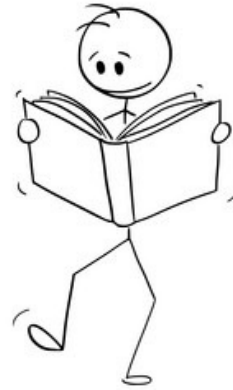
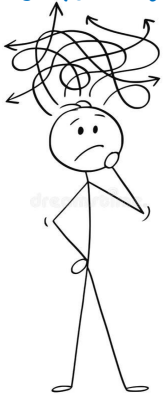


# Assessment



What do I need to do?  
Where do I start?



What tools do I need?  
Template Notebooks



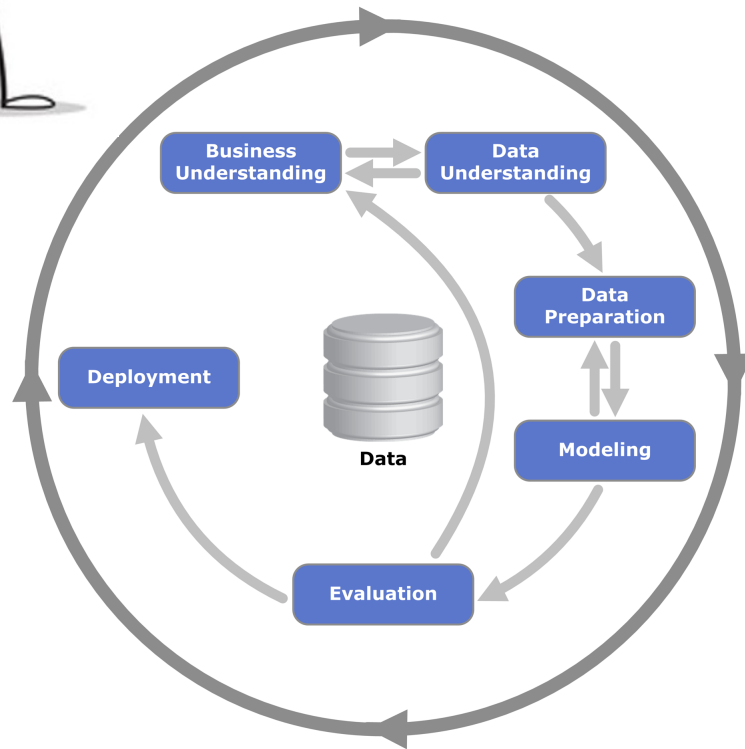
Read the assessment  
Read data description  
What can I figure out?



Review what was covered  
Review Notes  
Review Notebooks



Remember the Process  
(see Notebook layout)



### 1. Business Understanding

What's the problem?  
What is required?  
What is needed?

Week 1 + 2



### 2. Data Understanding

What data do you have?  
Can you load the data?  
Can you do some Charts?  
Can you do some Stats?

What can you learn about the data  
from doing this?  
What's your understanding of the data?  
Any low-hanging fruits?

Week 2 + 4



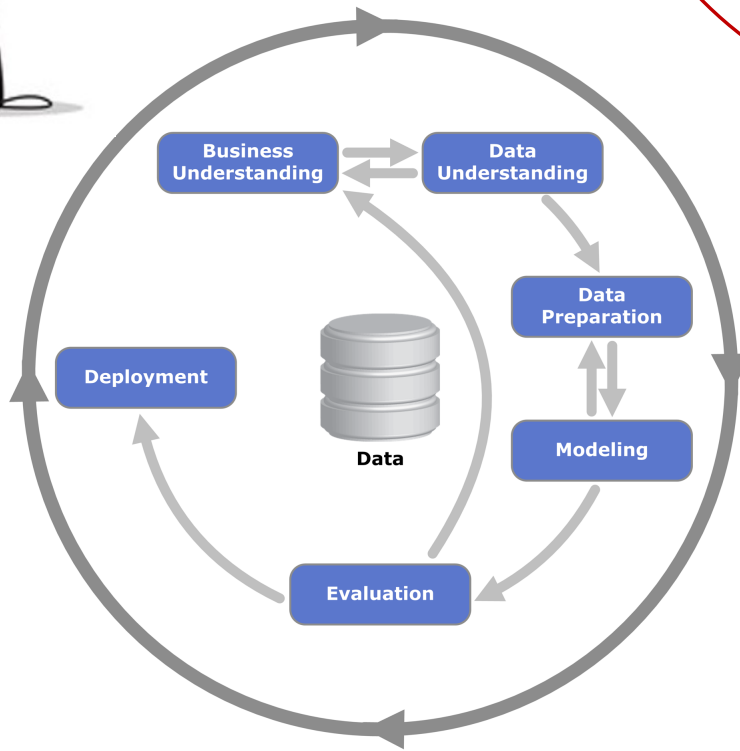
### 3. Data Preparation

Is the Data Clean?  
Do I need to do any Data Cleaning?  
Do I need to do any Data Transformations?  
Are there any features I need to remove & why?  
Anything else I need to do with the data? & why?  
Training & Test datasets.

