

# IOWA

Institute for Public Health  
Practice, Research and Policy

# Visualize This 2

## Chart Smarts: Design and Deliver Meaningful Visualizations.

2026 Session 4



# Course Schedule



Tuesday, February 3rd, 10:00am-11:30am CST Live Learning Session #1 – Kick off



“Work at home” **Course 1** and  homework.



Tuesday, February 10th, 10:00am-11:30am CST Live Learning Session #2



“Work at home” **Course 2** and  homework.



Tuesday, February 17th, 10:00am-11:30am CST Live Learning Session #3



“Work at home” **Course 3** and  homework



Tuesday, February 24th, 10:00am-11:30am CST Live Learning Session #4



# Course Objectives

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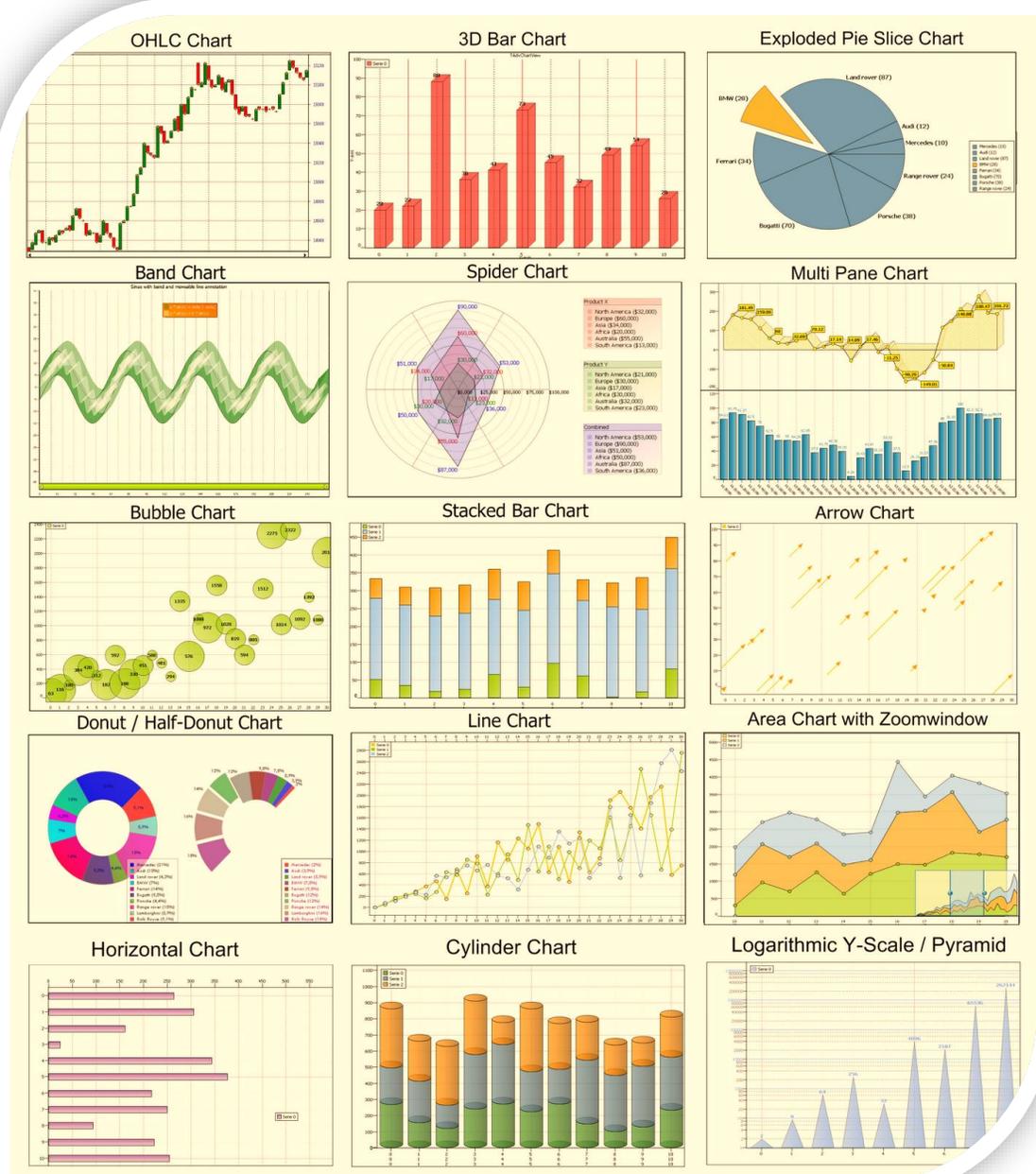
By the end of this course, participants will be able to:

