## Steps for doing a case study

## Research Study

- 1. Defining the problem
  - a. What parameters are associated with your study?
  - b. How many observations are necessary for a valid comparison?
  - c. What type of experimental design would produce the most effective comparison?
  - d. What are the valid statistical procedures for making the comparisons?
  - e. What type of information should be included in a final report to determine the evaluation?
- 2. Collecting the data
  - a. How did we collect the data?
  - b. Clean the data.
- 3. Summarizing the data
- 4. Analyze the data
- 5. Report the conclusions
  - a. Statement of objective for study
  - b. Description of study design and data collection procedures
  - c. Numerical and graphical summaries of data set
  - d. Description of all inference's methodologies
    - i. T and F-test?
    - ii. T based Confidence Interval on mean
    - iii. Chi-square based on Confidence Interval on Standard Deviation
    - iv. Verification that all necessary conditions for using inference techniques were satisfied
  - e. Discussion of results and conclusions
  - f. Interpretation of findings relative to previous steps
  - g. Recommendations for future studies
  - h. List of data sets
  - i. List of references