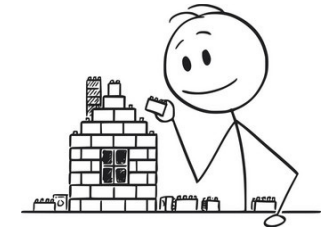
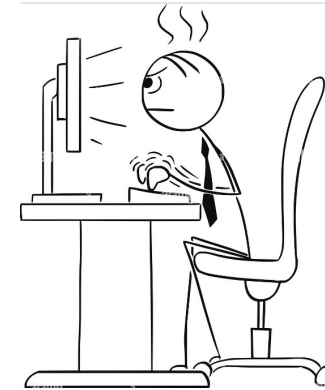
Week 4 + 5



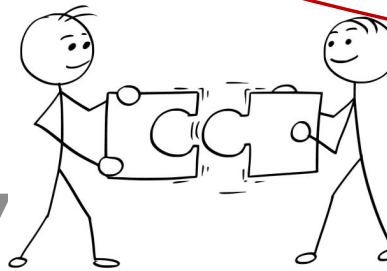
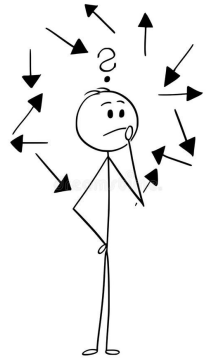
Remember the Process  
(see Notebook layout)



4. Modelling  
Create (lots of) models  
Try different algorithms  
Try different Tuning/  
hyperparameters  
Week 5 + 6 + 7



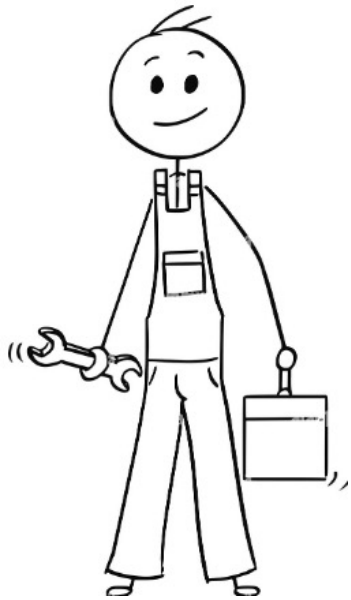
5. Evaluation  
How good are the models  
Evaluation measures  
Is the model any good  
Can I improve things?  
Week 5 + 6 + 7



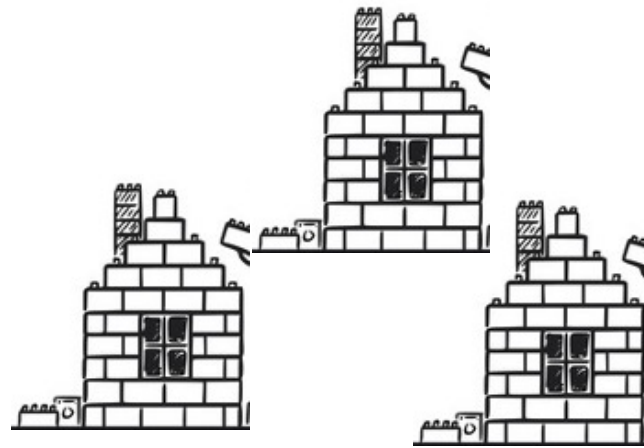
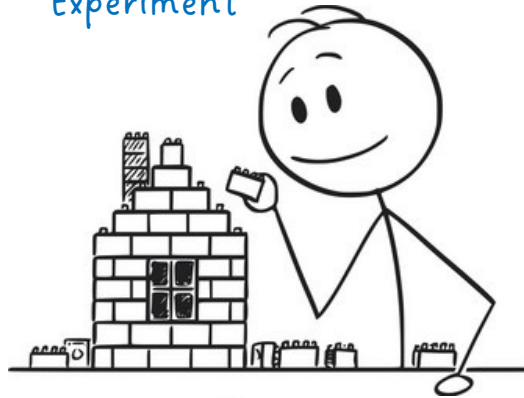
6. Outcomes  
You have found a good model  
You have some understanding of what  
is happening  
Can you explain that  
Week 5 + 6 + 7



