

Homework 4: Use and Critique Tableau

Objective: Learn the capabilities provided by a commercial vis system and basic visualization methods. You will use and critique Tableau – an Information Visualization System that does not require programming.

Groups of 2 are allowed for this assignment! You can write the report on this homework by yourself, or you can do it with a partner (which I encourage, it will be more fun and you will learn more). **Only groups of 2 are allowed, no larger.** If you write with a partner, you will both receive the same grade. You may ask others for help with downloading and figuring out how to use Tableau. The paper and its ideas should be developed by you or by your two-person team.

The assignment has four parts:

1. Gain familiarity with Tableau – Familiarize yourself with the visualization techniques and the user interfaces during the class presentation, and via on-line videos at <http://www.tableausoftware.com/learn/training>

2. Bring the **Country Development Indicators** data set into Tableau. You do not have to use all of the fields!

3. Develop three interesting questions about the selected data set – put yourself in the shoes of a data analyst, and think about all the different kinds of analysis tasks that a person might want to perform. For instance, someone working with international services might have analysis tasks like:

- Find all the information on Uganda
- Identify the country with the highest % of women holding elected positions.
- What is the distribution of life expectancy across countries?
- Does high GDP mean high life expectancy?

Do NOT make all of your questions be about correlations (!!) or min or max values. Think back to the different tasks and questions we have talked about in class.

4. Write a report –

Part 1 – List your three questions and answers, along with a screen shot showing the visualization you used to answer each question. One page per question – screen shot and narrative. Each question should be answered with a different visualization – so three different visualizations (e.g. not just three different maps).

Part 2 – Critique the system. What are the system's strengths and weaknesses? For what kinds of user tasks is the system particularly well suited? Focus more here on the visualization techniques as opposed to the particular user interface quirks, though you should feel free to comment on UI aspects when they are particularly good or bad. Describe characteristics of the UI using the concepts and terminology you have learned in class. This second part should be close to 2 pages.

Turn in to Canvas: Your document should be in PDF format and is limited to a maximum of 5 pages, no cover sheet. Use Times Roman 12 point type with normal margins, 1.5 line spacing. If you worked with a partner, **both of you are required to submit to Canvas**, and ensure **both of your names are on it**.