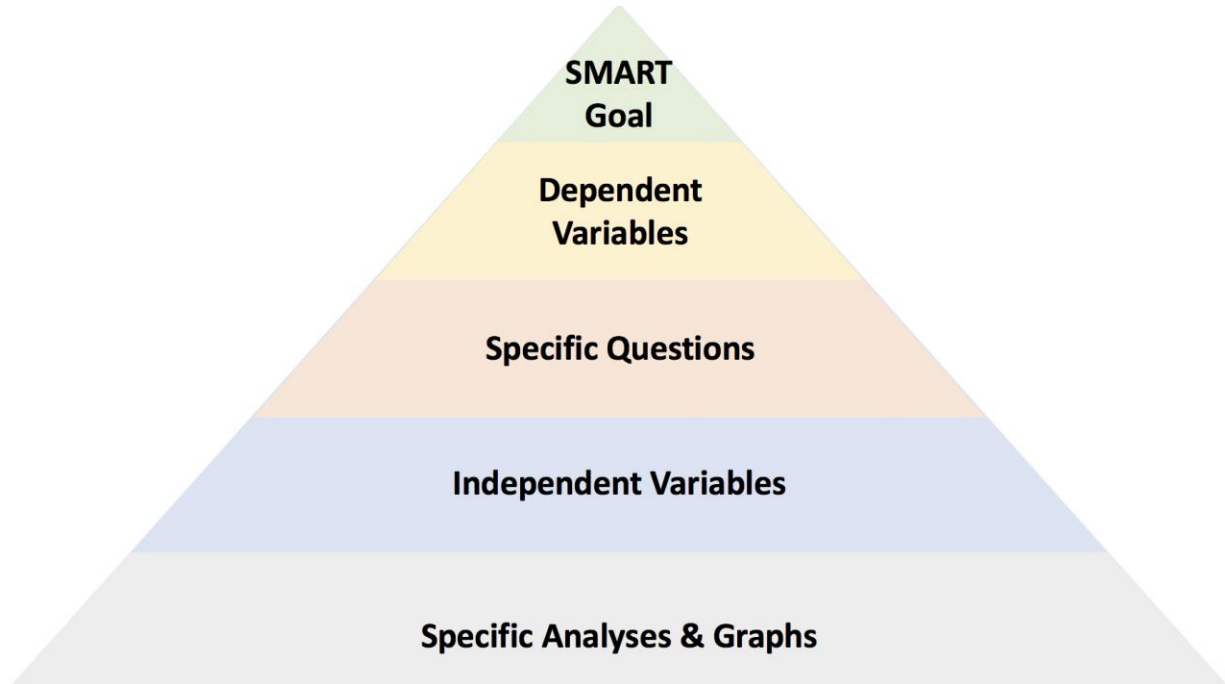


Structured Pyramid Analysis Plans



- **SMART Goal:** A goal that is Specific, Measurable, Attainable, Realistic, and Time-Bound.
- **Dependent Variables:** variables that directly pertain to the accomplishment of the S.M.A.R.T. goal.
- **Specific Questions to Investigate:** ideas and intuitions about what parameters may impact the independent variables.
- **Independent Variables:** variables that may help explain the possible connections in the questions, above, to the dependent variables.
- **Specific Analyses:** Statistical analyses and plots of independent versus dependent variables.

Goal:

In the span of 29 years (i.e. 1985- 2014) analyze the overall suicide trend whether it has been increasing or decreasing and determines which factor caused (or impacted) the trend to change, compared to previous years.

Relevant dependent variable:

1. **Total No of Suicide:** Suicide no field, for each individual country according to each year.
2. **Total No of Suicide/100k:** Suicide_100k_pop field, no of deaths by suicide for total 100,000 deaths.

Specific Questions:

1. Which age-group of people or gender mostly have been the victim of suicide, the most considering there demographical and biographical information.
2. How the suicide rate evolves during the long period of time?

Independent Variables:

For 1st question: population, age-group, sex, country, country, year, generation

For 2nd question: population, HDI.for.year, gdp_for_year, gdp_per_capita

Specific Analyses & Graphs:

- Age-group Histogram
- Suicide vs years (Male & female) Graph plot.
- GDP vs years Line plot.
- Suicides 100k vs GDP per capita Box plot
- Correlation between quantitative variables
- Analysis of Variance. ANOVA
- Multivariate Analysis.

KPI: It stands for Key Processing Index. It can be achievable by determining what is your objectives, how you plan on achieving them, and who can act on this information. The following are the KPI's which will help us to evaluate and determine the final analysis.

<u>KPI's</u>
Total No of Suicide
Total No of Suicide/100k
age-group
sex
HDI.for.year
gdp_for_year
gdp_per_capita
population

KPIs need to be defined according to critical or core business objectives. Following steps helps to define a KPI:

1. What is your desired outcome?
Prevention of suicides considering different parameters.
2. Why does this outcome matter?
By analyzing the parameters, it would help us to determine the key factors affecting the suicide number in the population, monitoring the trend in the suicides.
3. How are you going to measure progress?
Progress will be measured by comparing affects made by age and sex variable or age and population.

4. How can you influence the outcome?

To find out the most affecting parameter that causes suicides so that we can optimize it and reduce the suicide number.

5. Who is responsible for the business outcome?

We have considered different variables independent, dependent which will go through the specific analysis mentioned in SPAP and hence, it will help us to achieve the desired goal.

6. How are you going to measure progress?

The progress can be measured by analyzing the trend of suicides.

7. How often will you review progress towards the outcome?

Will be reviewing on a quarterly basis to see the trend.

Hypothesis:

1. People between ages of 15-24 are the most potential group for attempting suicide. These group of people are mostly belonged to generation x that had tough life and struggled with some issues like parent's divorce.
2. Reviewing the data set as the gdp is increasing, suicide rate has also been increasing in average but there is not a linear relationship between them.