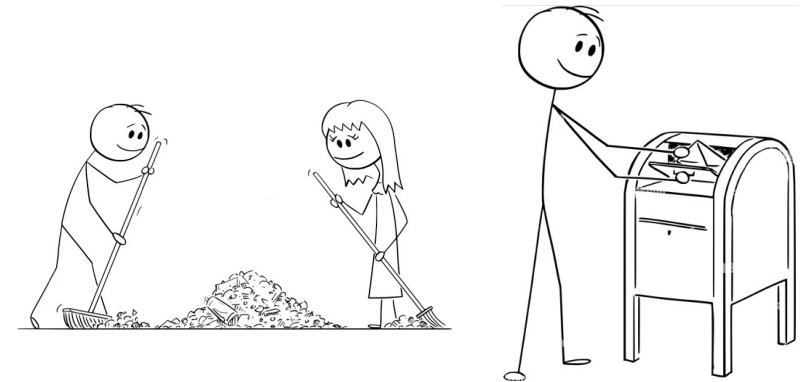
Notes  
Notebooks  
Different Datasets  
Toolbox of skills



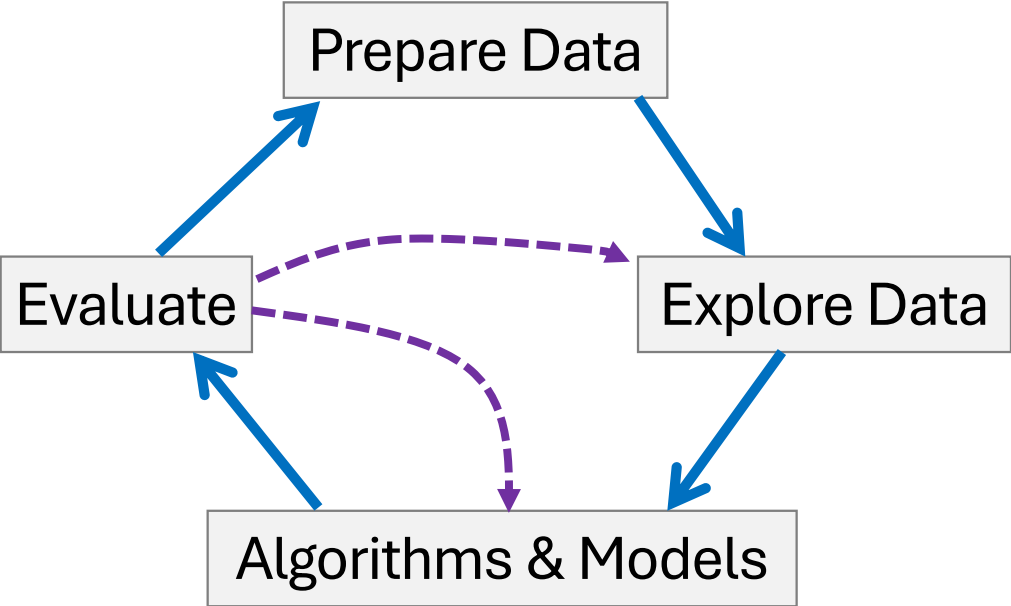
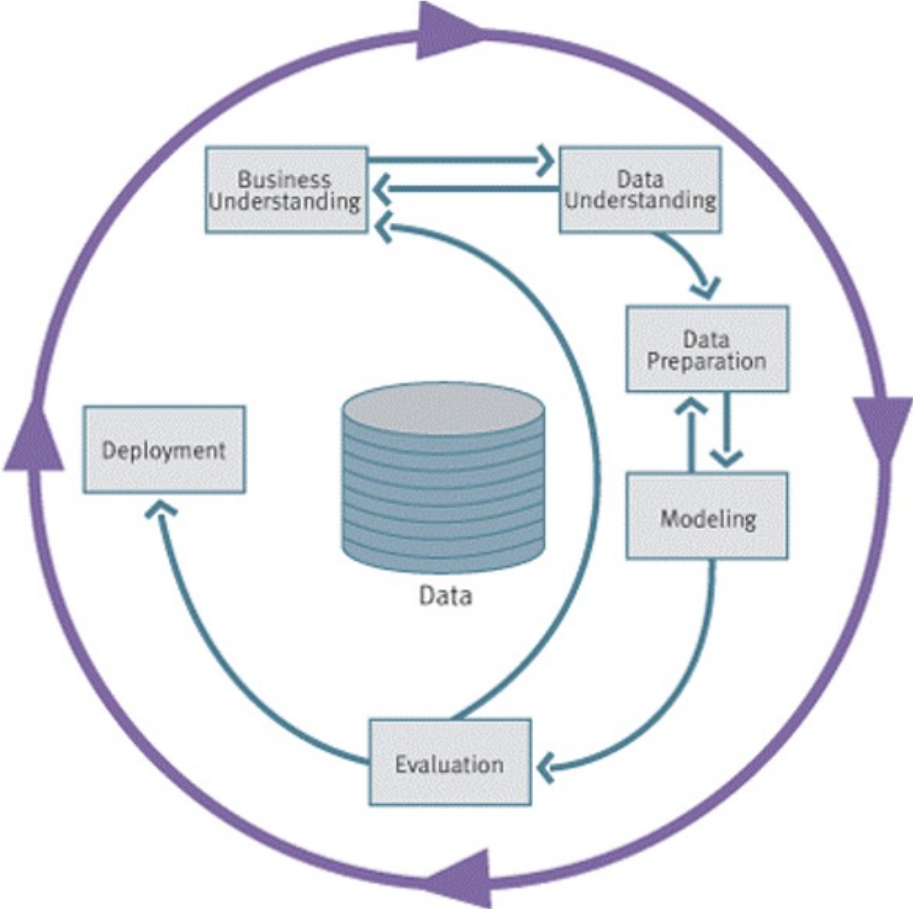
New Dataset  
Follow the process  
Apply skills to new Dataset  
Build, Evaluate - Redo - Repeat  
Experiment

