# Needfinding

Designing the right product

### What is Needfinding?

- Process based on Human Centered Design
  - Users drive design inspiration
- Solutions change, needs last longer
- Uncover latent needs
  - Gaps in Use, Usability, and Meaning
  - People are good at getting things done with less-than-ideal tools/situations
- Develop empathy for users

### Principles of Needfinding

- Look for needs, **NOT SOLUTIONS** 
  - If I can't reach something, I need a way to access it, I don't need a ladder.
  - This thinking is too limited
- Go to the customer's environment
  - Immerse yourself in the experience of your users
- Go beyond the obvious problem
  - Laddering (Five Why's), Double Diamond
- Collect different forms of data
  - Images, written notes, video, audio, etc.

#### Iterate

## Steps of Needfinding

- Identify your user group and a task/activity to study
  - Example: undergraduates + timekeeping
- Form hypotheses about the activity
  - Example: Undergraduates + timekeeping, hypothesis: "College undergraduates use their cell phones to tell time and therefore don't wear wristwatches anymore"
- Collect Data
  - Desk research or field studies
- Aggregate finding to identify product opportunities

### Field Studies (Observation)

- Find out specifically what tasks they are trying to accomplish and how they do so
- An outside perspective makes it easier to uncover workarounds
- Ask questions but keep them open ended
  - Do ask "Can you walk me through how you would do this?"
  - Do not ask "What problems do you have during your task?"

### Interviews

- Prepare questions ahead of time
- Suppress preconceived notions about the user and products and do not bias the discussion
- Aside from questions, ask user for demonstrations.
- Look out for surprises, these suggest latent needs.
- Additionally, watch for nonverbal cues, such as nods or frowns.

# Empathy Mapping

#### • Says

- What the user says out loud during an interview (or usability study)
- Ideally contains direct quotes

#### • Thinks

- Might be said out loud
- Can be elicited with questions
- Can be observed from non-verbal cues

#### • Does

- What is the user physically doing during the interview
- Feels
  - Emotional state
  - Adjective plus a short sentence for context
    - Impatient: pages load too slowly

#### **EMPATHY MAP**

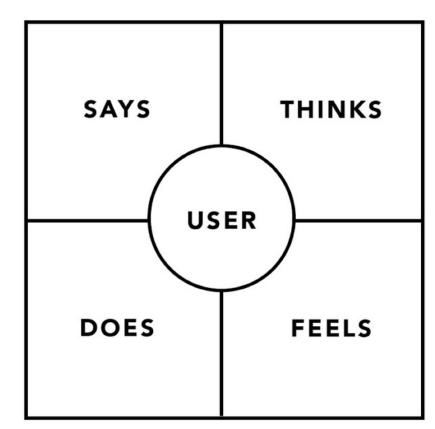


Image from: https://www.nngroup.com/articles/empathy-mapping/

### Empathy Map Example

**EMPATHY MAP** *Example* (Buying a TV)

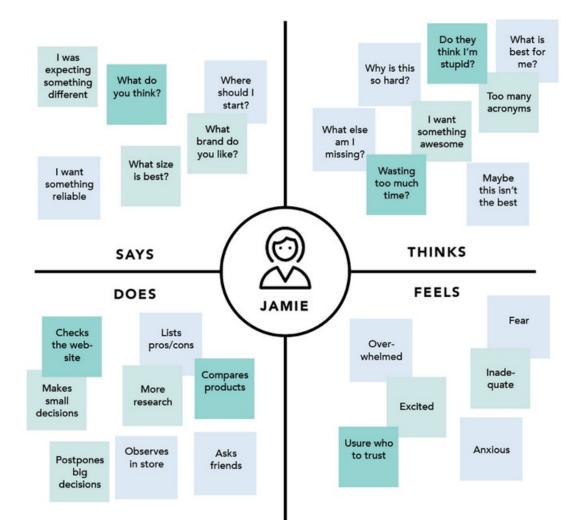


Image from: https://www.nngroup.com/articles/empathy-mapping/

CS 320: User Interface Design