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

©Ron Neely

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The Question?

How do

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

relate to **Data Science**?

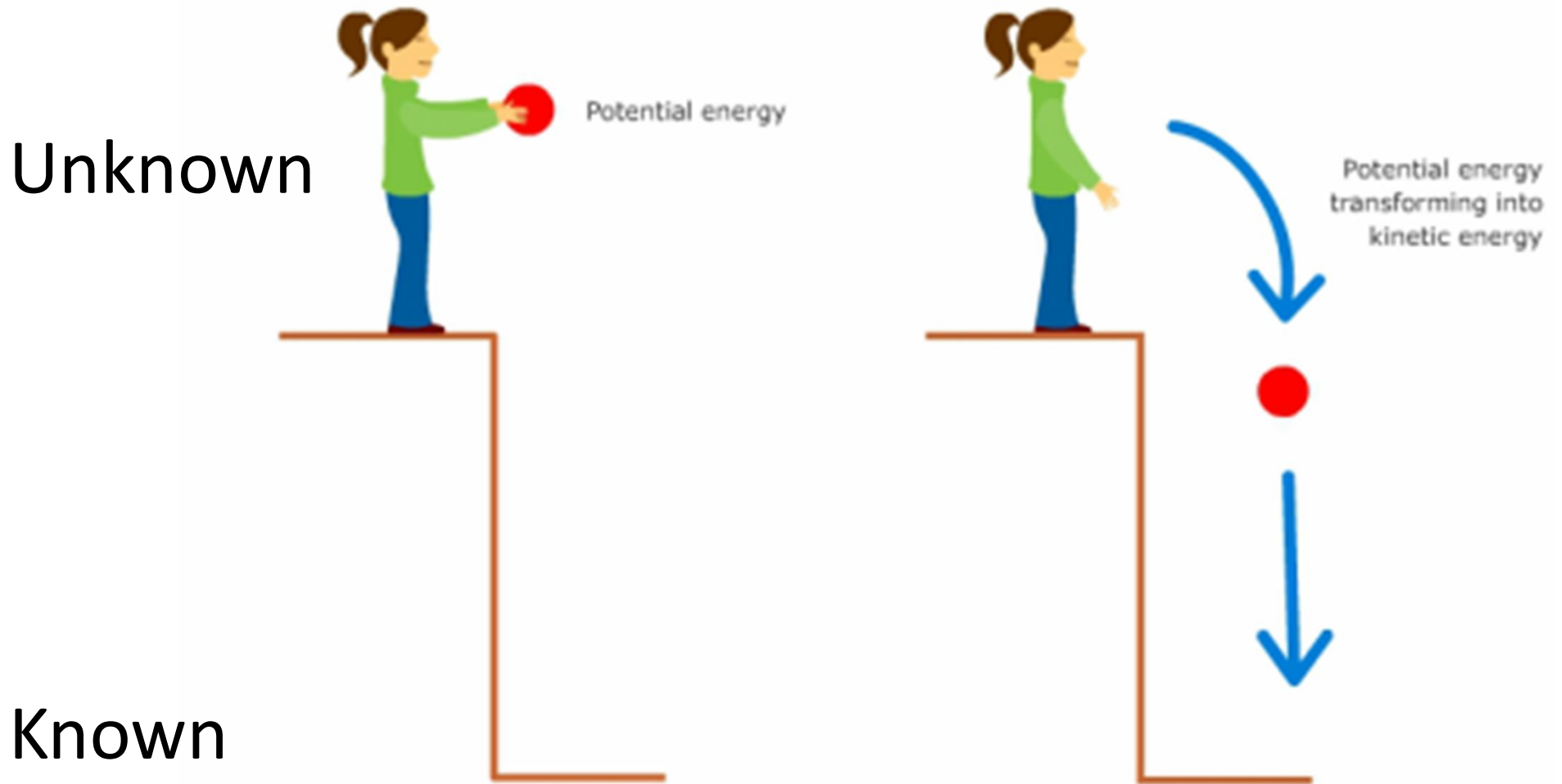Or, was I doing