CDS 301/501 - Homework 2

Due Date

4:30pm, Monday February 10th, 2020

Please submit two pdf files to blackboard - the first contains the answer to problem 1 and 2, the second contains your short presentation (problem 3).

Problem 1

Consider the simple (but somewhat infamous) visualization below regarding Planned Parenthood services. This graphic was presented in 2015, in Congress. No information on the chart is incorrect, but consider why this chart is misleading before reviewing an analysis of the chart at the link below:

`https://www.politifact.com/factchecks/2015/oct/01/jason-chaffetz/chart-shown-planned-parenthood-hearing-misleading-/`

Summarize your understanding. (Short answer - a single paragraph is fine).

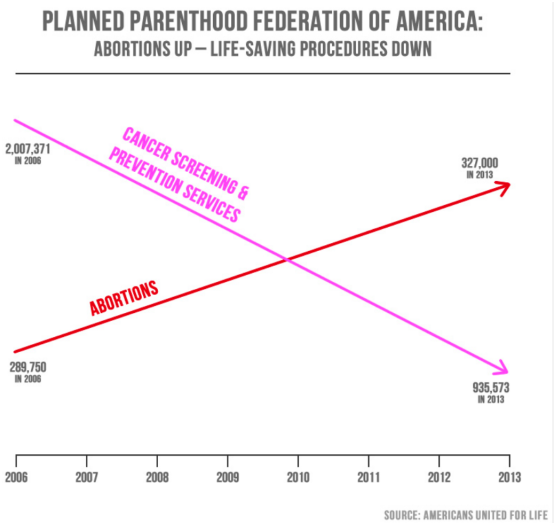

Figure 1: Planned Parenthood Graphic

Problem 2

Visit `https://www.boxofficemojo.com/date/2020-01-31/`. Either scrape & edit or manually enter the top 10 movies as listed at this link. You can use Excel or a text editor to enter the data. Include these fields in your data:

1. rank (TD) - current daily rank
2. daily gross (Daily) - the gross amount taken in by this move
3. title (Release) - the name of the movies
4. theaters (Theaters) - the number of theaters showing the movies
5. days-released (Days) - the number of days since the film was released
6. (Optional) avg (Avg) - the average gross per theater

Part 1 - Use Tableau to build a bar plot of the daily top 10. See Wilke Figire 6.3 for an example/guide for this first visualization.

Part 2 - Next, use Tableau to first, create a calucated field for the average gross per theater (this is just the daily gross divided by the number of theaters showing the film). Make sure that your calculation matches the published average posted on the website. (This is the Avg field above). Use the calculated field in a new bar plot based on the average gross over the top 10 movies.

Part 3 - Finally, for either graphic above, map the variable days-released to color and include this graphic in your report.

Note: When including the graphics in your report, be careful not to distort the images.

Problem 3

Continue reviewing the topic for your term project that you described in homework 1 (or investigate a different topic if you weren't happy with that choice). Now that you have seen some additional examples in Tableau, redo, refine, or create a new visualization in Tableau from the data gathered last week or new data you found this week. (Make sure you describe these, provide a link, etc...).

Create a (no more than 3 slide) presentation describing your thoughts on the project, why you think it will be interesting, the sources of data you have found so far. One slide should include your initial (however simple) visualization from Tableau. **Note:** Make sure you export the visualization from Tableau (rather than a screen capture), have a title, label each axis as necessary, include legends as necessary, etc...Also, again, make sure not to distort the graphic when including it in your presentation. This happens often when we stretch the graphic to fit into the presentation in a certain ways.

Be prepared to discuss/present your ideas for a project in an upcoming class.