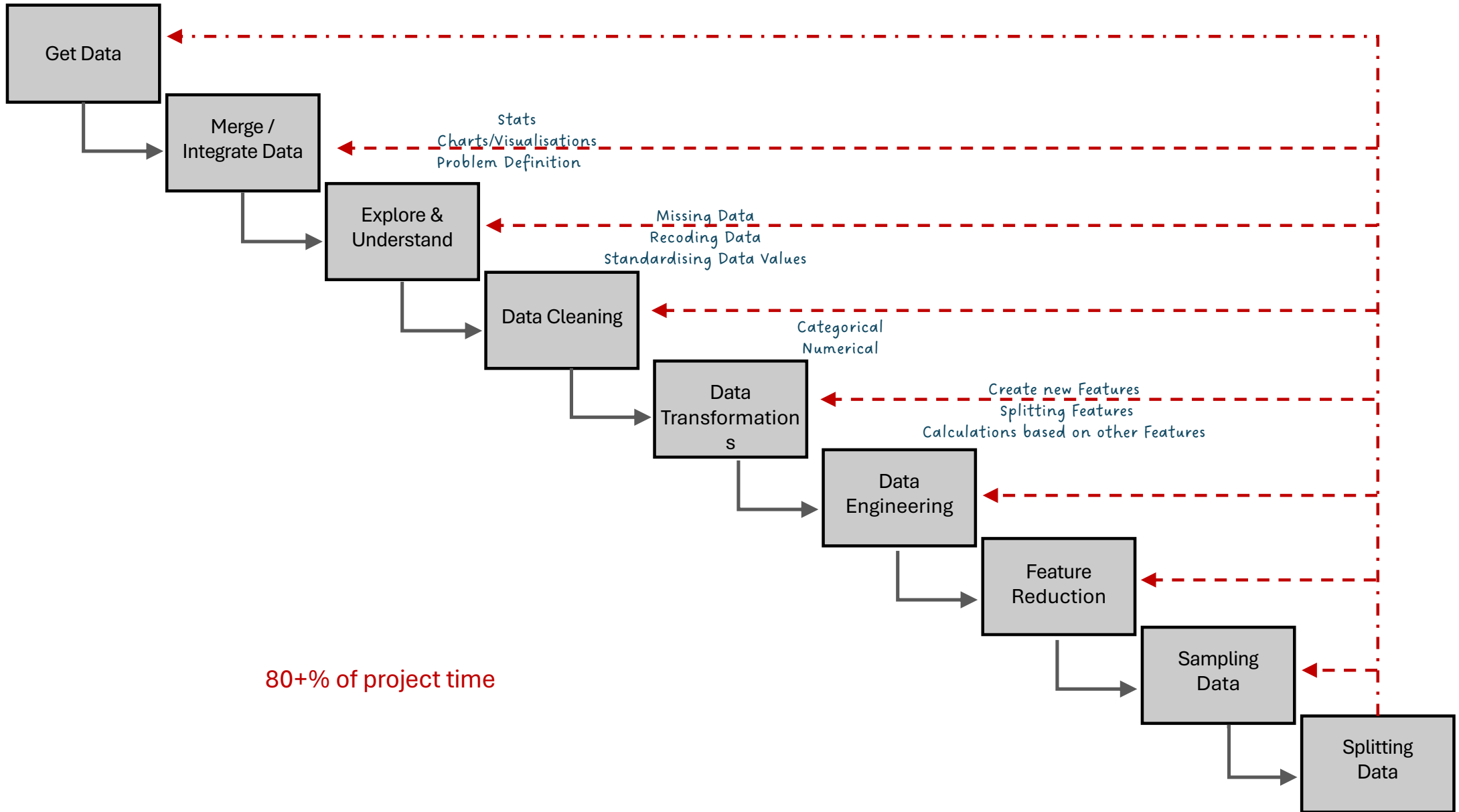


Can you do it?  
Some - is ok  
Lots - is great  
How much can you do?  
How good is your solution?  
Can you explain it?  
Tidy up everything