too much **homework**?
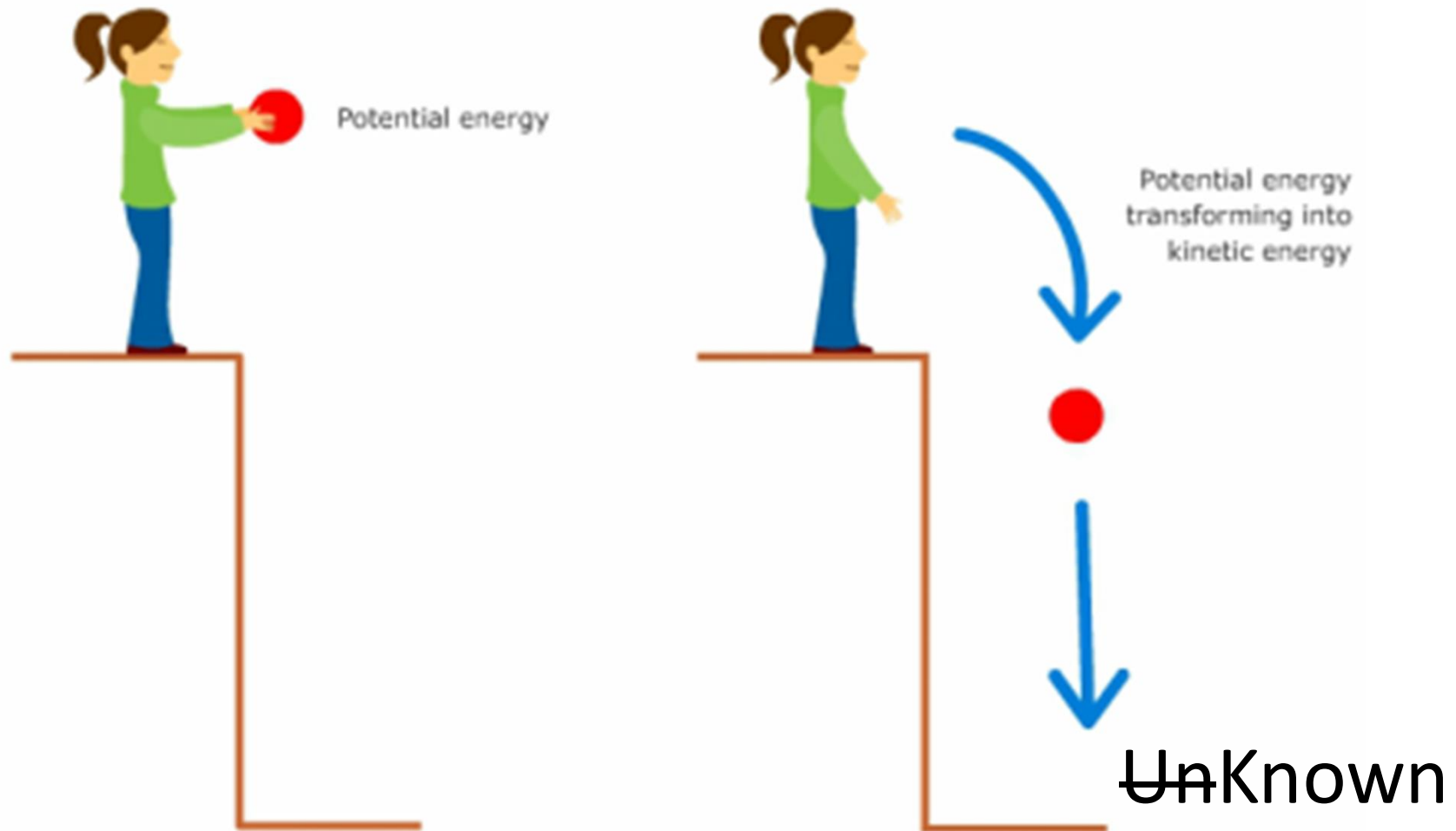
Found Answer on My Favorite Tee
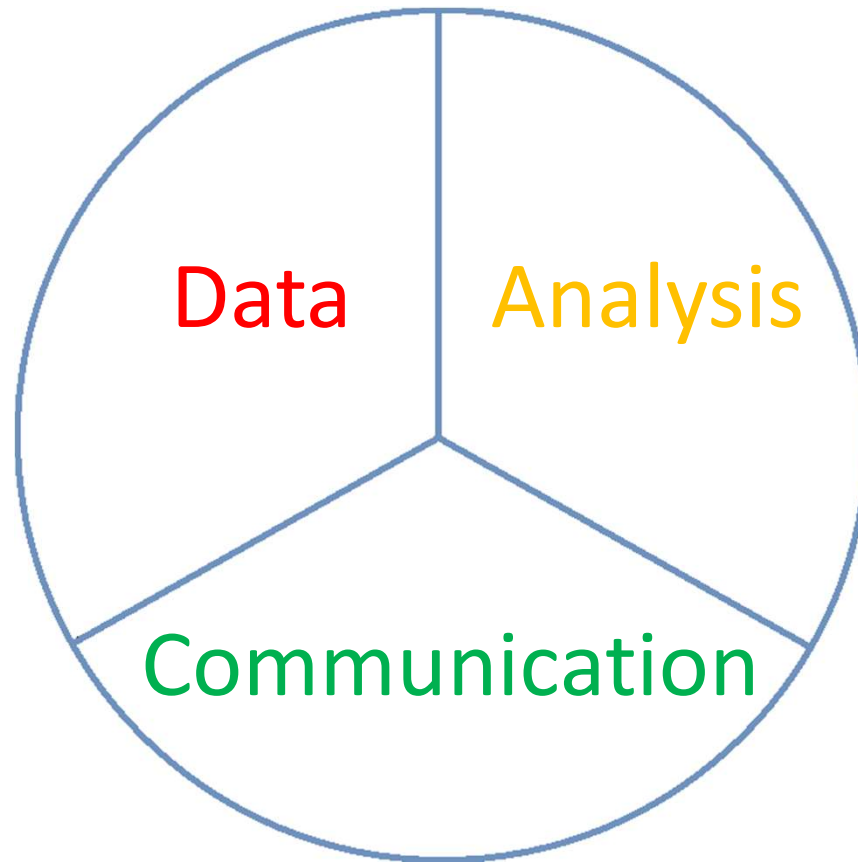

