

A Data Visualization Checklist:

13 Things to Consider for Every Chart

Data visualization has the power to educate, inspire, and engage - if done well. Follow our checklist below to make sure you're consistently building effective charts.



Pick the right chart

While your data might work with multiple chart types, it's up to you to select the one that ensures your message is clear and accurate. There are a few main types of charts - check the one that works best with your data.



Comparison.

Comparison charts are used to compare two variables, categories, or different items. They can also be used to show change over time. Suggested charts: table, bar, column, and line charts.

Possible examples - year-over-year deals closed, return on ad spending, trial starts, SEO traffic, conversion rates, blog traffic, social media followers, quarterly revenue, new signups



Relationship.

Relationship charts are used to show a possible connection or correlation between two or more variables. Suggested charts: scatter, bubble, and dot plot charts.

Possible examples - units sold compared to revenue, time compared to price, investment price over time, revenue compared to rating, email open rates



Composition.

Composition charts are used to display parts of a whole. Suggested charts: stacked bar, stacked column, stacked area, pie, and waterfall charts.

Possible examples - customer demographics, campaign leads, student grades, net income, sales flow, inventory audit, traffic sources



Distribution.

Distribution charts are used to show how variables are distributed over time, helping identify outliers and trends. Suggested charts: histogram, scatter, and area charts.

Possible examples - employee salary, customer wait time, product price breakdown, high traffic times for businesses



Stay organized

There are a few best practices you need to follow when designing a great chart. It all comes down to your axes, text, grid lines, and legends.



Even axes intervals.

The x-axis and y-axis are the backbone of your chart. The spaces between axis intervals should be even, the y-axis should start at zero, and they should be clearly labeled.



Relevant text.

Charts don't contain a lot of text, so make sure the text you add is concise and relevant. Give your chart a good title, pick an easy-to-read font, and make sure your text isn't too small.



Helpful grids and legends.

Excessive lines and legends can be distracting. If you chose to include a grid, experiment with only displaying horizontal or vertical lines. Include a legend if your chart needs clarification. If the legend feels clumsy, feel free to label your data directly on the chart.



Be mindful of color design

The color(s) you choose for your chart should be deliberate. This is a great opportunity for clarity and efficiency, but if done poorly, you risk confusing the viewer and muddling your message.



Keep it simple.

Pick one color for your entire chart. Or, you can use a muted neutral tone featuring a pop of color to draw attention to the most important aspect of your data.



Skip rainbow palettes and 3D art.

Avoid rainbow or mixed color palettes. They may be pretty, but they aren't necessarily effective. And never use 3D imagery in your charts. 3D charts are distracting and often misleading.



Test it out

Once you have a draft of your chart, share it with a friend or coworker. There are a few questions you should ask when having someone review your work.



Do they know what the chart is about in 10 seconds or less?



Does the chart make sense with your data?



Do they find the design appealing or confusing?



Do they understand your main takeaway?

Top tips



Pick the right chart



Keep it simple



Ask a friend