

The Hamster Wheel and the How and Why of Agile Data Science

©Ron Neely

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The Question?

Doing vast amounts of homework with my pets led me to wonder:

How do

- **Cats**
- **Hamsters**
- **Hamster Wheels**

relate to **Data Science?**



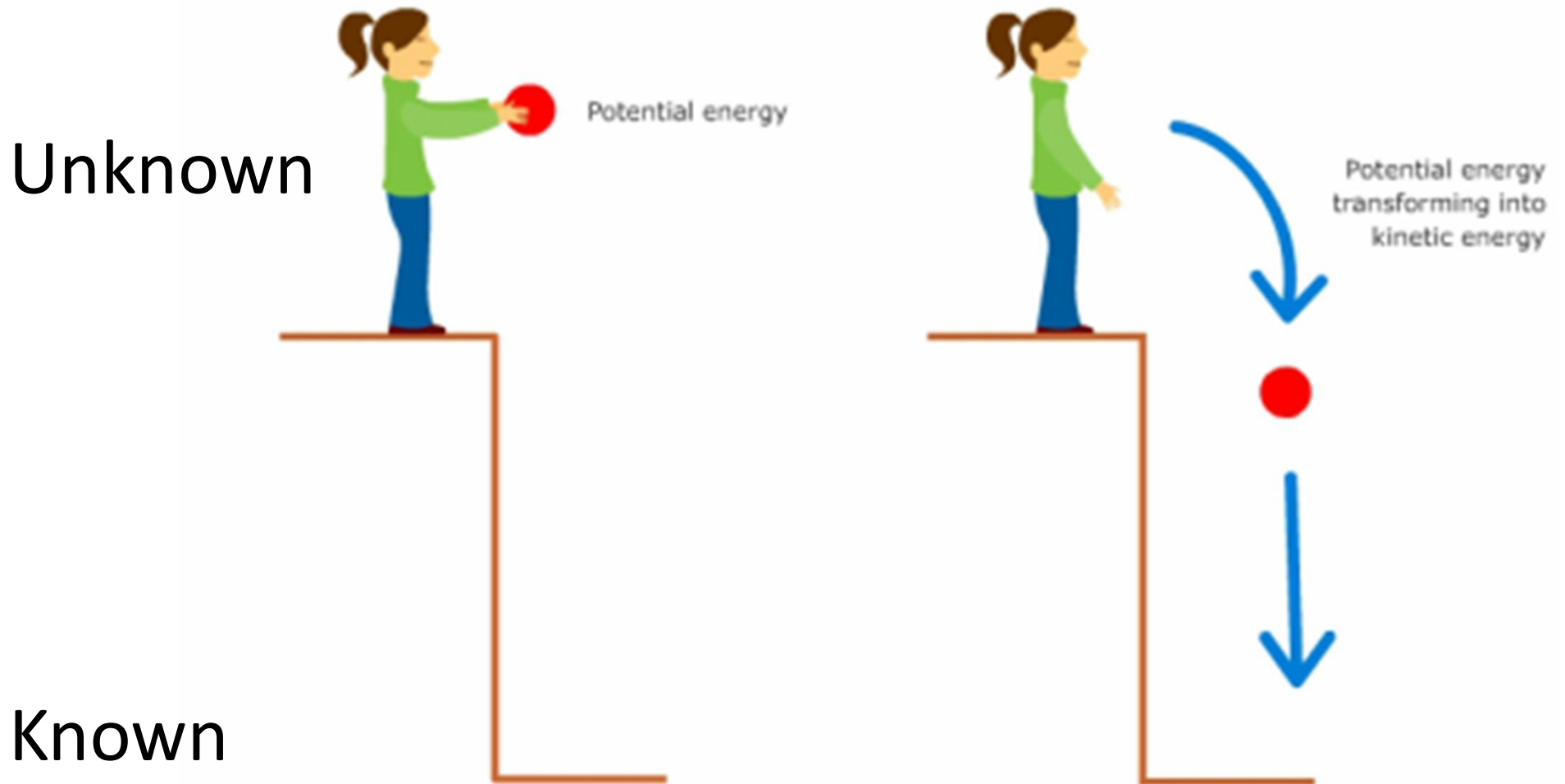
Or, was I doing too much homework?

