

**5 THINGS TO
CONSIDER WHEN
COLLECTING
RESEARCH DATA
ONLINE**

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Hi,

I'M SYD!

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- **Academic Background:**

- BA Theoretical/Portuguese Linguistics
- MSc Second Language Acquisition
- MSc Psychological Research

- **Now: Computational Cognitive Science**

- **Research Interests:**

- Language Acquisition & Processing
- Compositionality & Semi-Productivity
- Analogical Reasoning

- **Research Experience**

- Experimental Morphology
- Experimental Psycholinguistics
- (Some) Machine Learning

**WHY COLLECT
DATA ONLINE?**

PROS



**FASTER DATA
COLLECTION**



**LARGER
SAMPLES**



**COST
EFFECTIVE**



**DIVERSE
POPULATIONS**

CONS



COMPREHENSION



ATTENTION



HONESTY



RELIABILITY

DATA QUALITY

Depends on:

- Comprehension
- Completeness
- Accuracy
- Representation
- Validity

Is the data fit for its intended purpose?

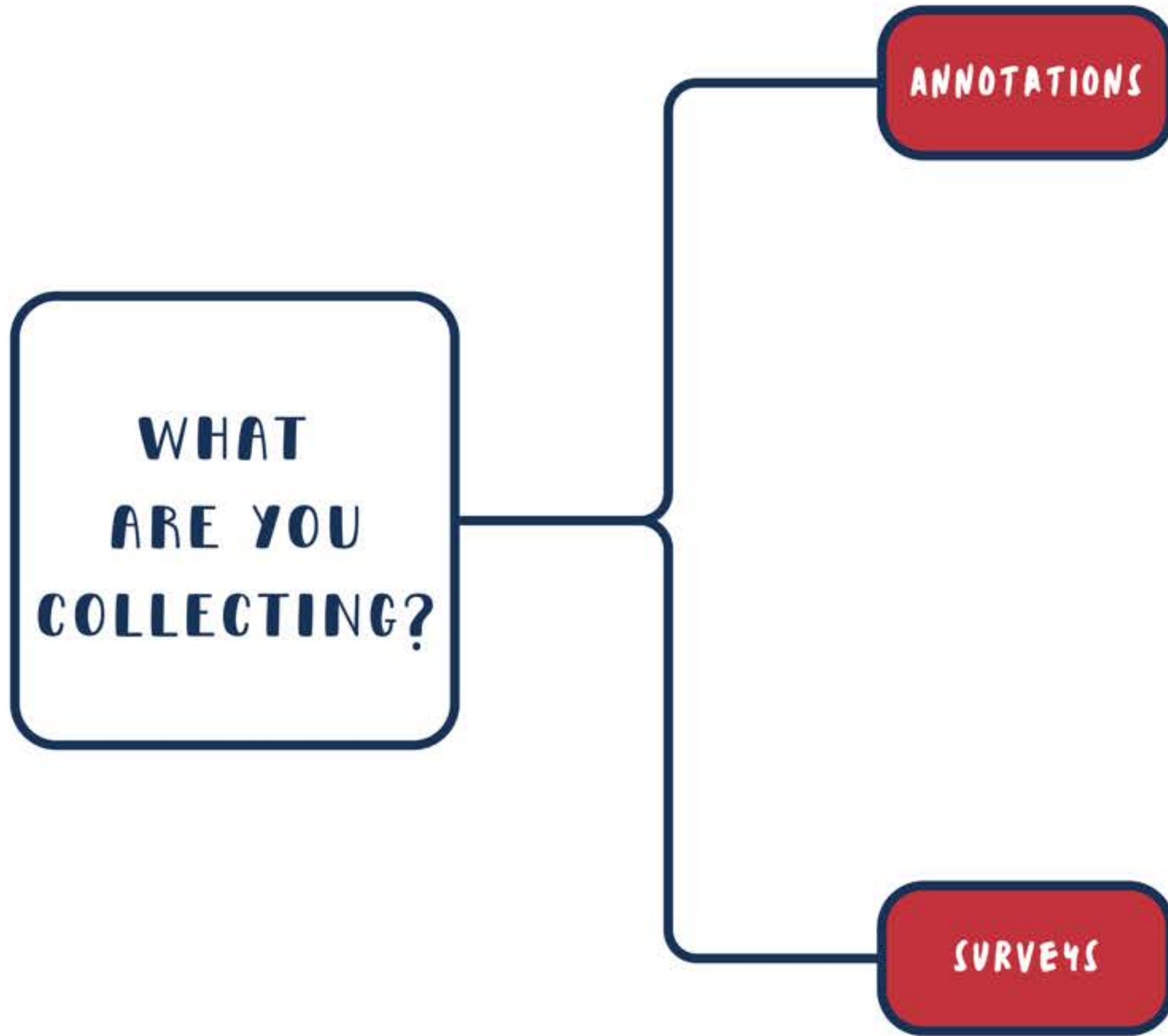
Can you extract usable & valuable insights?

