**ASSIGNMENT 3- FE 550**

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**Topic**

Suicide being one of the most sensitive topics and many becoming of the victim of it. I choose this topic to see if the socio-economic nature of the country also plays a role or not also, I wanted to look at the demographic.

**Data**

Data is downloaded from Kaggle. It has 12 features (country, year, sex, age group, count of suicides, population, suicide rate, country-year composite key, HDI for year, gdp\_for\_year, gdp\_per\_capita, generation (based on age grouping average).

**Research Questions**

1. How has the suicide rate change over the years?
2. Is the rate amongst women and men the same?
3. Which age groups has the highest suicide tendency?
4. Which countries has the highest and lowest suicide rates?
5. Do people from poorer countries commit suicide more than the richer countries?

These research questions are answered in the tableau story.

**Data Visualization choices**

* Line graph – I used line graph to depict the change in suicide rate over the years. I also used a regression line in the line graph to show the average rate over the years.
* Pie charts- I had two columns like sex and age group, which were categorical values and they weren’t many unique values in each column. Hence, I used a pie chart. I even used the percent of the total and displayed on the pie chart.
* Bar graphs- I had to differential between each category, hence I used bar graph as its clean and easily readable.
* Maps – I had country names in my data set. So, what’s better than to use maps. I used maps to depict each counties GDP and number of suicides over the past years.

**Principles of Interaction**

The tableau story has dashboards and sheets. They are interactive and you can select fields and filter accordingly.

Example –

Slide 2 – Has a dashboard that shows the suicide rates across age, gender and generation. This was represented using different colors also with different shades of color.

Slides 3,4,5 – has a scroll bar, which lets the user set parameters like GDP and number of suicides and look at where on the map this is happening.

The users can also filter out by choosing one or more elements they want to closely observe.

**Interactivity**

I used the slide bar to adjust the GDP and the number of suicide rates. I even used both of these together in one of the visualizations, to show how they react with each other.

**File Submission:**

* A .twbx has my tableau story along with conclusions I infer from each slide.
* This .pdf document
* .csv file of data