Found Answer on My Favorite Tee

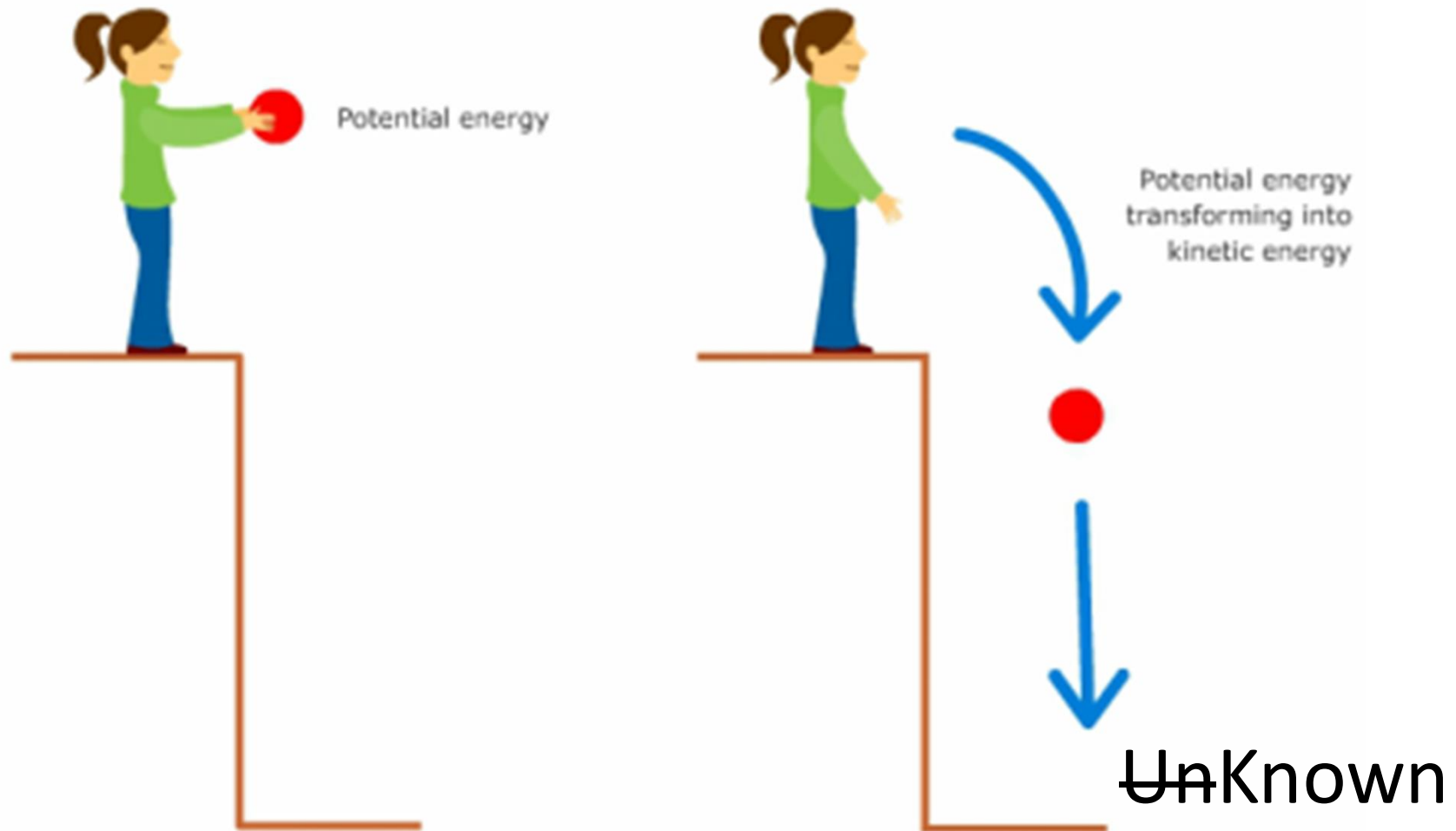


Curiosity = Desire To Know the Unknown

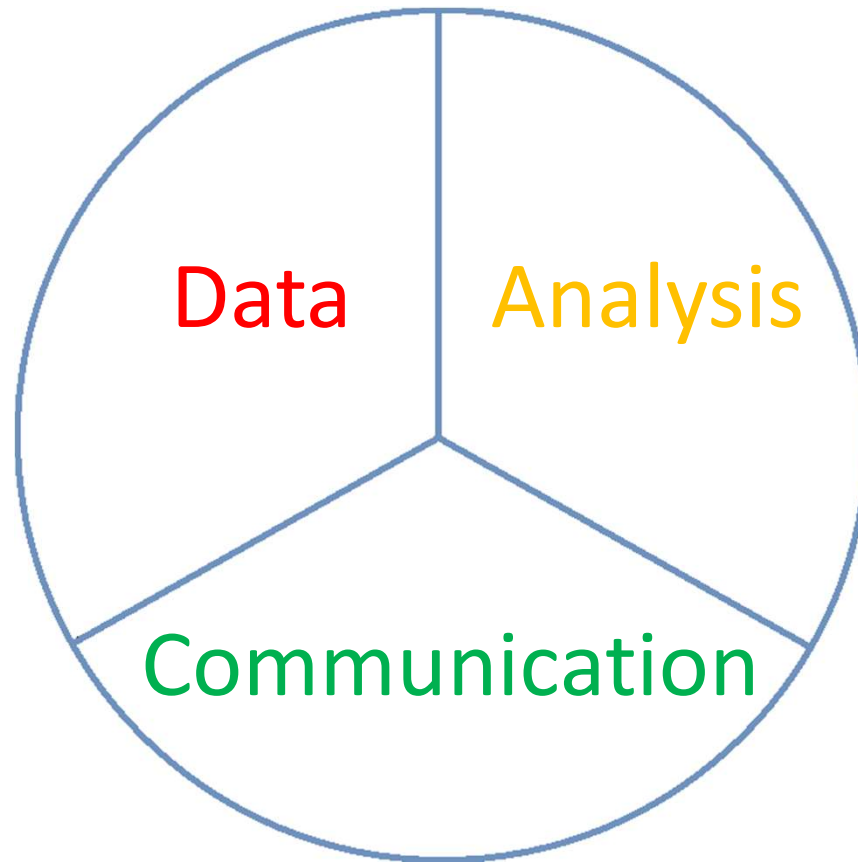
Curiosity = Potential Energy



Data Science Projects -> How to Know Unknown



3 Components of a Data Science Project



