Analytics Jumpstart

pandas methods for exploratory analysis

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For today

- More pandas

  ```
  df.value_counts()
  df.describe()
  df.info()
  df.reset_index()
  ```

- Intro to Exploratory Data Analysis
  - methods for learning more about the data
  - plots for learning more about the data

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Statistics and other info

series.value_counts() – returns the frequency of each unique value in a pandas series (or DataFrame column)

series.reset_index() – moves the index value to a column and converts the series to a DataFrame

df.describe() – to get summary statistics about quantitative data

df.info() – to get information about the DataFrame

df.isnull().sum() – to get counts of missing values

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Exploratory Plots

```
import matplotlib.pyplot as plt
import seaborn as sns
```

https://matplotlib.org/api/_as_gen/matplotlib.pyplot.plot.html#examples-using-matplotlib-pyplot-plot
https://seaborn.pydata.org/examples/index.html

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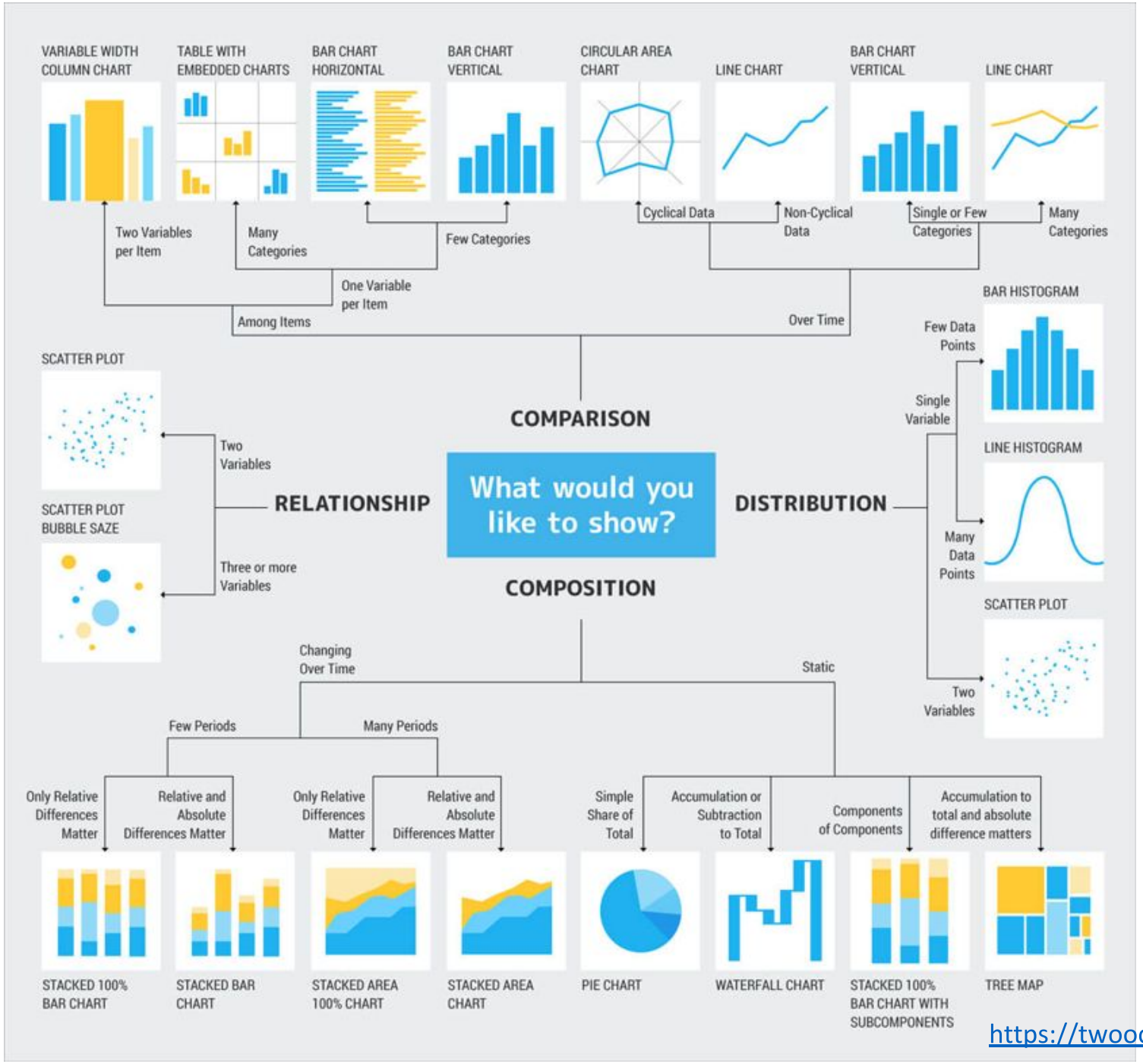

https://twooctobers.com/blog/8-data-storytelling-concepts-with-examples/

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Reminders

- Build upon your work in the same notebook each week. Just open it and add to it.
- If the code in a cell did not run as expected, modify the code in that cell (not a new one)
- Remove any unused/un-useful cells
- Beware of the changing state of objects in your notebook
    - Example – if you create a df and drop 3 columns and then go back to add code to look at the head() in the same cell, you are re-running the command to drop the 3 columns which are no longer there!

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Questions?