- Select the appropriate chart type for your data
- Identify critical formatting elements for effective data visualizations
- Create data visualizations for basic descriptive epidemiological data
- Create data visualizations that demonstrate comparisons and evaluation
- Describe the difference between common visualization tools such as infographics, data placemats, and data dashboards



# Small Group Activity

20 minutes



# Small Group Activity – 20 minutes

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In your breakout groups,

- Share your data visualization
- Remind group members of your target audience
- Have group members indicate what message they get from your visualization.
- Was your visualization successful?



# Debrief



**Ok, so now I know how to create an effective chart/graph but is one chart enough?**

**When would I use an Infographic or a Dashboard?**



# Choosing the Right Data Visualization Tool

Select the right visualization tool based on your audience needs, goals, and available resources.

## Infographics



### Best For:

- One-time storytelling
- Public communications
- Executive summaries

### Best Practices:

- Have a clear story/ message
- Logical information flow
- Consistent visual styling
- Emphasize visuals over text

### Resources Required:



High initial design effort  
Minimal maintenance

### Distribution Methods:

- Print materials
- Digital platforms
- Presentations

### Software Options:

- Adobe Creative Suite
- Canva

## Data Placemats



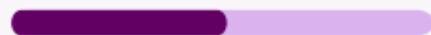
### Best For:

- Client engagement
- Collaborative analysis
- Interim findings

### Best Practices:

- Clear visualizations
- Focus on data interpretation
- Include space for feedback
- Questions for discussion

### Resources Required:



Moderate setup time  
Periodic updates

### Distribution Methods:

- In-Person/virtual meetings
- Email
- Collaborative platforms  
(e.g., Teams)

### Software Options:

- Excel
- Tableau

## Dashboards



### Best For:

- Ongoing monitoring
- Interactive exploration
- Regular reporting

### Best Practices:

- Focus on key metrics
- Group related information
- Intuitive filtering controls
- Include user training

