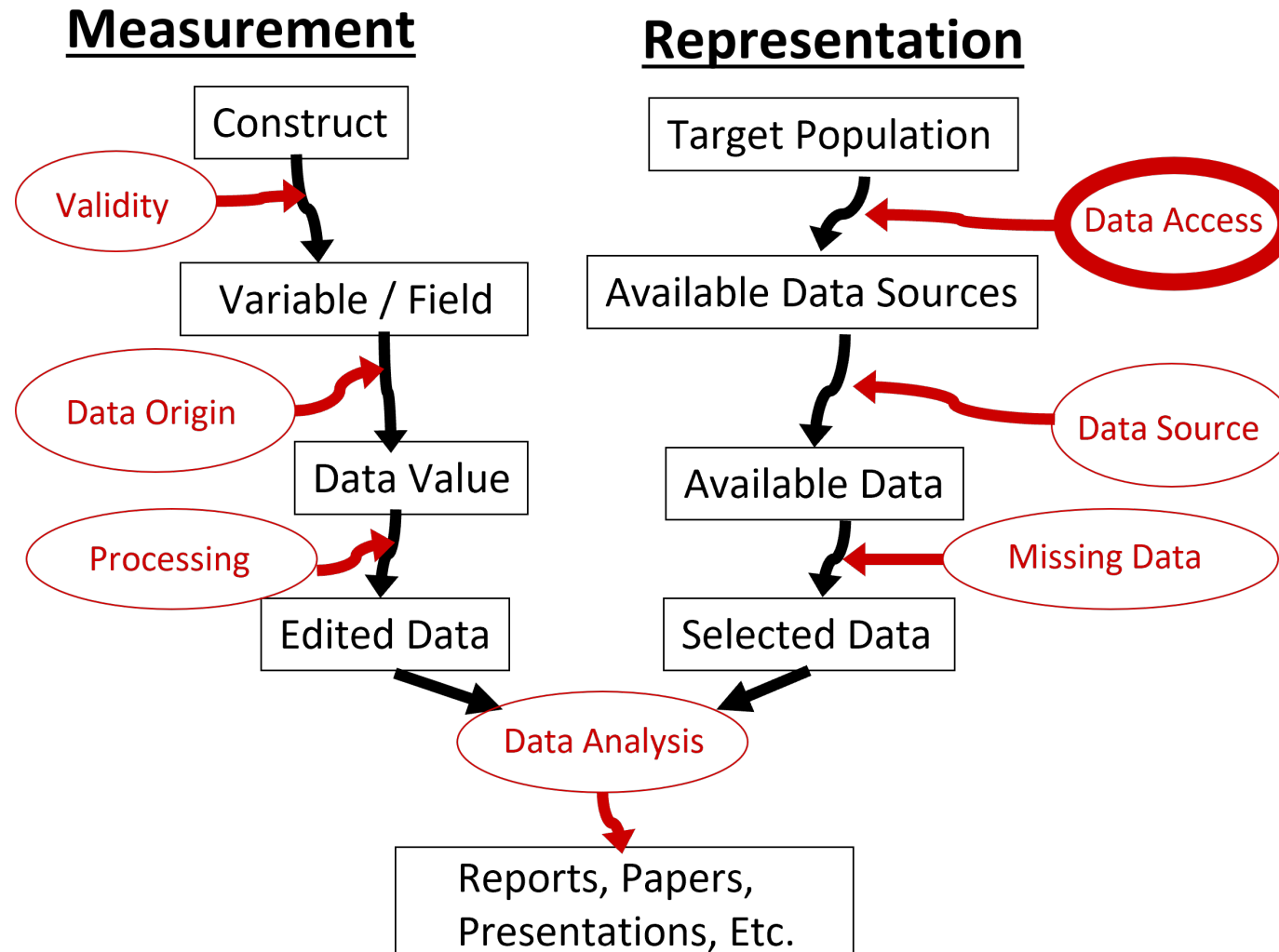# Defining Target Populations
By James Wagner

Dimensions of TDQ

What is a "Target Population"? (1)

- **Target Population:** The finite (in theory) population which is the target of your *inference* or *prediction*.

- The target should relate to the goals of the research:

  - Describing a population or subpopulation of persons.

    - *Example*: All adults living in the US on April 1st.

  - Characterizing what is trending on Twitter during a two-week span.

    - *Example*: All tweets made between June 16th and June 30th.

What is a "Target Population"? (2)

- **Time** is a key aspect of the definition of a target population is time.

    - **Populations change** over time.

        - Do inferences from last year's data apply this year? Do opinions or behaviors change daily? Weekly? Annually?

    - Sampling from human populations, what is the **time frame** of the sampling.

        - Example: Survey eligibility is determined at the time of first contact, field period is limited in time.

        - Example: Twitter data – when were the tweets drawn? From which dates and times were they extracted?

What is a "Target Population"? (3)

- It's important to **start** with a clear definition of the target population.

  - Comparing the data source to the target population is an important evaluation step.

What is a "Target Population"? (4)

- **Examples** of target populations:

  - Some research might be concerned with the population of Twitter users…

  - …while other research might want to use Twitter data to draw inferences about the population of U.S. Adults aged 18+!

- **A clear definition is important.** For the latter purpose, twitter seems ill-suited, as it doesn't include/cover the whole population.

What is a "Target Population"? (5)

- **More examples** of target populations:

  - Adults 18+ in the US as of April 1st, 2020.

    - **Time** is part of the definition of a finite population.

  - Adults 18+ in the US who have been diagnosed with diabetes.

    - Some groups are **rare** and there may not be a high-quality method for accessing them.

    - Important to be clear about the definition in order to evaluate quality relative to that definition.

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