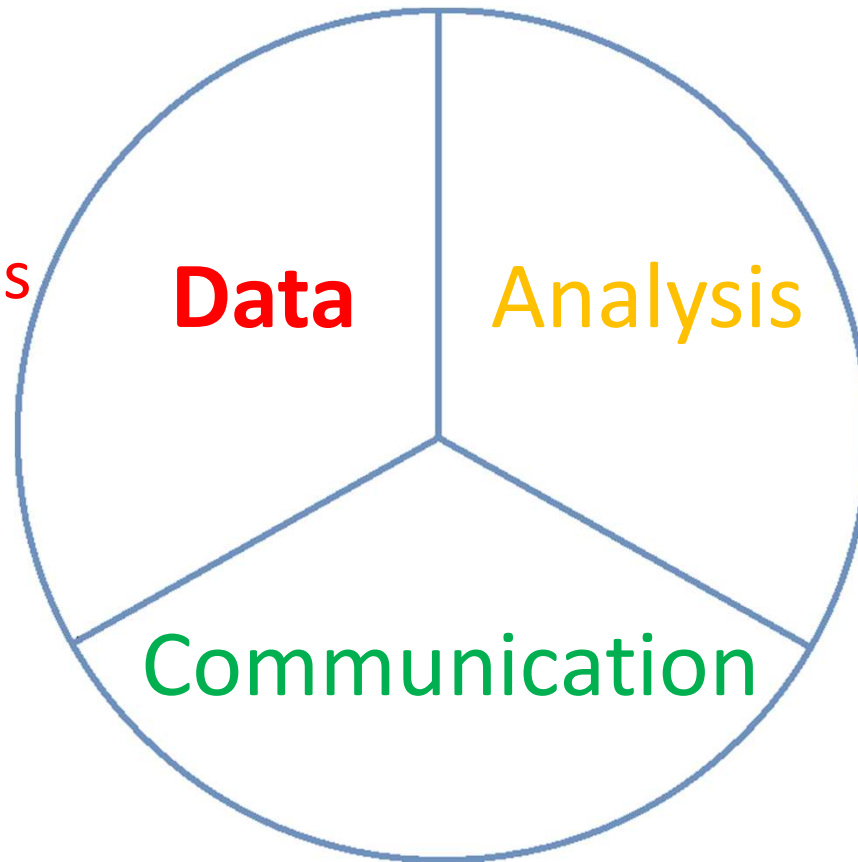
3 Components of a Data Science Project

Facts

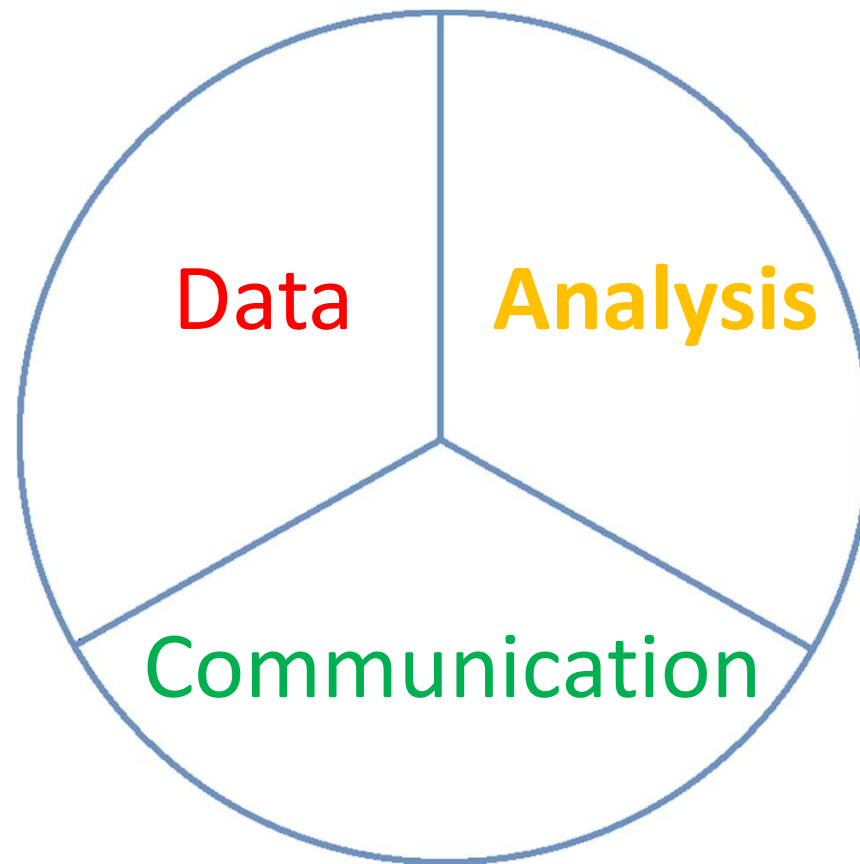
- Real World

Info

- Gathered Facts



3 Components of a Data Science Project



Data

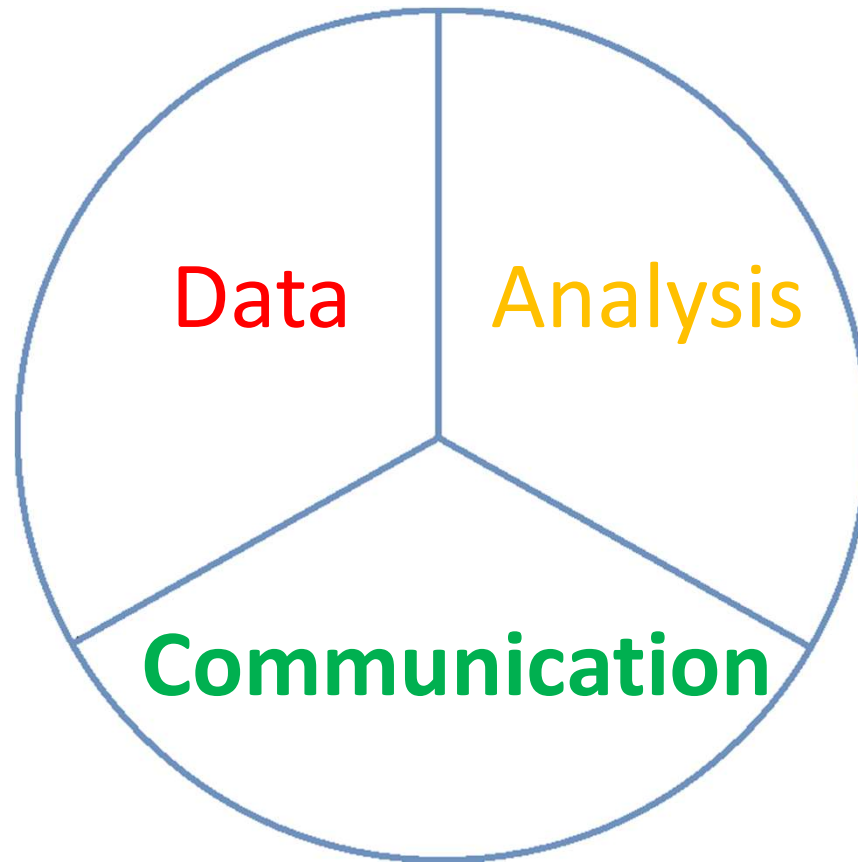
- Cleaned
