

## Core-level design tips

**Pay attention to the data to ink ratio.** One of the basics from the data visualization Godfather himself, Edward Tufte. Indispensable. [The Visual Display of Quantitative Information, 2001, Chapter 4, Data-Ink and Graphical Redesign](#)

**Avoid chart junk.** Ditto above. [The Visual Display of Quantitative Information, 2001, Chapter 4, Chart Junk](#)

**The best explanation of why to never use a pie chart.** I admire much of Jorge Camoes' work and simple writing. This one still conveys the issue best. [Finally revealed: The optimal number of categories in a pie chart.](#)

**Whitespace matters.** There's lots of writing on the topic, but this article has a nice summary with great examples. [Why whitespace matters](#)

**PowerPoint can be dangerous.** Some good references on how easily presentations go awry. [We Have Met the Enemy and He Is PowerPoint](#)  
[Amazon Staff Meetings: "NO POWERPOINT"](#)

**Do the squint test.** This might sound silly, but try it and see what you think. [The Squint Test: How quick exposure to design can reveal its flaws](#)

## Major-level design tips

**Less is more.** And this article helped me understand why. [Hick's Law](#)

**Simplify the explanation.** Avinash's passion when writing about this very old principle is hard to miss. [Occam's Razor](#)

**Consider your user's decision fatigue.** When I think about a user looking at information at the end of the day, I remember this article. [Do You Suffer From Decision Fatigue?](#)

**Limit colors.** Juice's design principles are great. I love the ones on color the most, like this one. [Limit Colors](#)

**Persuade your audience.** This one is more about presentation than design, but it's good for helping you consider your audience. [More than just facts](#)

**Understand performance vs. preference.** A little deep, but useful when thinking about what chart might be more effective. [User Satisfaction vs. Performance Metrics](#)

**Take Tufte's one day class on presenting data and information.** If you've gotten this far, congratulations! Now it's time to schedule your [Edward Tufte one day class.](#)

**Learn the 5 design principles of Gestalt Theory.** You'll be one of the cool kids when you mention Gestalt. I found this article to be the easiest to digest. [Gestalt Theory in Typography & Design Principles](#)

## Graduate-level design tips

**Use aesthetics that attract people.** A good 101 on aesthetics for the non-artist. [The Fascinating Science Of Aesthetics](#)

**Include storytelling in your visualizations.** It's really necessary to understand the connection between storytelling and data. [Storytelling: The Next Step for Visualization](#)

**Consider what motivates users to take action in your design.** There's a lot written on the psychology behind design, but this is a great summary article. [How psychology can help generate more clicks on your links](#)

**Learn about interactive data analysis.** This video focuses on visualization for exploring data. Hear from a major thought leader in the data visualization space, Jeff Heer. [Interactive Data Analysis](#)

**Review these data design guides.** Lots of suggestions from Nathan Yau on ways to think about charts. [Working and designing with data.](#)

**Design information so it tells a story.** This video focuses more on art than data, but it's helpful to see another thought leader's perspective on data visualization. [The beauty of data visualization - David McCandless](#)