Fundamentals of Data Science

Data Visualisation



Chartjunk



Chartjunk

Chartjunk, according to Tufte (1983), is anything that can be removed from a chart without changing its meaning

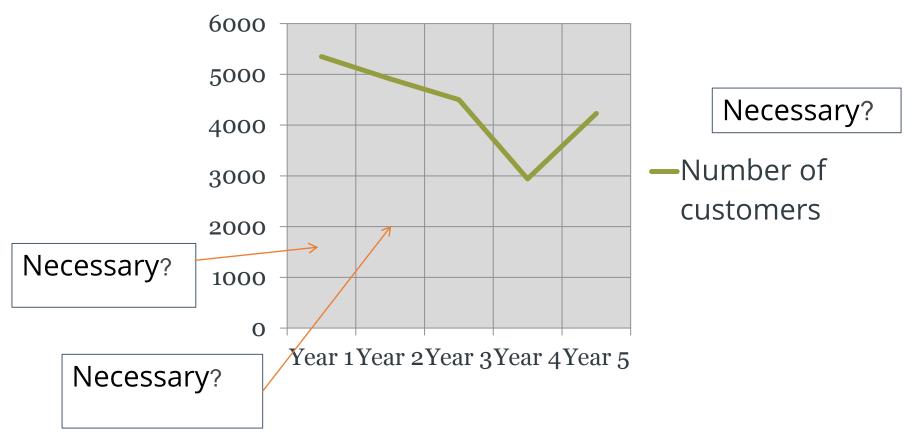
- It obscures the true meaning and story
- Imagery is not information
- Imagery draws attention away from data
 - Short-term memory resources are used to identify the images rather than understand the chart's meaning

Tufte, E. R., & Graves-Morris, P. R. (1983). *The visual display of quantitative information* (Vol. 2, No. 9). Cheshire, CT: Graphics press.



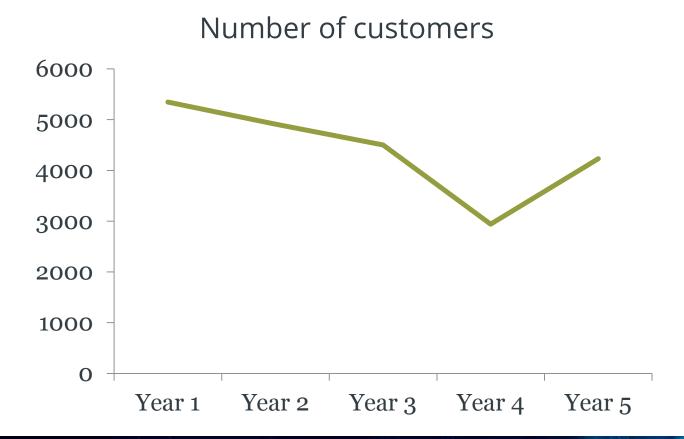
Chartjunk







Chartjunk fixed





The Beauty Paradox

- How complex should a graphic be? How much should you show?
- **Tufte** (1983) emphasises minimalism: Communicate as much information from as few pixels as possible
- Depending on the audience, this may or may not be the best approach
- When creating a visualisation, you must balance the need to focus on the story of the data, with art and design decisions to help your audience engage with and remember the visual.