Curiosity = Desire To Know the Unknown

Curiosity = Potential Energy

Unknown

Potential energy

Potential energy transforming into kinetic energy

Known

Data Science Projects -> How to Know Unknown

Potential energy

Potential energy transforming into kinetic energy

~~Un~~Known

3 Components of a Data Science Project

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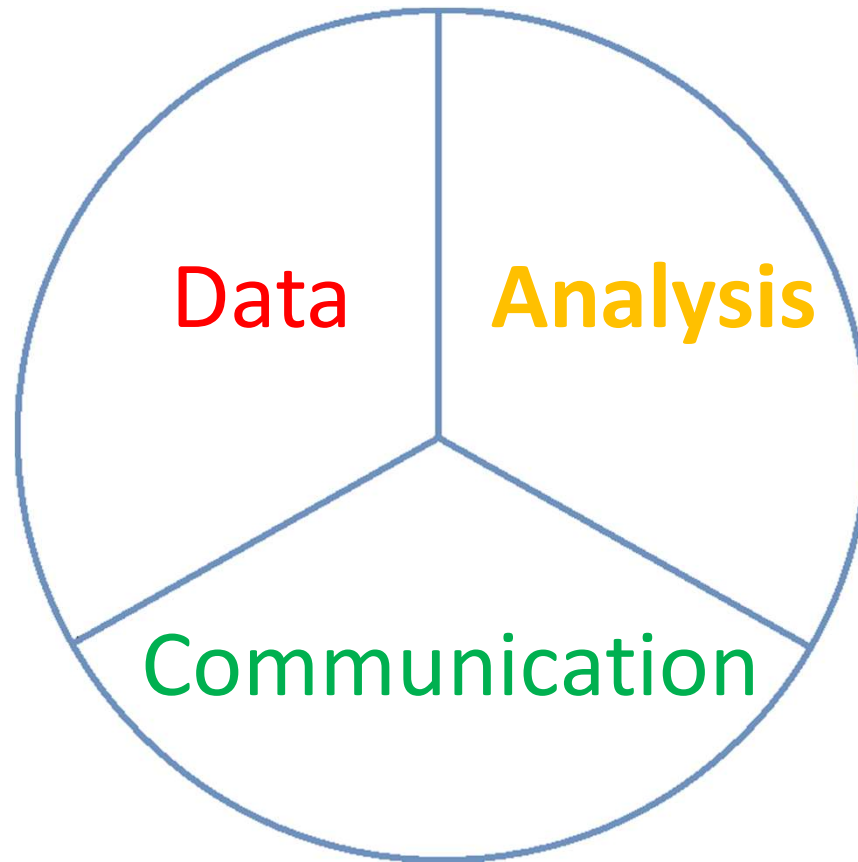
Facts
- Real World
Info
- Gathered Facts

Data Analysis

Communication
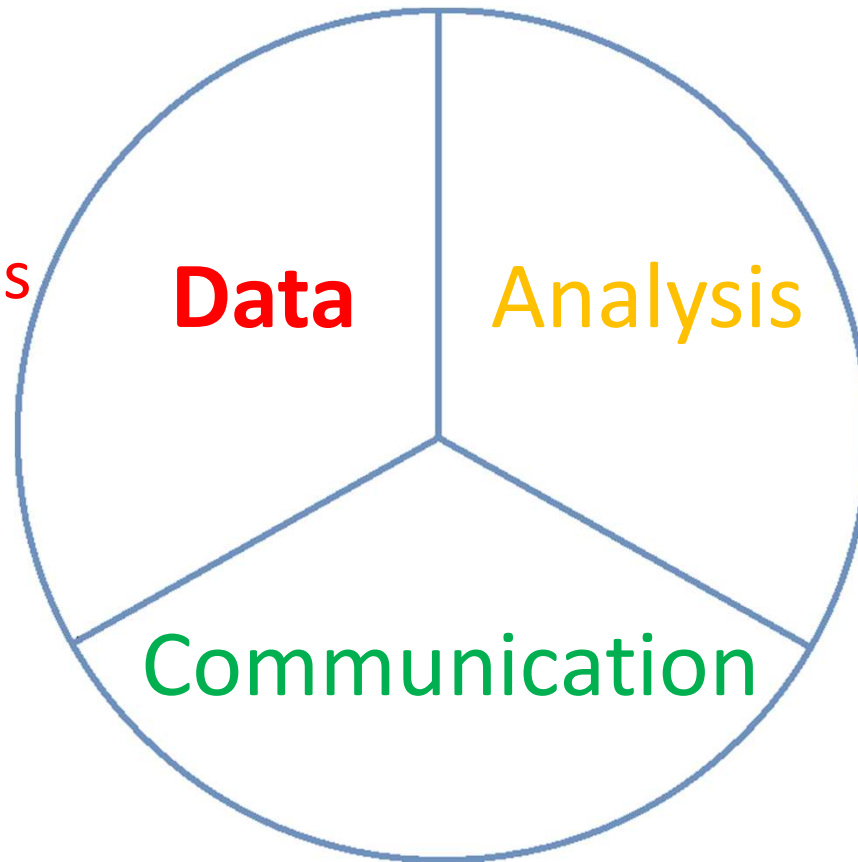
3 Components of a Data Science Project

