# chu\_data\_life\_cycle

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#### R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see http://rmarkdown.rstudio.com.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

#### summary(cars)

```
##
        speed
                          dist
##
           : 4.0
                    Min.
                            : 2.00
    Min.
    1st Qu.:12.0
                    1st Qu.: 26.00
##
##
    Median:15.0
                    Median: 36.00
##
    Mean
            :15.4
                    Mean
                            : 42.98
    3rd Qu.:19.0
                    3rd Qu.: 56.00
    Max.
            :25.0
                    Max.
                            :120.00
```

## **Including Plots**

You can also embed plots, for example:



Note that the echo = FALSE parameter was added to the code chunk to prevent printing of the R code that generated the plot.

- 1) Generate: Happens passively on your part, but it's good to know how it works in your field.
- 2) Plan: Devise a protocol for your data: fields, metadata, how it's going to be collected, etc.
- 3) Collect: Actually go out and get the data. Ensure the process is sound, no unintended bias.
- 4) Process: Make sure the data is formatted correctly, all correct metadata is assigned, and goes through whatever transformations are necessary
- 5) Analyze: Do your analysis.
- 6) Discuss: Discussion phase of a research paper