

MIS 0855 – Data Science (Section 005) – Fall 2016 In-Class Exercise (Week 7) – Finding Data Distortion

Objective: Identify how data visualization can distort messages and mislead readers

Learning Outcomes:

- Discover the way in which data visualization distorts main messages
- Suggest modifications to avoid data distortion

Part 1: Explore - individual (10 minutes)

- 1) Open <http://images.google.com/> and find data visualization that conveys misleading messages.
- 2) Find at least four examples with different ways of data distortion such as
 - a. a vertical axis without zero,
 - b. axes with unequal intervals,
 - c. incorrect graphic size, or
 - d. misleading use of colors.
- 3) Think about what misleading message each visualization delivers and how to correct it.
- 4) Copy and paste the URL where you found the visualization from your browser into a Word document. You can also use the document to make some notes.

Part 2: Discuss – group (10 minutes)

- 1) In a group of three or four, discuss misleading data visualization you found.
- 2) Select the four most misleading visualization.
- 3) Write in a note (i) what misleading message each visualization delivers and (ii) how to correct it.

Send your group's note to minspang@temple.edu by 8:00 PM.