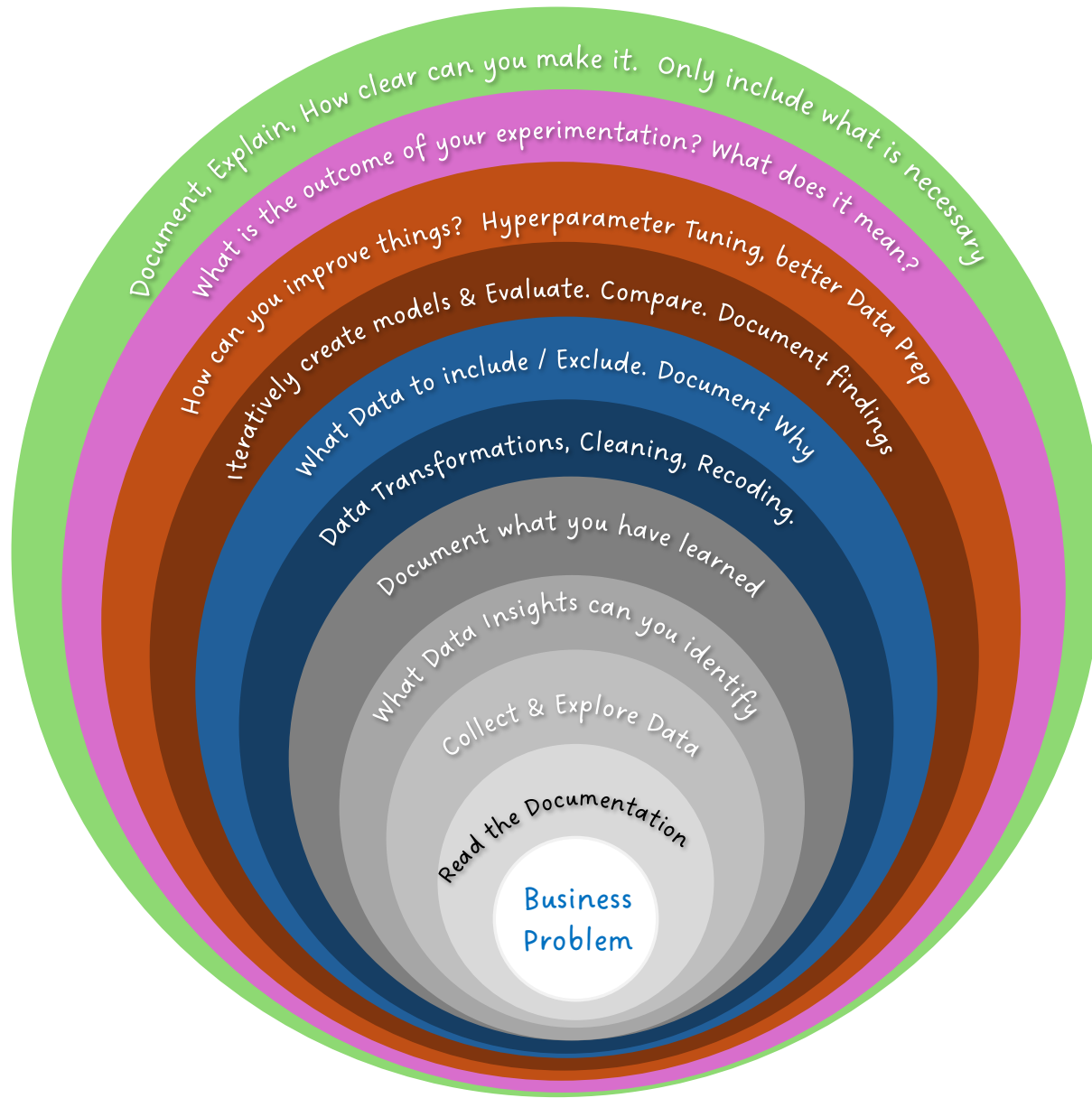
# The work is **Iterative**



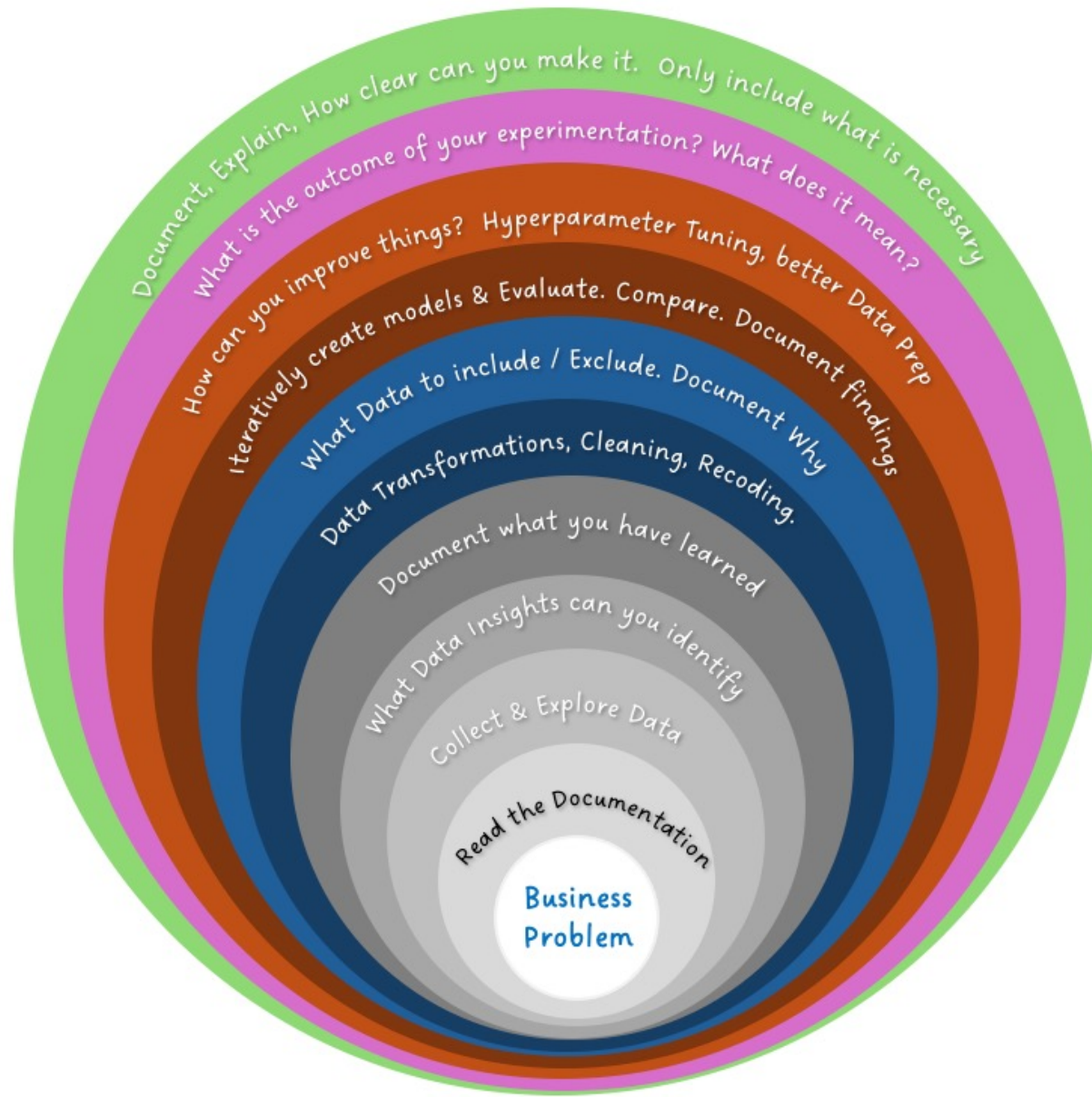


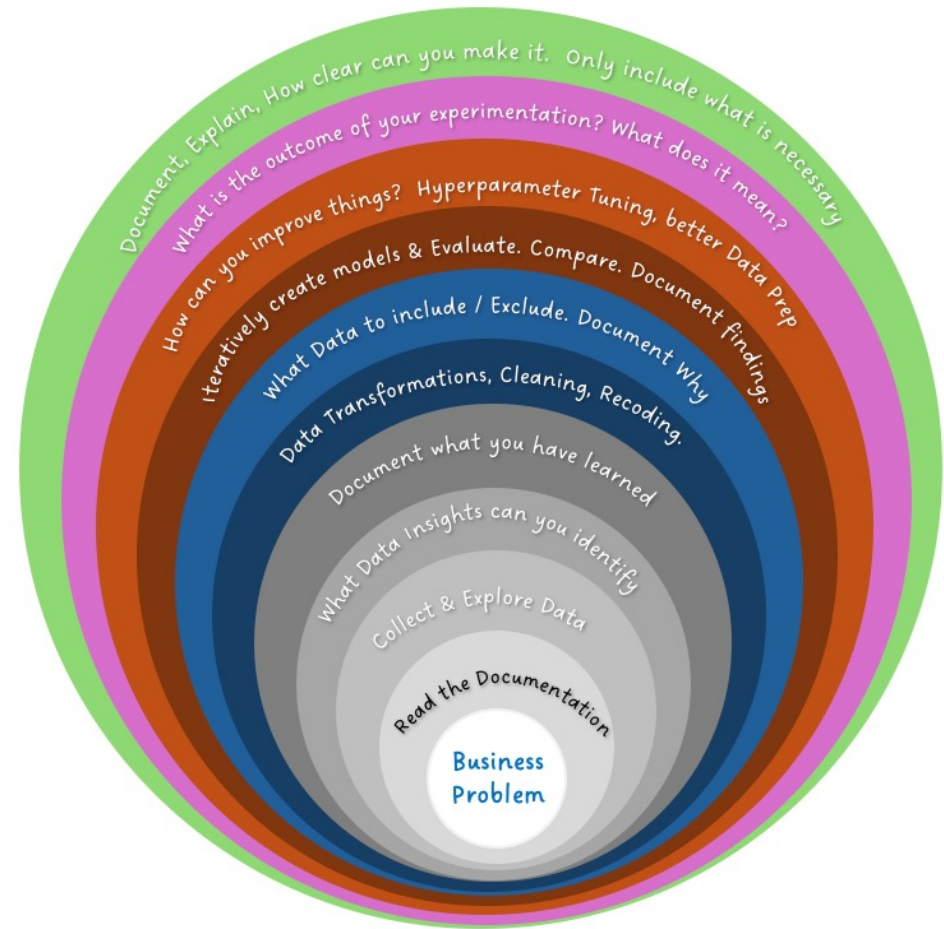


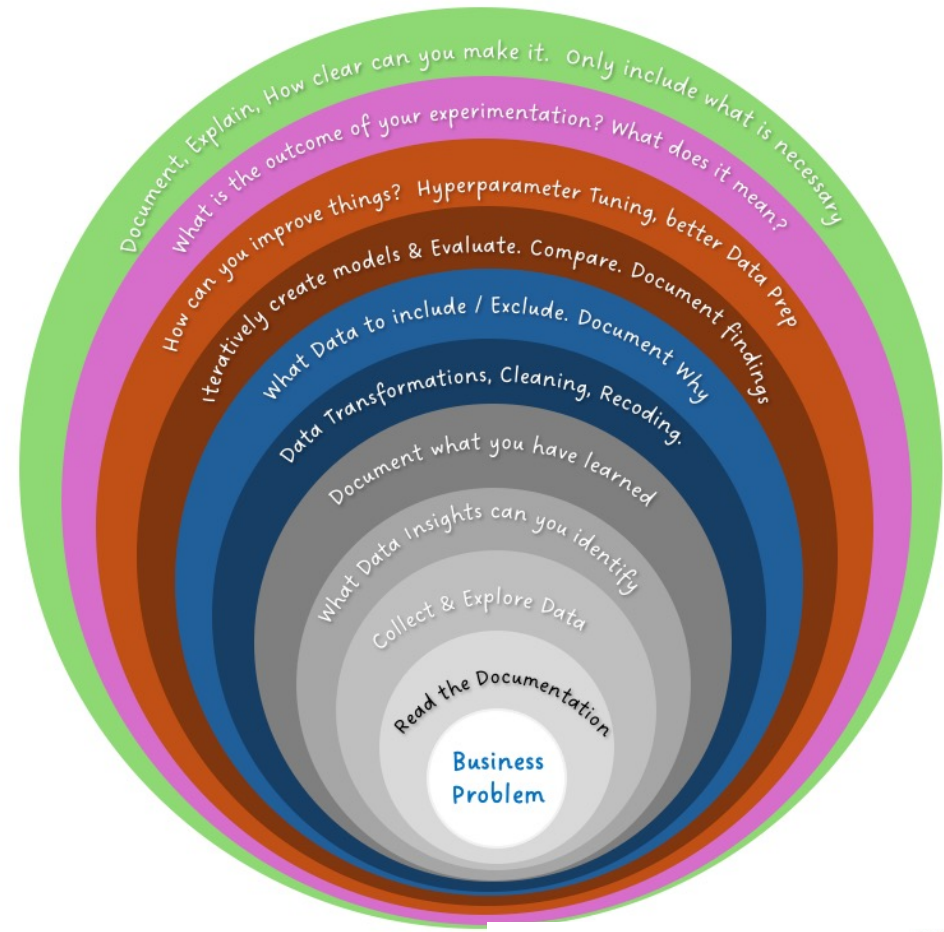
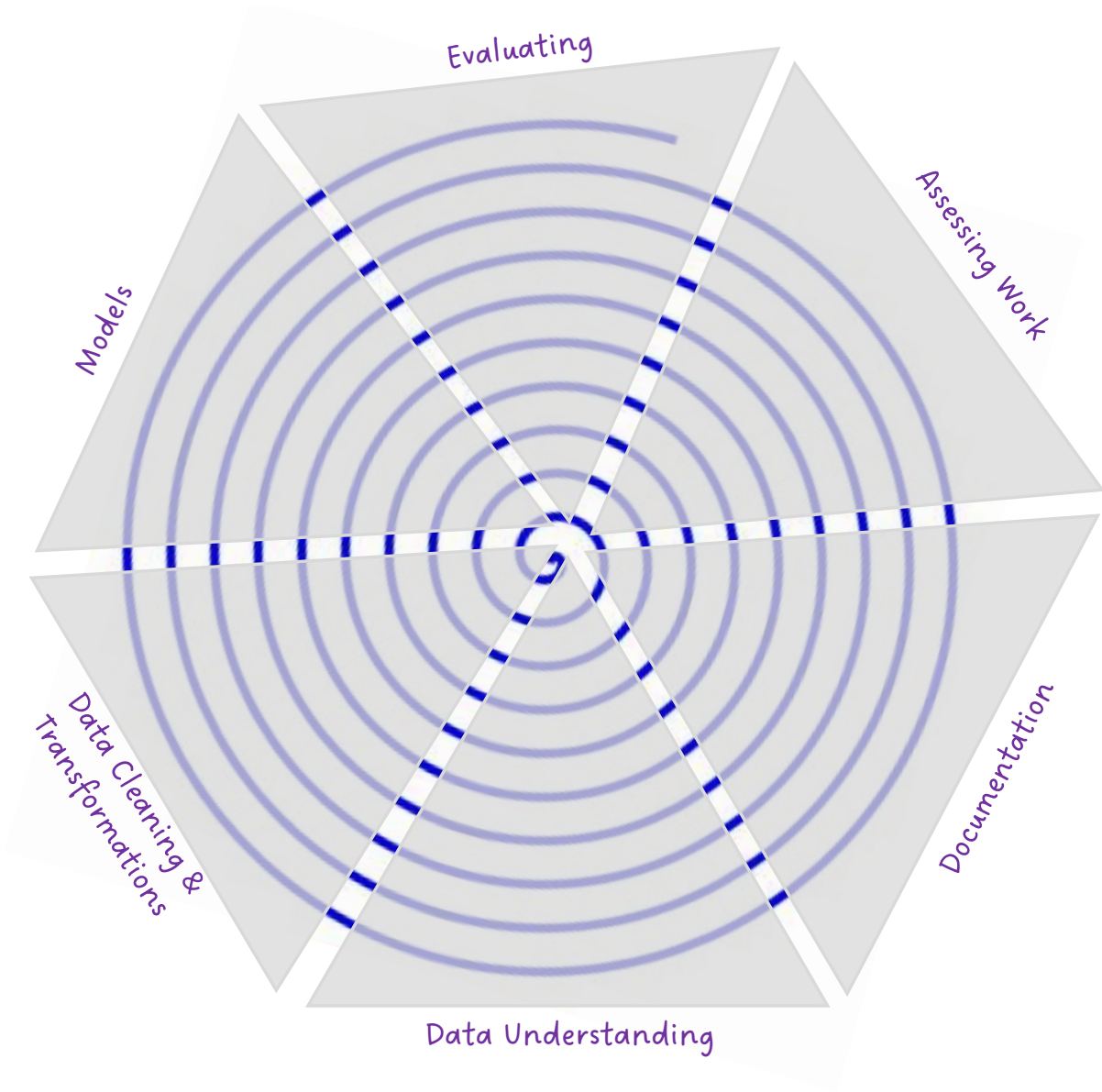
Business Problem











## Documentation is Key

- Explain each step
  - Explain why you included/excluded features or other things
  - Explain what is shown in a table/diagram/chart etc
  - If you do something, can you explain Why and what you Learned
  - Explain what you learned or discovered at each step
  - How would you explain this to your Boss? If this was for work?
- 
- You don't have to document everything - just the cleaned-up process
  - Add as Comments or as Markdown
    - Comments - for Code
    - Markdown - for discussion
- 
- Experimentation is Key
    - Iterate - Non-linear
    - Evolve with each Iteration (you might Discover something and have to go back to fit it in and re-do)
    - Discuss with Team/Group - You will learn from each other - This is part of the learning process
    - There isn't (necessarily) one correct solution. There could be many. "It Depends!"