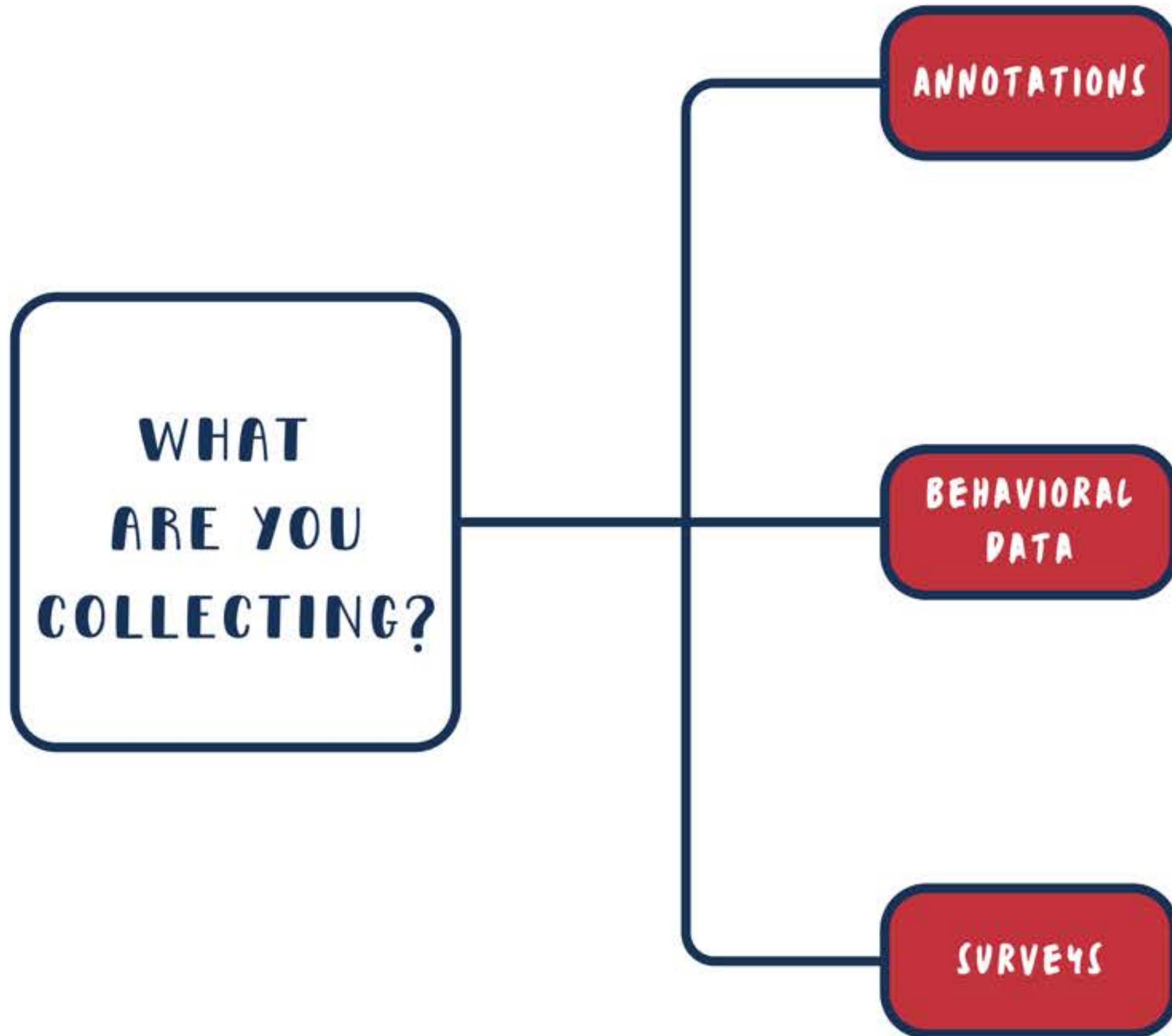
**WHAT CAN WE
DO TO IMPROVE
DATA QUALITY?**

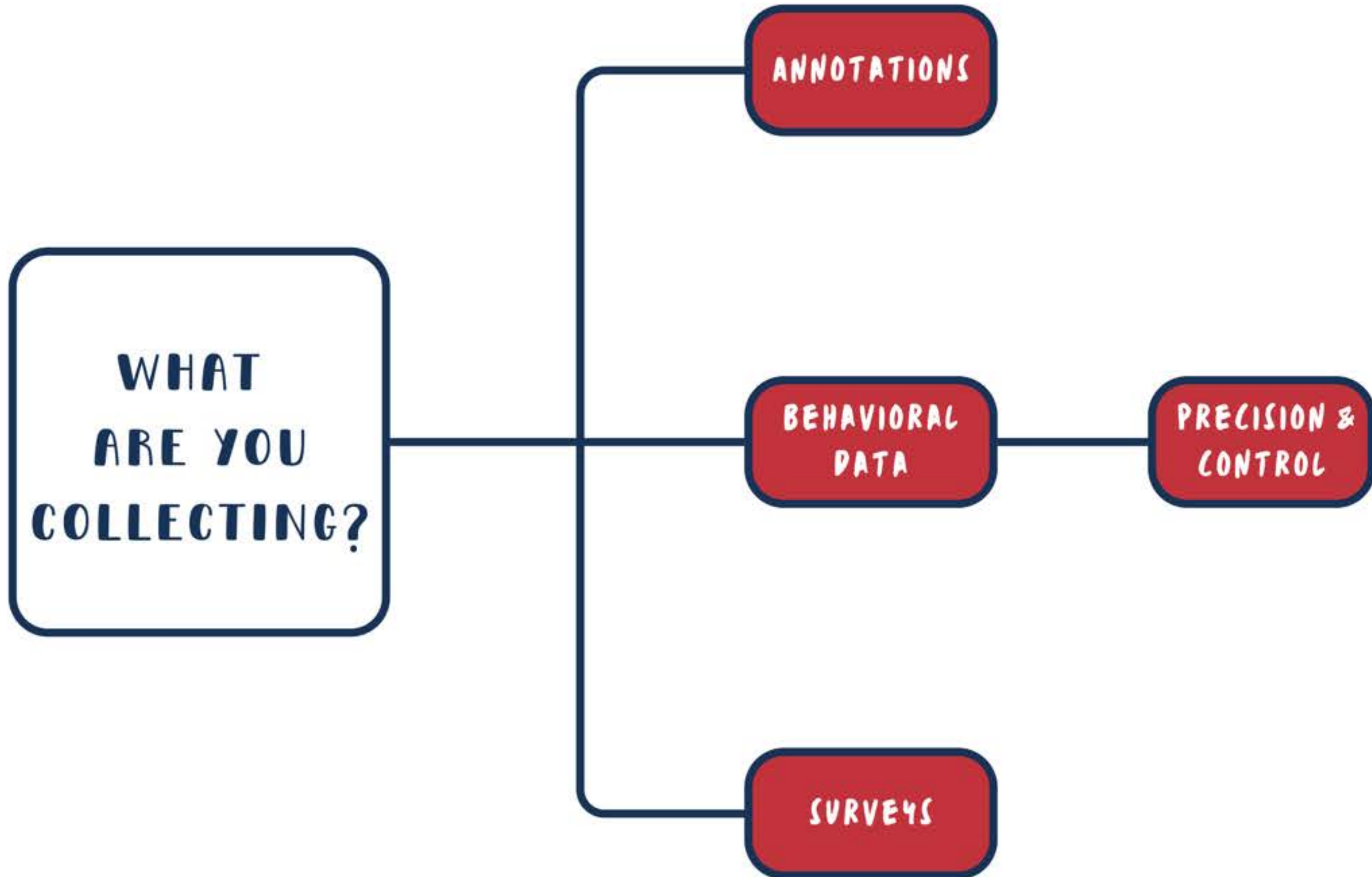
#1

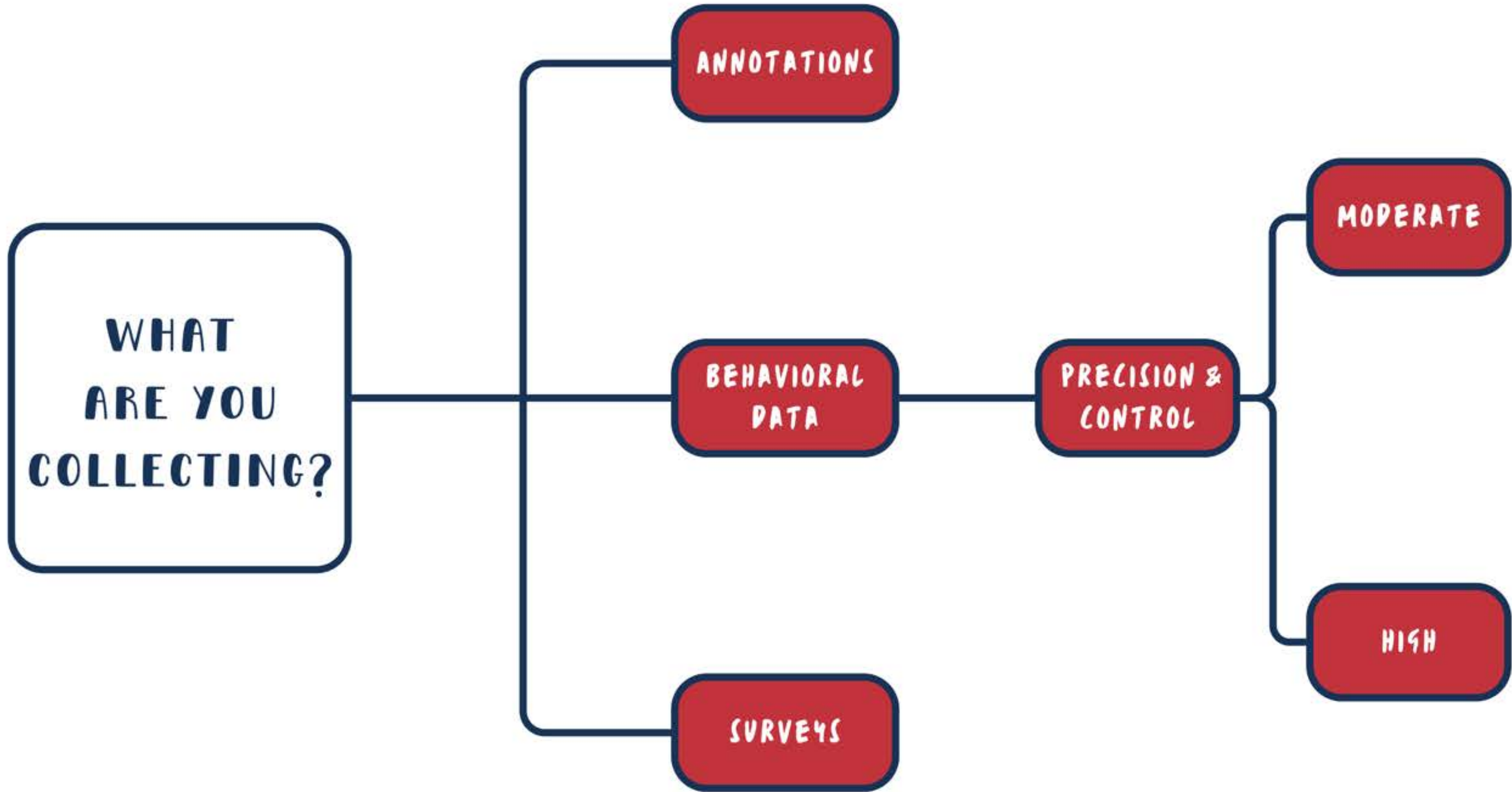
USE THE RIGHT TOOL
FOR THE RIGHT JOB

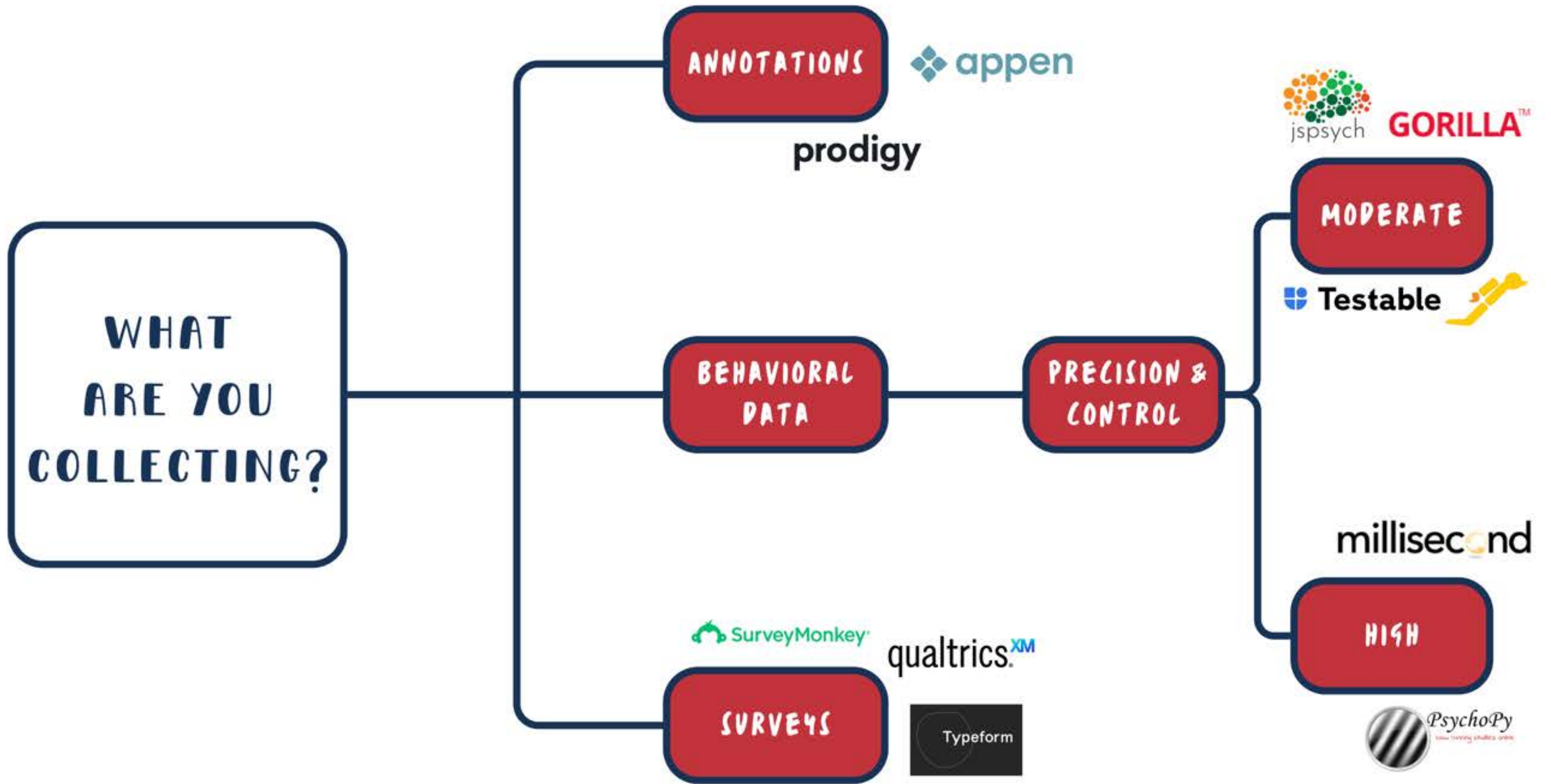
**WHAT
ARE YOU
COLLECTING?**











#2

WELL DESIGNED IS
HALF DONE!

BAD DESIGN LEAVES PARTICIPANTS...



CONFUSED



BORED



EXASPERATED



OUTRAGED



ENRAGED

YOU WANT YOUR PARTICIPANTS TO BE...



RELAXED

