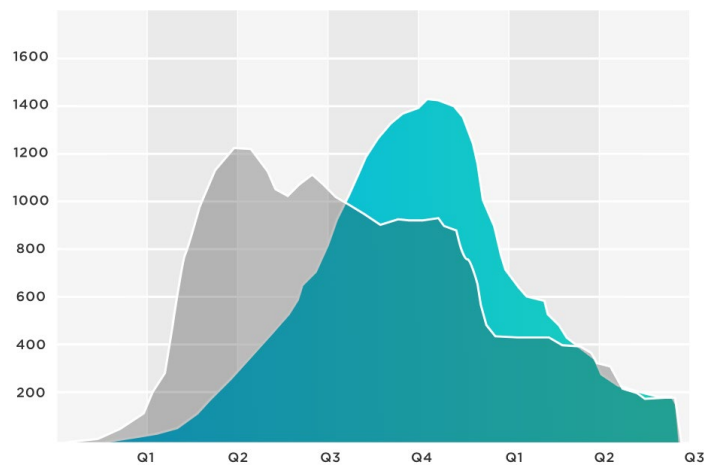


6) Areal chart

- The areal chart is like the line chart, the area below the plotted line is filled in with color to indicate volume

Best Practice

- Always label the axis and fields clearly
- Avoid using dimensions with more categories in an areal chart as it can lead to clutter
- The X-axis must start from zero



7) Heat map

- A Heat map is a visual representation of numerical data in a tabular format, tables where color intensity is used to represent relative values
- Heat map shows you a comparative view of a dataset and gives insight which dataset needs more attention

Best Practice

- Color range high, average and low (uses a warm-to-cool color spectrum)

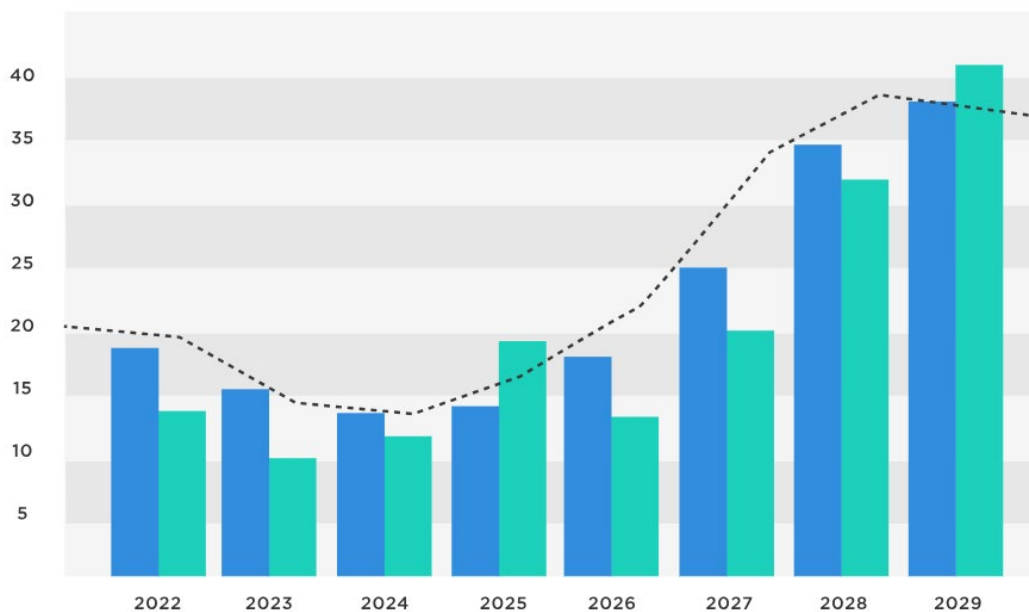
IMPACT	Catastrophic (5)	5	10	15	20	25
	Significant (4)	4	8	12	16	20
	Moderate (3)	3	6	9	12	15
	Low (2)	2	4	6	8	10
	Negligible (1)	1	2	3	4	5
		Improbable (1)	Remote (2)	Occasional (3)	Probable (4)	Frequent (5)
LIKELIHOOD						

8) Combination/ Combo chart

- Combo charts are used to visualize a correlation between two data sets

Best Practice

- Limit the number of series and keep each chart simple
- Use similar scale to improve the graph readability, similar scale for both axis
- Use multiple Y-axis to show different scales



9) Scatter plot

- A scatterplot shows the relationship between two numerical variables plotted along both the horizontal and vertical axis.
- It is used when you want to see a relationship analyze the correlation between two variables

Best Practice

- Label key data points directly
- Only used for numerical data
- Use when there are more than 10 data points on the horizontal axis