### Resources Required:



High technical expertise  
Ongoing maintenance

### Distribution Methods:

- Internal portals
- Web applications
- Regular reports

### Software Options:

- PowerBI
- Tableau

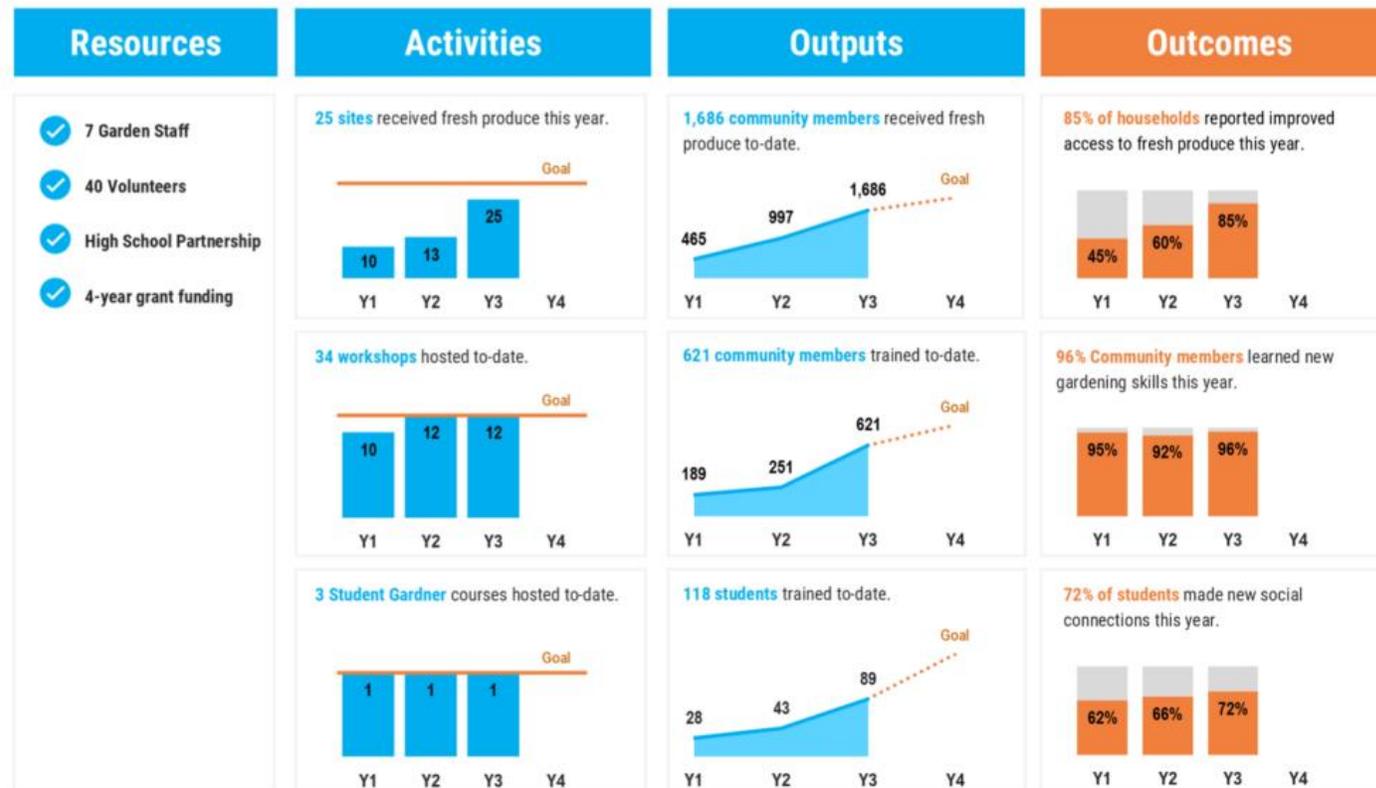
# Your Visualization Tool Should Follow Your Conceptual Model/Framework/Theory of Change



## Community Food Garden Initiative

*Growing food to make our community healthier and stronger, 4-year theory of change*

The Good Old Logic Model



# Using the What? So What? Now What? Format

## Tiny Steps to Triumph: Navigating the Journey to Reduce Infant Mortality

### What's the Problem?

Every year, thousands of babies die in the United States due to a variety of reasons. Some of those reasons include:

- Preterm Birth
- Low Birth Weight
- Sudden Infant Death Syndrome (SIDS)<sup>1</sup>.

**Infant Mortality:** The death of an infant before their first birthday.<sup>4</sup>

These deaths contribute to the infant mortality rate, the number of infant deaths for every 1,000 live births. The United States' infant mortality rate is **5.4 infant deaths per 1,000 live births<sup>1</sup>**, much higher than other wealthy nations. Globally, the infant mortality rate is a good indicator of the quality/effectiveness of the nation's healthcare system. The U.S. infant mortality rate indicates that there are deep inequities in the health system. Analyzing the U.S. infant mortality rate among race/ethnicity reveals health care disparities resulting from years of inequality and discrimination. While the infant mortality rate in the U.S. has slowly decreased in recent years, much more should be done by the U.S. legislature. The Biden administration, with their goals to improve equity throughout the U.S., would be greatly interested in promoting policies through the power of the U.S. Department of Health and Human Services to further reduce the infant mortality rate.

### So What?

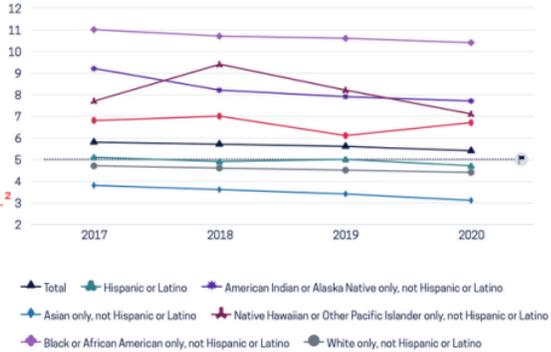


The U.S. infant mortality rate shows a disproportionately higher rate among Black or African American communities. The infant mortality rate for this group is