- Digested

Models

- Math
- Simulation
- Prediction
- Machine Learning

Visualizations

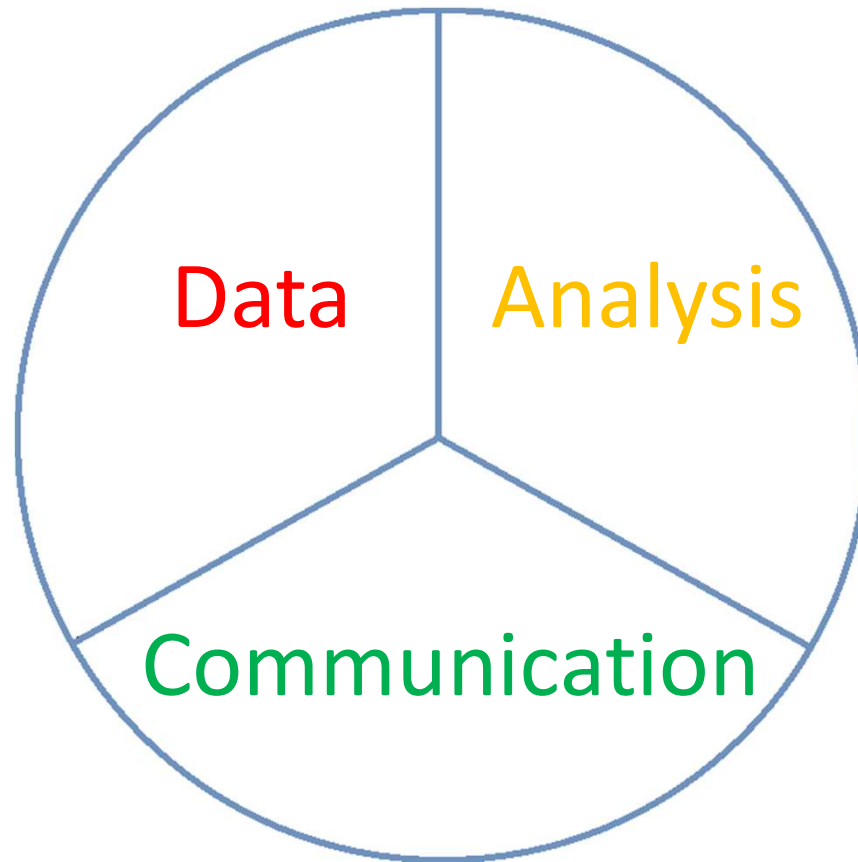
3 Components of a Data Science Project



Verification = Client Agreement + Reality Check

- Reports
- Presentations
- User Interfaces