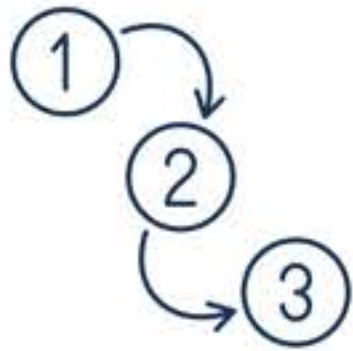


ENGAGED

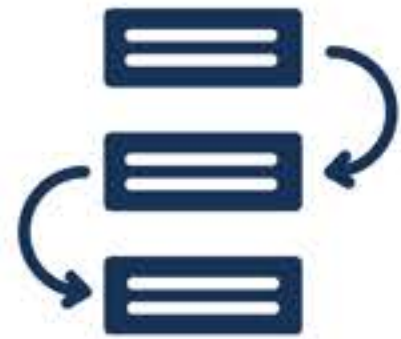


MOTIVATED

FOLLOW GRICE'S MAXIMS



**CONCISE, CLEAR
INSTRUCTIONS**



**ORDERLY
TASK FLOW**



**KEEP IT SHORT &
RELEVANT**



**KEEP IT
SIMPLE**

#3

PILOT TWICE.
RUN ONCE!

ROBUSTNESS CHECK

- Before deployment:
 - Work out kinks in your design
 - Spelling & grammar checks
 - Inconsistencies in presentation
- Use it to build your analysis pipeline
 - Add/remove variables
- Pilot with experts AND non-experts