Data
- Cleaned
- Digested

Models
- Math
- Simulation

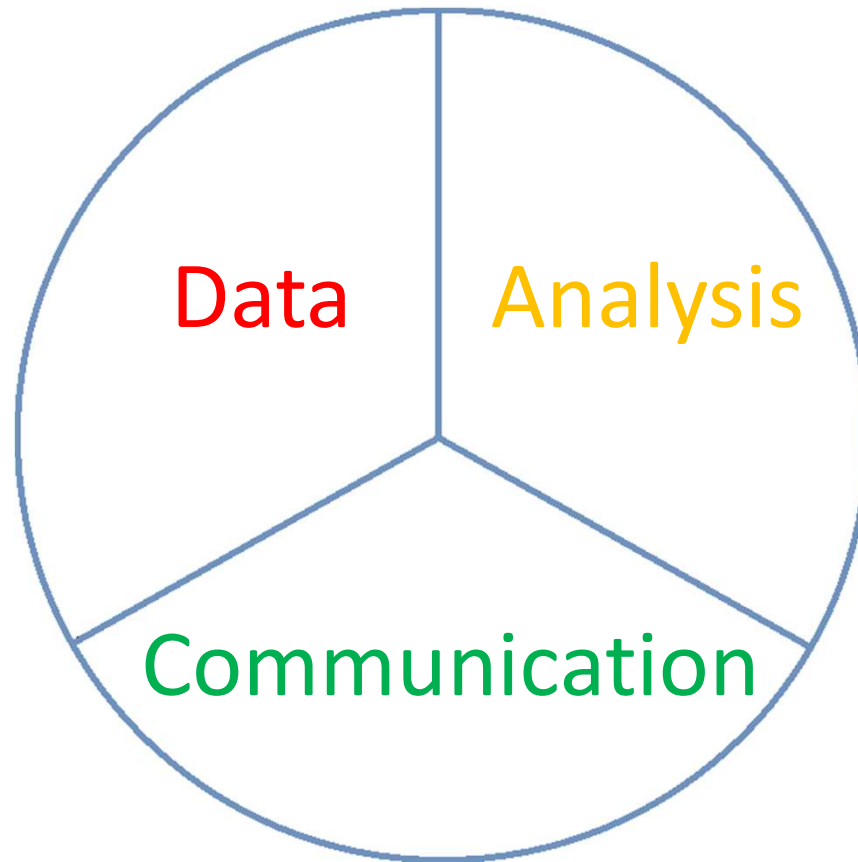Visualizations

3 Components of a Data Science Project

Data **Analysis**

Communication
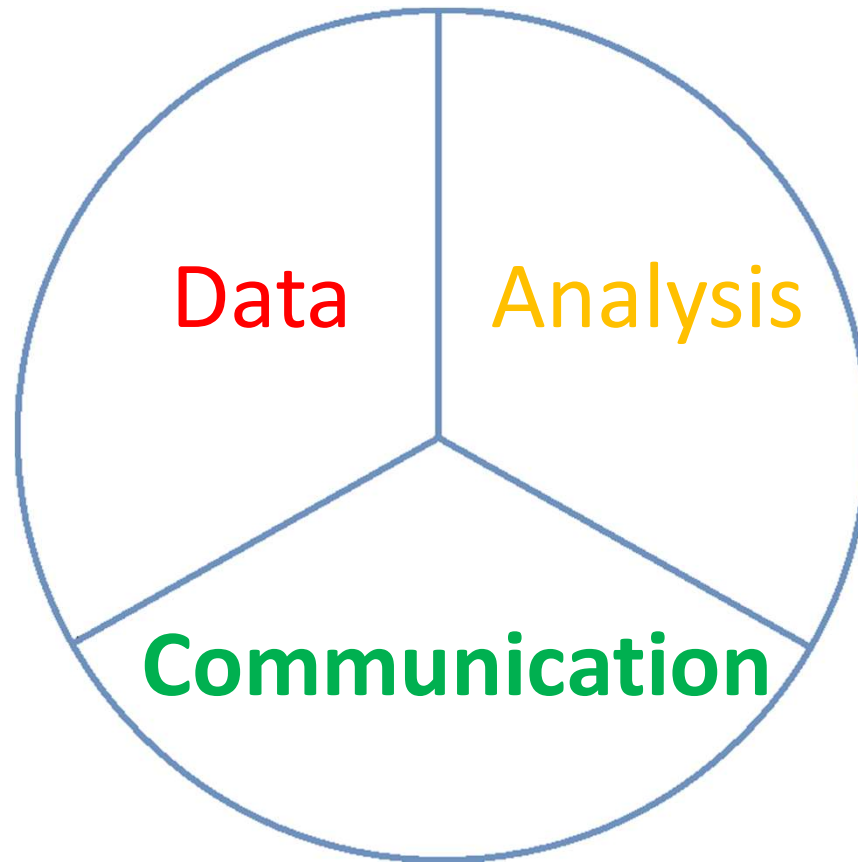
Verification = Client Agreement + Reality Check
- Reports
- Presentations
- User Interfaces

