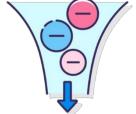


Data Visualization

How Can You Better Collect and Organize Data to Support Visualization?

- Collect data at the lowest level of granularity as possible
- Determine how data elements are collected and are related to each other
- Understand who and how institutional data is currently governed
- Map changes to data elements, collection methods, and governance across relevant time periods
- Identify opportunities to "close" open text elements



What Visual Is Most Appropriate for Your Data?

Understanding how your data is structured can eliminate certain design options.

Interactive version @ https://ft-interactive.github.io/visual-vocabulary/

Deviation	Correlation	Ranking	Distribution	Change over Time	Magnitude	Part-to-whole	Spatial	Flow
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How Can You Develop Visualizations That Respect Visual Perception of Information?

Design Objectives

- Accurate representation
- Facilitates accurate and quick understanding
- Memorable
- Appropriate amount of data/context
 - Orientation
 - Shape/Symbols
- Tint amount of white
 - Line length
 - Line width
- Colorfulness as compared to gray

• Hue

• Saturation/Brightness – amount of gray

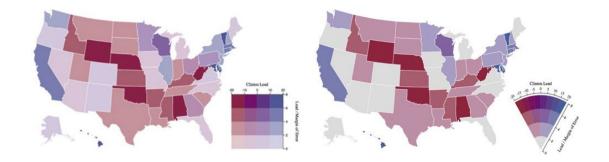
• Shade - amount of black

- Curvature
- Enclosure
- Spatial position
- Motion
- Texture

- Selecting Color Palette
 - Color-blind
 - Perceptual ordering/categories

• Size

- Captures nuances of variations
- Conveys gradients
- Displays uncertainty when relevant
- Works across mediums



Focusing Intended Users' Focus

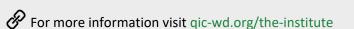
- Understand what your end-users will focus their attention on based on their role, interest, expertise, and familiarity with data and relevant issues.
- Every element you add to the page or screen takes up a cognitive load on the end-user
- Does your design reflect what areas you want the end-user to focus their attention



Tools & Platforms

Beginner	Intermediate	Jedi
Excel	Tableau	D3.js
<u>my.visme.co</u>	<u>Power Bl</u>	<u>R</u>
Infogram.com	Google Data Studio	<u>Python</u>
piktochart.com	<u>Qlik</u>	
	<u>Domo</u>	
	<u>SAS</u>	





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