- Get as much feedback as possible
 - IMPLEMENT IT!
- Saves time & £££

#4

KNOW THY
PARTICIPANTS

PRE-SCREENING

- **Balanced and representative sample**
- **Ensure that your participants fit the profile of your target audience**
- **Pre-determine the demographic variables of interest. For example,**
 - **Age**
 - **Gender identity**
 - **First language**
 - **Employment status**
 - **Social media use**



BEWARE PROFESSIONAL SURVEY TAKERS

- Non-naive participants are problematic!
 - Introduce biases
 - Reduce effect sizes
 - Provide poor responses
- Negatively impacts data quality



CHANDLER, J., PAOLACCI, G., PEER, E., MUELLER, P., & RATLIFF, K. A. (2015). USING NONNAIVE PARTICIPANTS CAN REDUCE EFFECT SIZES. PSYCHOLOGICAL SCIENCE, 26(7), 1131–1139.

[HTTPS://DOI.ORG/10.1177/0956797615585115](https://doi.org/10.1177/0956797615585115)

WATCH: [HTTPS://WWW.PBS.ORG/NEWSHOUR/SCIENCE/INSIDE-AMAZONS-HIDDEN-SCIENCE-FACTORY](https://www.pbs.org/newshour/science/inside-amazons-hidden-science-factory)

#5

YOU GET WHAT YOU
PAY FOR

COMPENSATION

- Participants expect to be paid for their time!
 - Choose the right incentive
 - Consider a performance bonus
- Is your task unusually long, mentally taxing, or uses stimuli that cause emotional distress?
 - If yes, then increase the reward!
- An attractive reward == increased motivation
 - Reduces drop-outs
- Poorly thought-out incentives can skew decision making