Most Important for **Working** Data Scientists

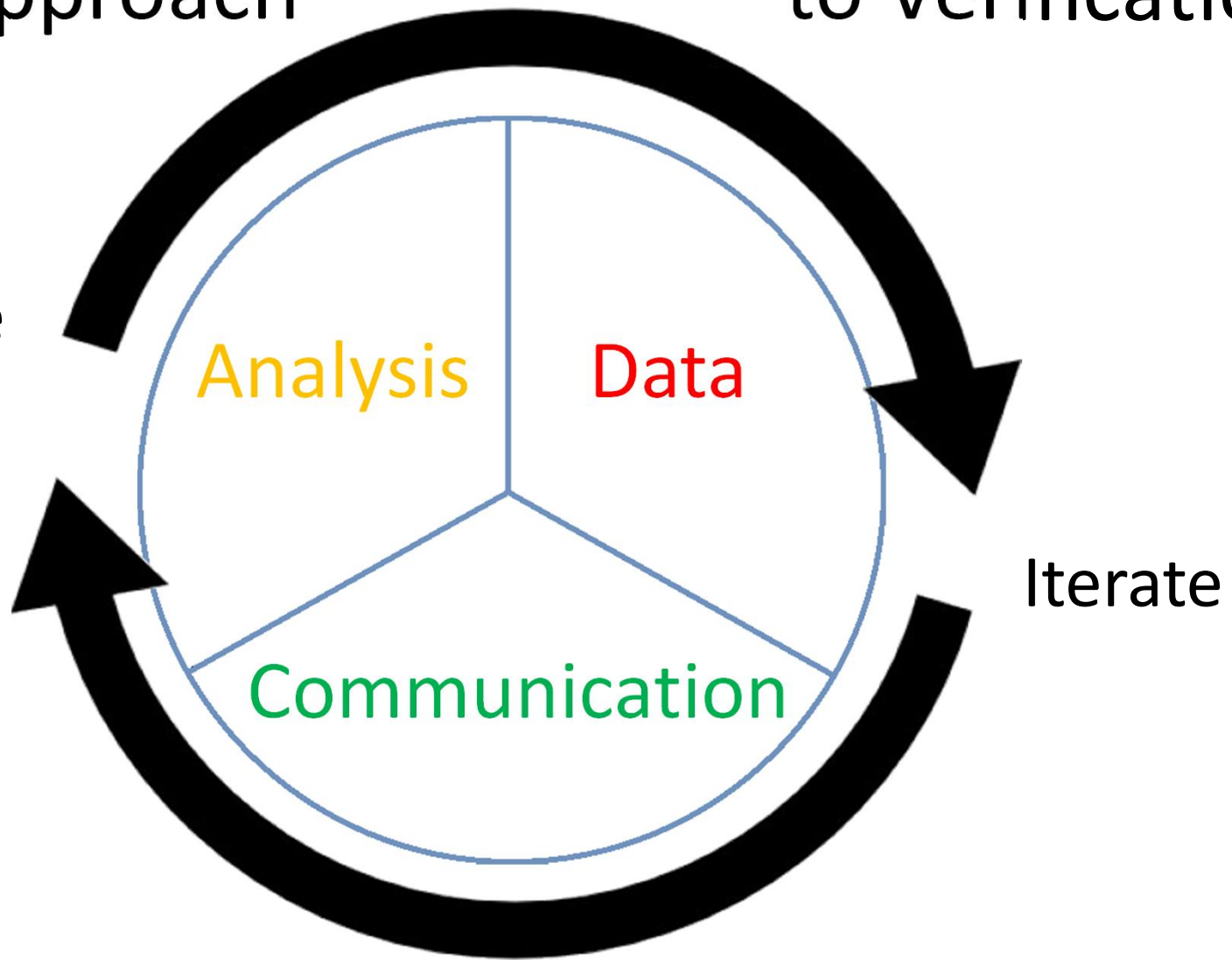


Verification = Client Agreement + Reality Check

Agile Approach

to Verification

Iterate



Iterate

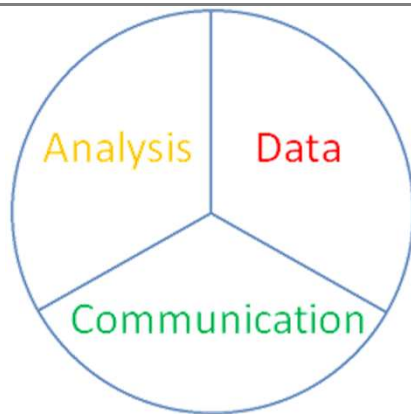
Verification = Client Agreement + Reality Check