Most Important for Working Data Scientists

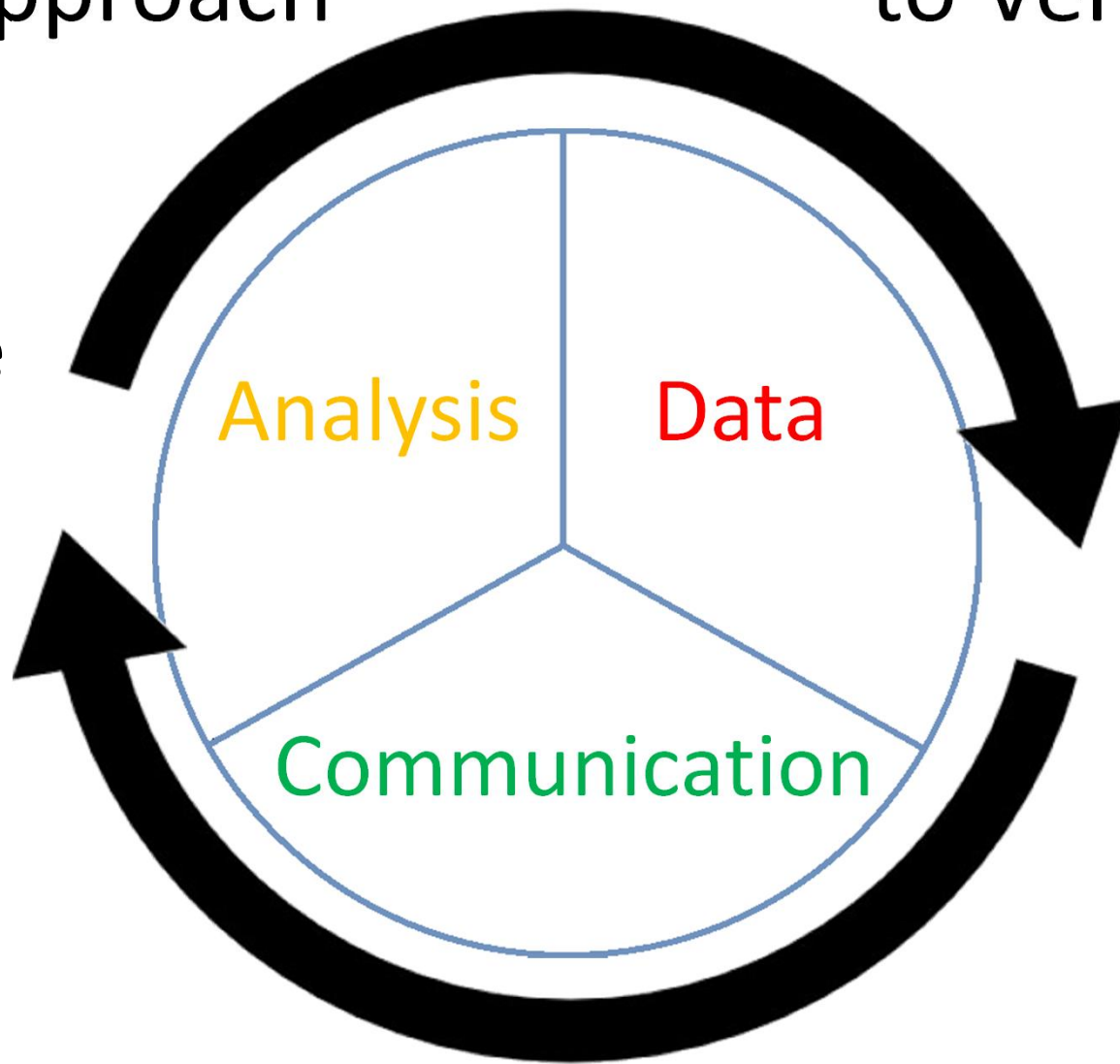**Verification = Client Agreement + Reality Check**