GOLDEN RULE:

DO UNTO OTHERS

**FOR
ANNOTATION
TASKS:**

prodigy

 **appen**

**FOR
EVERYTHING
ELSE:**



Definitive human data to deliver
world-leading research and AI

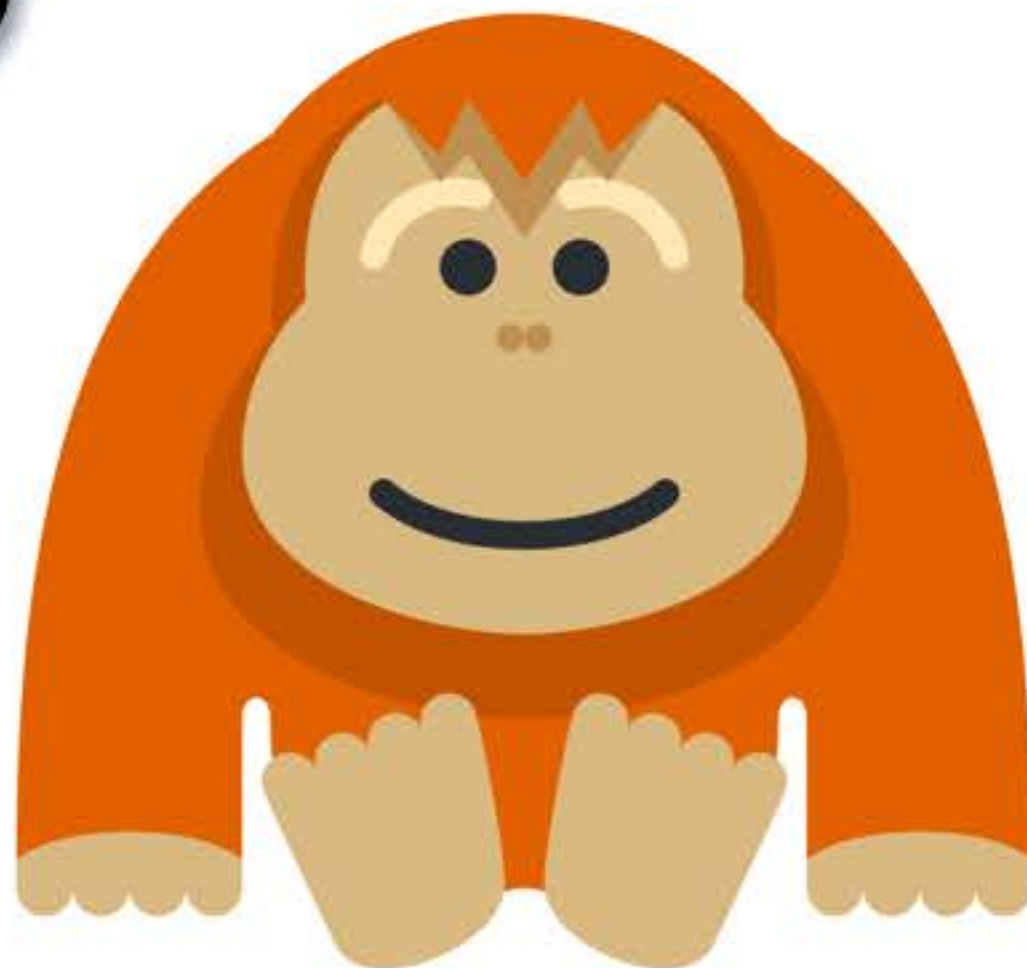


**SYD DOESNAE
RECOMMEND:**

amazonmechanical turk

RESOURCES

- Collecting behavioral data online (APA)
- So, you want to run an online experiment?
- nodeGame Online Real-Time Synchronous Experiments
- Survey data quality: The 4 factors that matter most to researchers
- Reddit discussion on survey platforms
- How to Make \$50 a Day on MTurk: How is everyone doing it?
- How to increase participant attention in online experiments
- Pay Fairness



SCAN FOR FULL
SLIDE DECK