

Do's and Don'ts of Data Visualization

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Do's and Don'ts of Data Visualization

Data Visualization is the visual representation of data and helps with the analysis of information. It presents information in a way that's engaging, helps communicate complex ideas quicker and present it in a way that allows viewers to discover patterns that might otherwise be hard to uncover.



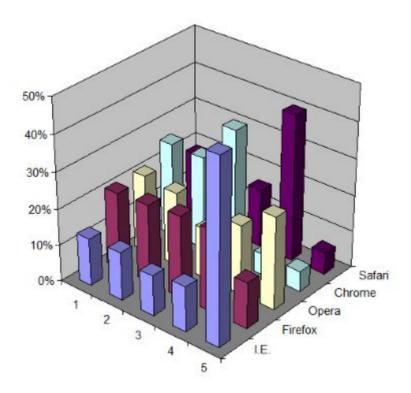
1. Do's of Data Visualization

1.1 Always Consider The Purpose Behind The Visualization

Before diving into the visualization process, one must understand the main purpose or goal behind creating the visualization. It is crucial to understand what kind of visualization one must use to represent the specific project. There are mainly two kinds of visualization, one is the presented visualization and the other is the distributed visualization. The former focuses on key highlights while the other focuses on both contexts as well as the conclusion.

1.2 Do understand to use the Correct Visualization and choose the most Effective One

There are various kinds of data visualization tools for various specific problems and you have to an understanding and knowledge to use the appropriate visualization for the particular project. Different types of visualization include treemap, circle packing, parallel coordinates, slope graphs, etc. For instance, in this 3D bar chart, it is difficult to understand the height of each bar as well as the values in the rear dimensions.



1.3 Keep the Visualization simple

Good data visualizations should have the power to message by making the data points simple and easy to understand. A complex graph and infographic will make more people difficult to understand the message that the graph wants to show. Simple t effective graphs like pie-charts, bars, etc. grab attention to the viewers and help to make them understand the reasonable points behind it.

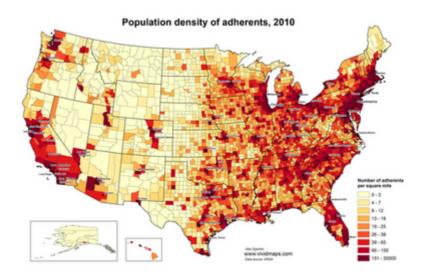
1.4 Always Highlight the important Pieces of information

It is crucial to make sure that the labels are aligned in an appropriate way and are not crowding the important data on the graph. Highlighting the important points will emphasize the particular data that you want to show to the people. Size and color make attraction to the eyes so it is to make sure that the color contrast, sizes, and positions are placed consciously.

2. Don'ts of Data Visualization

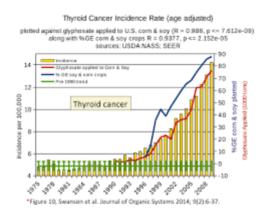
2.1 Don't use too many Colors for Visualization

Yes, different colors help us understand any visualization in a fast manner but when it is used too much, it no longer helps us to understand anything rather creates confusion and complications while visualizing the data. It is better to hold minimum color shades in order to lessen the perplexity.



2.2 Don't use Erratic Scales

It is said that excess of anything is bad. In the same manner, if a visualization consists of too much inconsistent scales it can create confusion in understanding the result behind it. However, it is not forbidden to use multiple variables in a single visualization but one must have the proper knowledge of using the way of it.



2.3 Avoid misrepresentation of Data which leads to misleading Graphs

Misrepresentation of data leads to misleading the person who wants to understand the data and the purpose. The cases can be improper labelling of a graph, data is left out, etc. For instance, this is a real-life example of a bar chart is a misleading graph because we can see a huge difference between the two bars but when we focus on the y-axis, we see that the graph begins from point 34 instead of 0 which means the difference is not huge or double but it is just around 4%.

