

## Steps for working with Tableau:

- 1) Download today's data – see front screen
- 2) Open tableau public
- 3) Under Connect > “To a File” > *Todays\_filename*
  - a. Select our document: “Sales-Data.csv”
- 4) Click “Sheet 1” – this is where you will make your individual visualizations
- 5) Visualization 1 – plotting a distribution of items sold
  - a. Drag “item name” to columns and drag “units sold” to rows
  - b. Using the “show me” menu in the top right corner, explore changing this visualization to different representations.
  - c. Try making the same visualization using “Sales Rep” in a **new sheet**
  - d. Name both sheets by right clicking on each tab and selecting “rename”
- 6) Visualization 2 – CHALLENGE: Who won the sales award in each country?
  - a. Problem: This dataset doesn't have a column that tracks total sales, only the units sold and price-per-unit in each sale.
  - b. We can create this data in Tableau using a **Calculated Field!**
    - i. Right click in the area showing Dimensions and Measures, and select “Create Calculated field”
    - ii. Name the calculated field something descriptive (this will be the total price of each sale)
    - iii. Drag “Price Per Unit” and “Units Sold” into the calculated field window. Separate with a \* to multiply.
    - iv. The bottom should have a message that says “this calculation is valid” – click ok.
  - c. Create a new sheet. Drag “Sales Rep” to columns and your new calculated field to rows.
  - d. Drag “Country” in front of “Sales Rep” in the columns field
  - e. Try adding and changing color by dragging attributes to “color” in the marks card
  - f. Try adding and changing labels by dragging attributes to “label” in the marks card
  - g. Make a visualization you would feel best presenting!
  - h. If you haven't, name all the sheets you have made so far
- 7) Visualization 3 – plotting countries on a map
  - a. Make a new sheet and drag “Country” into the main window – what happens?
  - b. Using the marks card, change the plot type to “map”
  - c. Add some labels and colors!
- 8) Visualization 4 – working with datetimes
  - a. Make a new sheet and drag “Date” into columns
  - b. Drag your calculated field for total sales into rows
  - c. Use Show Me (top right) to make a visualization that looks like a good start

- d. Dates are interesting data types – they can be tracked as either quantitative variables (Dec 24<sup>th</sup>, 2019 is the day after Dec 23<sup>rd</sup>, 2019) or as qualitative variables (data occurring in December, as opposed to another month). Tableau calls quantitative variables “measures” represented in green, while qualitative variables are “dimensions” represented in blue.
- e. Right click “Date” in columns – you will see two sets of options for “Year, month, day, etc.” The top group will represent as dimensions, and the bottom will represent as measures.
- f. Try representing your data as both measures and dimensions. What makes more sense for this dataset?
- g. The [+] box on “Date” can be used to \*zoom in\* on your data – see what happens!

#### 9) Creating a dashboard

- a. With multiple sheets created, we can now make a dashboard – our final tableau visualization
- b. Create a new dashboard
- c. On the left under “size” change size to “fixed” in the dropdown, and set a size of 1000x800. Because a dashboard will be represented on end-user screens, Dashboards do not resize in a flexible drag and pull way.
- d. Drag in your four visualizations! Feel free to delete any legend entries that don’t contribute to your vision.
- e. Once the visualizations are added, go to Dashboard > “Actions...”
- f. Choose “Add action” and select “Filter”
- g. Choose your map sheet for the source sheets and all other sheets for target sheets
- h. Under “run action on” choose select

#### 10) Saving your dashboard

- a. With the dashboard as the active screen, “File” > “Save to tableau public”
- b. This will save your dashboard to tableau public under your account
- c. Remember: **Tableau Public save files are just that – public!** Do not save data you can’t afford to leak.
- d. Once saved, you can share your viz as a link to your tableau public page or embed directly into your website!