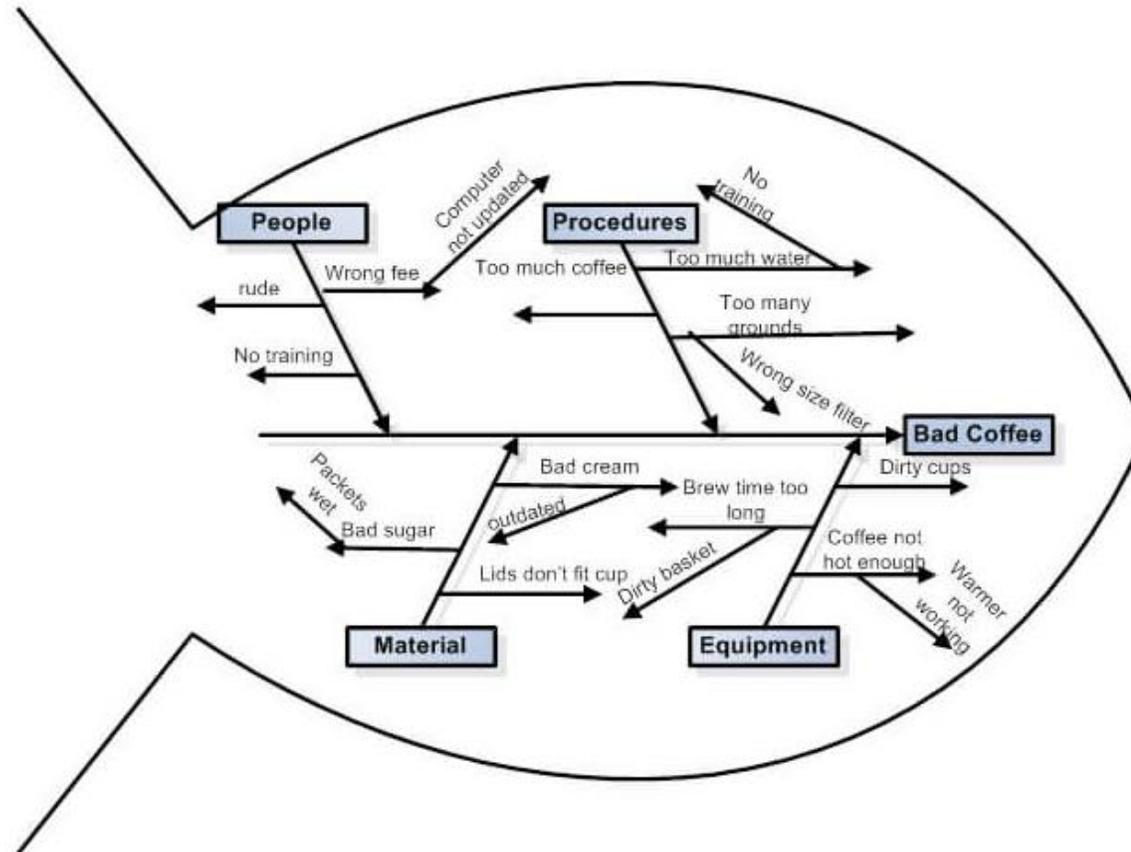
**10.4** infant deaths per 1,000 births.<sup>2</sup>

This disparity indicates there is a vast difference in experience for pregnant Black women compared to White women (who's infant mortality rate is 4.4)<sup>2</sup>. It also shows that there are fundamental flaws among all levels in the U.S. health system toward

All Infant Deaths by Race/Ethnicity (of mother), 2017-2020



# Why Do We Have Such Bad Coffee in Our Office?



# How To Add Context to Your Chart/Graph

**Adding “Higher is Better”**  
Context for Dynamic Dashboards

The image shows a woman with long brown hair, wearing a dark blue top, holding a laptop. The laptop screen displays a dashboard with two bar charts. The left chart is blue and the right chart is green. There are yellow circles highlighting parts of the dashboard. A green Excel icon is in the bottom left corner.

