

Evaluate and improve presentations

In this course, a previous reading covered how to avoid crowding in a chart by adjusting or regrouping data so it's easier for stakeholders to understand it. That practice becomes even more critical if you decide to include a chart in a slide presentation. This reading covers other design principles to think about when you incorporate visualizations of data in slide presentations.

Design principles for visualizations

Visualization design is important to your work as a marketing professional. Your primary goal is to use visualizations that communicate your data effectively to your audience. By keeping the following design principles in mind, you can plan and evaluate your visualizations and decide if they add value to your presentation. If they don't, you can adjust or remove them.

Choose the best format

One of the first things you have to decide is which visualization format is the most effective for your audience. Sometimes, a simple table is the best visualization for an audience of executives or managers. They tend to focus on the big picture and strategies instead of the data itself. Other times, you need a more complex visualization to illustrate your insights for more technical teams that require a deeper understanding of the data.

Minimize distractions

Focus your audience on the part of the visual that is key to understanding an insight. The term **data-ink ratio** is used to describe the proportion of ink (or pixels in digital content) that is used to present actual data compared to the total amount of ink (or pixels) used in the entire visualization. Try to maximize this ratio and minimize distractions in your visualizations. For example, remove lines or boxes around charts and legends, or remove shadow effects for text.

Use the appropriate orientation

Make sure the text components of a visualization, like labels on a chart, are easy to read. You can change the orientation of your visualization to make text easier to read and understand.

Choose colors thoughtfully

There are a lot of important considerations when choosing colors in your visualizations. Using some colors can promote unintended effects. For example, red is often used to alert people of danger or emergencies. Green is often seen as unopposed, like a green light to move along in traffic. Red and green color combinations can also be problematic for people with color blindness. Therefore, consciously and meaningfully select colors for your visualizations, and use them consistently throughout. When you're considerate of what colors mean to different people, and use inclusive color combinations, your visualizations will be accessible to everyone in your audience.

Evaluate visualizations for improvement

When you review the visualizations for a slide presentation, ask yourself these questions:

- Is the scale appropriate for order of magnitude comparisons?**
 For example, changing the scale on the y-axis of a chart can make differences between data groups seem more drastic when differences are actually quite small.
- Am I artificially limiting the scope of the data?**
 Be careful about including only a portion of the data in a visualization just because it is favorable to your conclusion or insight to do so. Limiting the scope of the data can be misleading.
- Did I hide or misrepresent any trends when I regrouped data?**
 Regrouping data can simplify visualizations to make them easier to read, but be careful that the data hasn't been oversimplified to a point where trends become less apparent. For example, suppose you are showing demand trends for car loans and you want to share insights about the loan industry as a whole. However, since the trends for car loans are quite different from the trends for home loans, it wouldn't be helpful to combine the data. In this case, regrouping the data makes the insights inaccurate for both types of loans.
- Do individual parts accurately add up to the whole?**
 If you are using a part-to-whole visualization (such as a pie chart) to describe your data, the individual parts should add up to and equal 100%. If they don't, your data visualization is misleading.

Key takeaway

Data visualization is a bit of an art form. As you gain more experience creating and using visualizations in presentations, you'll be able to apply the design principles and evaluate how well your visualizations convey meaningful insights to your audience.

