

Uses and Visual Presentation of Data Analytics, *Katherine Rowell*

First round – 38 people in the room

Second round – 27 people in the room

70% of the way we take in information is by sight. You want to tell a story with your data by using simple tools. Your data should focus on monitoring, analytical and action.

- Monitoring – the report the CEO wants so he can see how different departments/regions, are doing
- Analytical – follow this data to correct an issue
- Action – fix it now

Strip away all non-data ink.

- Colors; especially red, yellow green
  - 10% of the population is color blind and cannot distinguish between these 3 colors – the visually impaired need high contrast
  - If you absolutely have to use color, stick to soft natural colors such as blues, tans and greens
  - There are other ways to highlight what you want your viewer to see
    - Enclose it
    - Gradiate the color
    - Use a different shape
    - Make it bold
    - Italicize
- Strip out gridlines, they serve no purpose and are distracting
- **Don't use a pie chart**
  - Chartjunk: lots of useless information in a pie chart
- **Don't use 3D – it doesn't show 2D quantitative data well**

People need to understand the intent and purpose of the data, so use categories that make sense and know what you are comparing to. Check out [Edward Tufte](#), known as the guru of data, for some great visuals.

- Put your “comparison to” on the right hand side – people read left to right.

Use a graph to show patterns, trends, and exceptions. You want your graph to be understood at a glance by using one of the following graphs:

- Point
- Line
- Point and Line
- Vertical bar
- Horizontal bar

Use a bullet chart (new) to show lots of information in a small amount of space.

- The bullet graph was created by [Steven Few](#)

A few rules to live by:

- All bar graphs must start at zero
- **Don't use a key or legend** – put your labels on your lines or add this info to your categories
  - If you need a footnote, add it to the bottom of your graph, table or chart
- A dash board is data that must fit on one page
- When comparing you must use the same measures, order and values
- Tables are not good for time series data
- A line graph should not have more than 5 lines
- Keep it simple: 28.8% could be 29%, 20.0% could be 20%
- All numbers must right align so people understand their values (thousands, hundreds, tens, etc.)
- Do not use red, yellow, green