Ann Emery [DepictDataStudio.com](http://DepictDataStudio.com)

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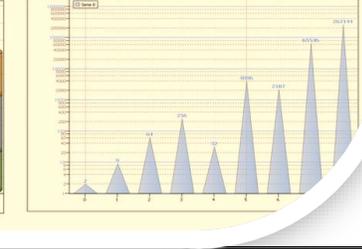
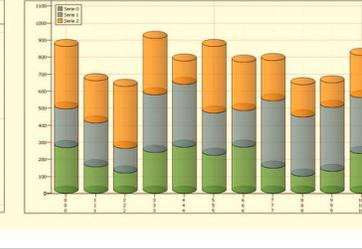
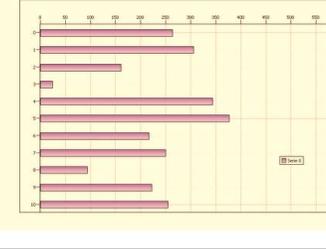
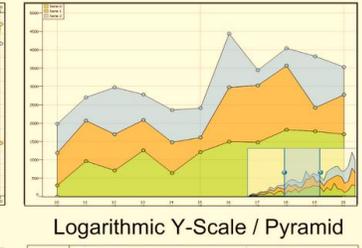
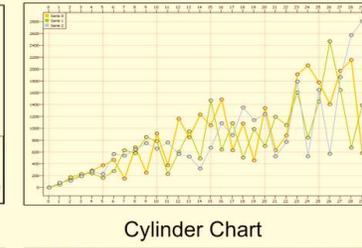
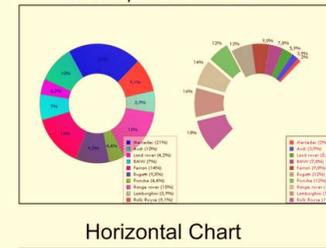
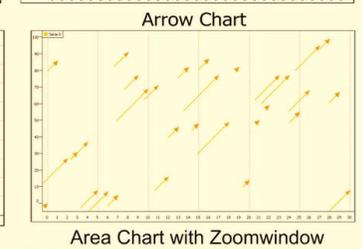
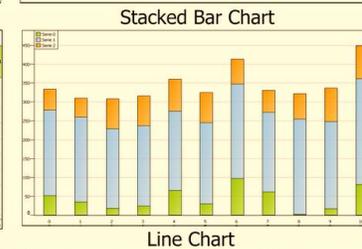
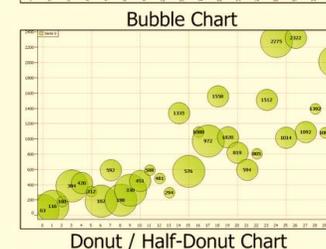
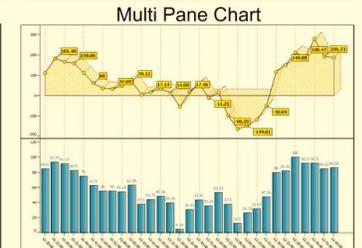
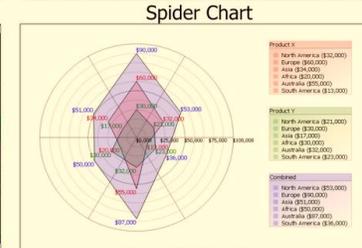
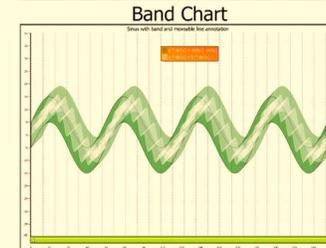
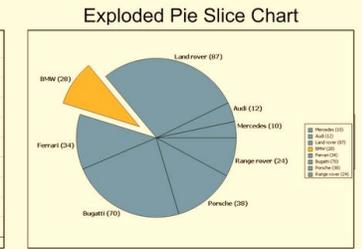
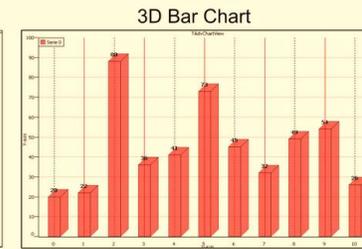


