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