



DATA VISUALIZATION

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VISUALIZATION PROCESS



1 Build It

- Check out the seminal work of Cleveland and McGill in their paper (see below)
- Only use pie charts with 3 slices or less
- To get away from horizontal bar graphs, try using a lollipop chart which decreases cognitive load and graphs higher up on the Cleveland hierarchy

Resources

[Stephanie Evergreen's Chart Building How-to Blogs](#)
[Ann Emery's Essentials Chart Choosing Tool](#)
[Evergreen Data's Qualitative Chart Chooser](#) (designed by me)
[Cleveland and McGill's Paper](#)



2 Break It Down

Reduce Clutter

- Start by taking off gridlines, axes, chart border, chart fill, non-descriptive title, and chart legend
- Deemphasize everything on the graph by greying all the data out

Apply Gestalt Principles

- Proximity: Directly label graphs and make sure referenced graphs are near the associated text
- Focal Point: After greying everything out, emphasize your story intentionally to create focal point in the graph

Resources:

[Stephanie Evergreen and Ann Emery's Data Viz Checklist](#)
[Handouts from Stephanie Evergreen's Blog](#) (sign up for membership, it's so worth it!)
[Twain Taylor's Article on Gestalt](#)



3 Emphasize Your Story

Use Text Strategically

- Make your chart title say the main point of the graph
- Link the story in the title with the data in the graph using color

Color

- Use gestalt and color to tell your story. This taps into people's preattention and is more likely to end up in long term memory
- Color code a long report
- Be aware of color blindness and printing in black and white

Resources:

[Stephanie Evergreen's Blog on Strong Titles](#)
[Cole Nussbaumer's Talk on Data Visualization](#)
[Twain Taylor's Article on Preattention](#)
[Color Brewer 2](#)
[Adobe Color Kuler](#)