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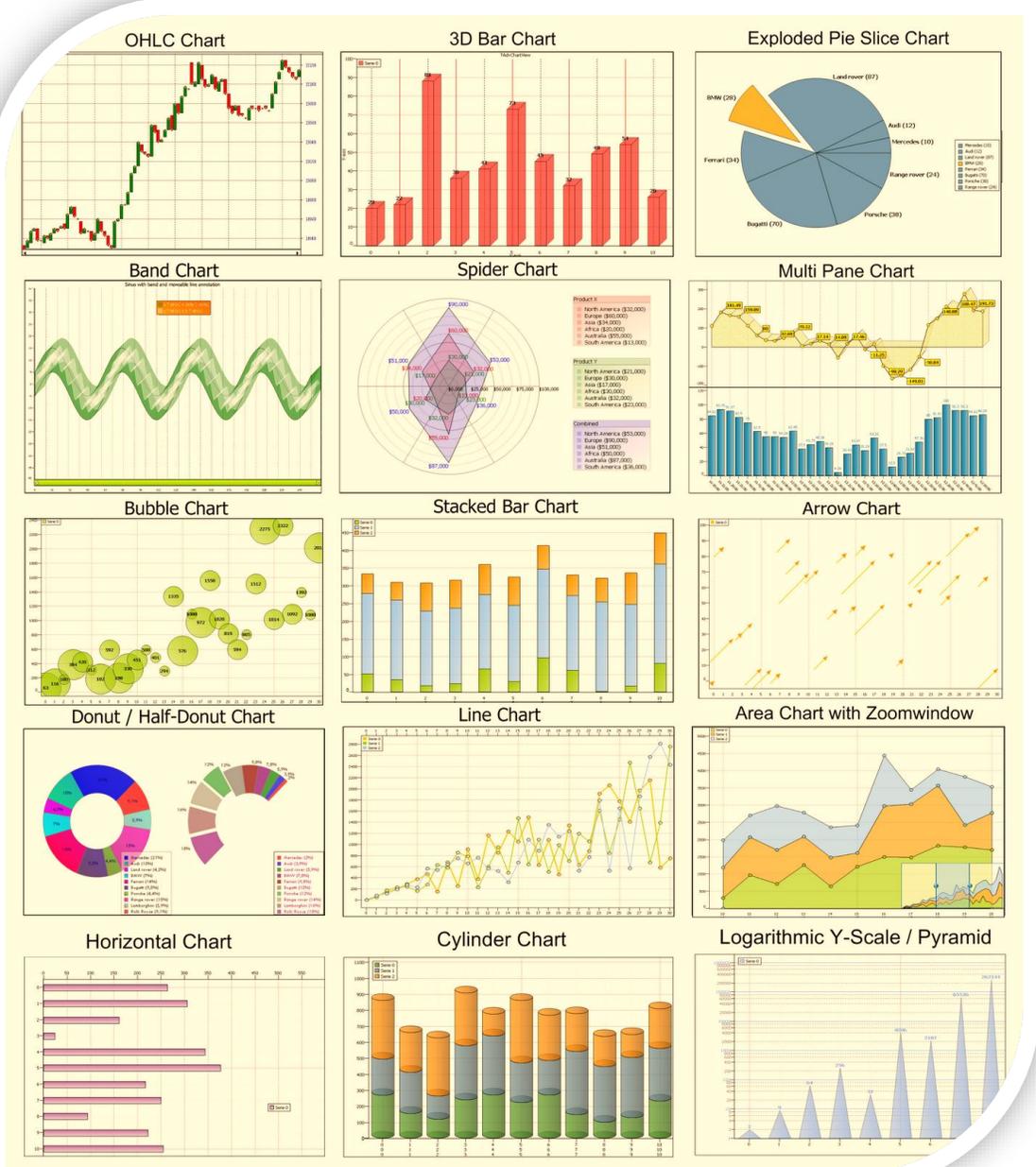
# Questions?



# Share your visualization!



If you want more feedback on your project, submit it to [abigail-stock@uiowa.edu](mailto:abigail-stock@uiowa.edu) by **Mar 9th** and the trainers will provide you with feedback.



# OVERALL VIZ CONSIDERATIONS

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- The chart highlights the most important finding
- Use the most appropriate chart type for the data you have (check out the chart choosers)
- Use the level of precision that your audience requires (only scientists get excited about decimal points)
- Create something meaningful—do not use defaults (EXCEL is your friend)
- Your use of color, text, graphics, arrangement all support what you want to communicate to your audience.
- Bring equity into your visualization!



**Questions?  
Comments?**



**REGISTER NOW**

# VISUALIZE THIS 2

CHART SMARTS: DESIGN AND DELIVER MEANINGFUL VISUALIZATIONS

Online Training Opportunity



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**Thank you!**

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