Agile Approach   to Verification
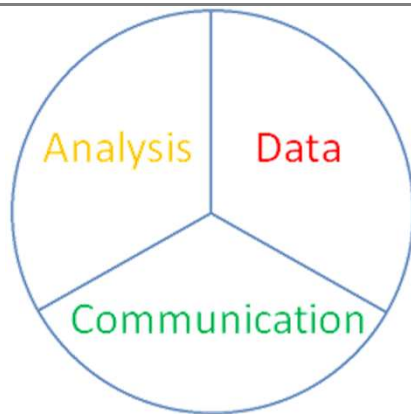
Iterate

Analysis | Data

Communication

Iterate

Verification = Client Agreement + Reality Check

The Data Science Project Wheel

Why? - because we (i.e. the client) wants to know
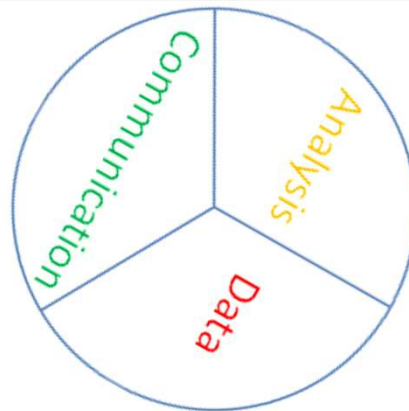
How? - iterate Data, Analysis, & Communication

Unknown

Known

~~Un~~Known

The Data Science Project Wheel
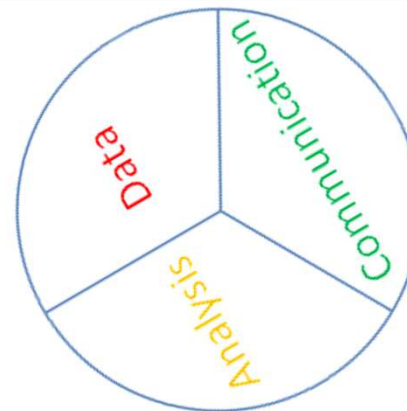
Keep going until

Unknown

Known   ~~Un~~Known

The Data Science Project Wheel

Keep going until

Unknown

Known

UnKnown

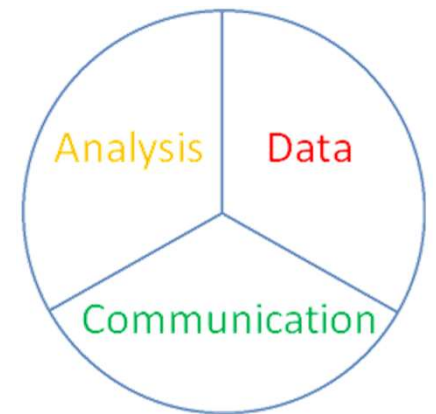# The Data Science Project Wheel

the client knows what they want

~~Un~~Known

Or Until the Cat is Curious Again

Thank You ☺