The Data Science Project Wheel

Why? - because we (i.e. the client) wants to know

How? - iterate Data, Analysis, & Communication

Unknown

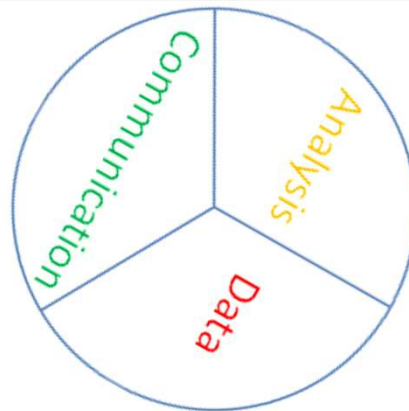


Known

The Data Science Project Wheel

Keep going until

Unknown

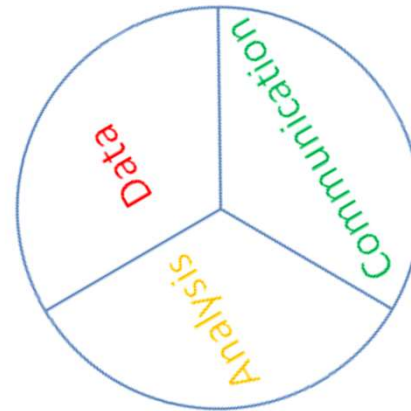


Known

The Data Science Project Wheel

Keep going until

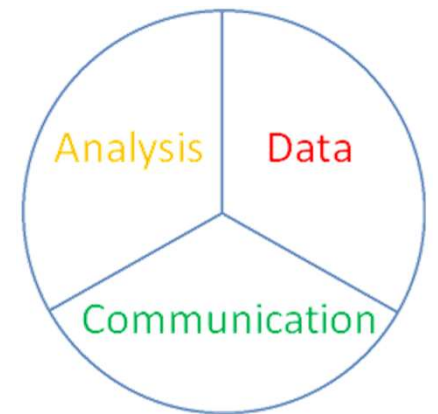
Unknown



Known

The Data Science Project Wheel

the client knows what they want



~~Unknown~~

Or Until the Cat is Curious Again



Thank You 😊