

# Module 4 - Session 1 - Data Visualisation

## Working effectively with data

CivicDataLab

2021/10/12 (updated: 2021-10-12)



1. To understand a concept visually



To understand a concept visually
To demystify what a data point represents



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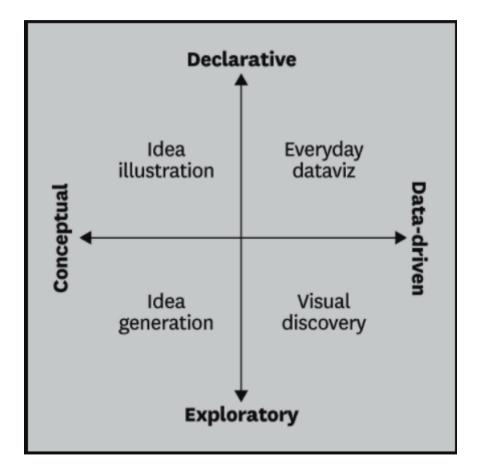


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- 6. **It's fun**

#### SeriesHeat by Jim Vallandingham

## The Data Viz Quadrant

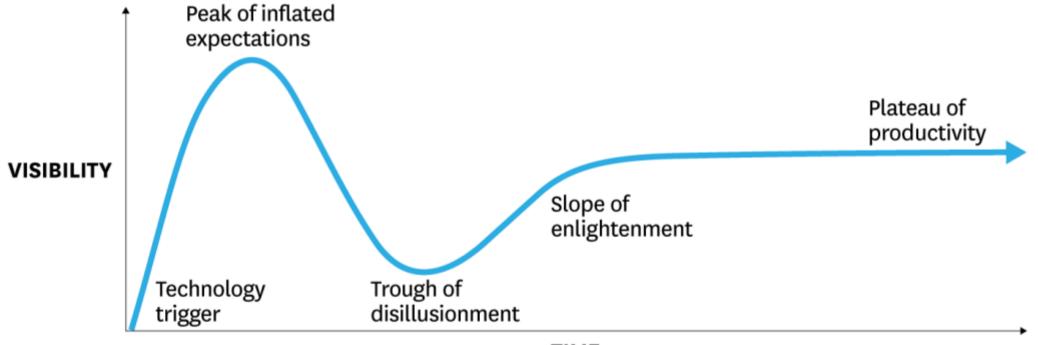




#### **Idea Illustration**

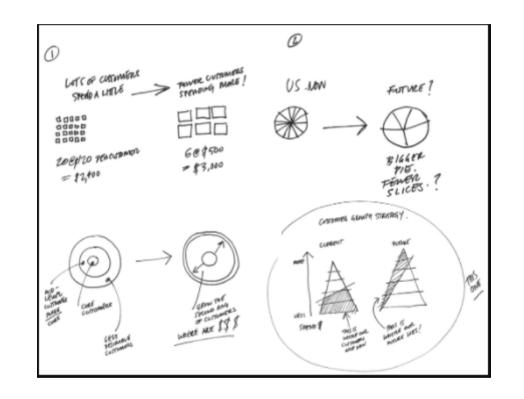
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#### **Hype Cycle for Emerging Technologies**



### **Idea Generation**





## Visual Discovery/Exploration





## Every data viz



#### Reports linked under each theme

Judicial Appointments						
ADR						
Diversity						
COVID-19						
Government Litigation						
Others						
2	4	6	8	10	12	14



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## **Telling stories using Data**

**Stories** 



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Stories | Audience



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Stories | Audience | Medium

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- 5. Personal Stories How does this data connect to the lives of the audience?

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- 3. Visualisation Narratives
- 4. Intended Outcomes



1. Static (Media articles, Infographics) vs Interactive (Web Applications, Websites, etc)



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- 5. Stakeholder specific





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7. Ask the stakeholders what convinced them and what didn't

# **Types of Arguments**



- Did you make someone feel guilty?
- Did you appeal to a sense of responsibility?
- How central was the data to your argument?
- Did you relate to person's point of view or where they are coming from?



- Double-check your assumptions about an audience
- Use different approaches for different audiences

mmon Pitfalls

 Be true to your data (show a big difference and make it relevant)

#### **Data Stories**

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1. What's really warming the world ? *Evaluating arguments* 

#### **Data Stories**

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- 1. What's really warming the world ? *Evaluating arguments*
- 2. US Gun Deaths Gun Control vs Gun Rights



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Look at accessibility as an opportunity to hone your skills, to move beyond the ordinary, and to provide an intentional experience for your users.

#### **Accessibility Resources**

- 1. Why Accessibility Is at the Heart of Data Visualization
- 2. Accessible COVID-19 Pandemic Data
- 3. Dataviz Accessibility Resources Github
- 4. Accessibility Fireside Chat Data Visualization Society





**Deconstructing a data viz** - Build your visual skills by taking apart an example visualization



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**Why** - *This activity helps you build the skills (data processing, design, storytelling) by taking apart work that others have done (the good and the bad) to build your critical eye.* 



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- 2. The ways it shows that data.
- 3. The narrative it is trying to tell.
- 4. Evaluating whether it combines those to tell the data story well

#### Activity 2 - Examples

1. Line of Succession



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Line of Succession
IJR - 2021 - Vacancies- Pg 33



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**Resource** - From Data to Viz

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- 5. Linked data stories to check how different charts were used for visualisations.

# Data to Viz - Selecting charts

Resource - From Data to Viz

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- 2. Basic description of what works where
- 3. Code to implement the charts across multiple platforms
- 4. Lists common mistakes for all chart types
- 5. Linked data stories to check how different charts were used for visualisations.
- 6. Open Source Link



#### Data Viz - Things to avoid



1. Spotting visualisation lies

# Data Viz - Things to avoid

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1. Spotting visualisation lies

2. Examples of quantitative info that is poorly designed for communication



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  - 2. Data Biography
  - 3. Metadata about the variables
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Viz for Social Good - Justice and Peace project



#### **Queries and Feedback**