



## CSE 440: Introduction to HCI

User Interface Design, Prototyping, and Evaluation!

Lecture 07: User Research II

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### Today's Topics

- User Research II
  - IDEO video
  - Design Empathy
  - More user research tips
- Presentations on final 2b and ongoing 2c work

## IDEO Video

### Things to keep in mind

- Ok, this is from 1999. Plenty of cringe.
- I want you to get an example of user research, prototyping, and the design process in action.
- But also keep a critical eye and consider the flaws in their approach. We'll discuss after the video.
- It's also an interesting historical tidbit.
  - Shows some of the origin and culture behind IDEO, one of the most successful design consultancies in the world
  - Can see the exuberance of the Silicon Valley mindset in ~2000
  - Very well-known video at this point

Online discussion and Web address information given during this program may no longer be accurate.

ABC has left these references intact to preserve the integrity of this program.

### Activity

- Things that stood out to you?
- Notice aspects of the design process you've learned in class in their approach?
   How could their design process be improved?
- What do you think about that shopping cart? (Flex those Hall of Fame and Shame muscles!)
- Let's share and discuss answers to these questions in breakout groups for a couple minutes.
- Fill this out with your group while you're discussing: <a href="http://www.yellkey.com/inside">http://www.yellkey.com/inside</a>
- Then each group shares with the class one thing from their discussion.

# Design Empathy

Read the full text of "Empathy on the Edge" in Files in Canvas!

### Design Empathy

"an approach that draws upon people's real-world experiences to address modern challenges. When companies allow a deep emotional understanding of people's needs to inspire them [...] they unlock the creative capacity for innovation."

— from the article Empathy on the Edge



**Figure 6.** Self-administering a fake injection as part of month-long exercise designed to build empathy for patients of a weekly treatment. Photo courtesy of IDEO.



**Figure 4.** The client team's journey, including a trip to a local pharmacy with herbal medicine infusers, began to reveal dissonance between their concept for contraceptive pills and traditions of health and medicine in China. Photo courtesy of IDEO.



Figure 2. A designer gets his chest waxed to empathize with wound-care patients. Photo courtesy of IDEO.

# Six User Research Tips



### Cast aside your biases, listen and observe

Let subjects tell their own story, and listen for the things that elicit emotion, cause them concern or frustration.

"If you want to find out what people really need, you have to forget about your problems and worry about their lives."



Note the contradictions between what people say and what they do

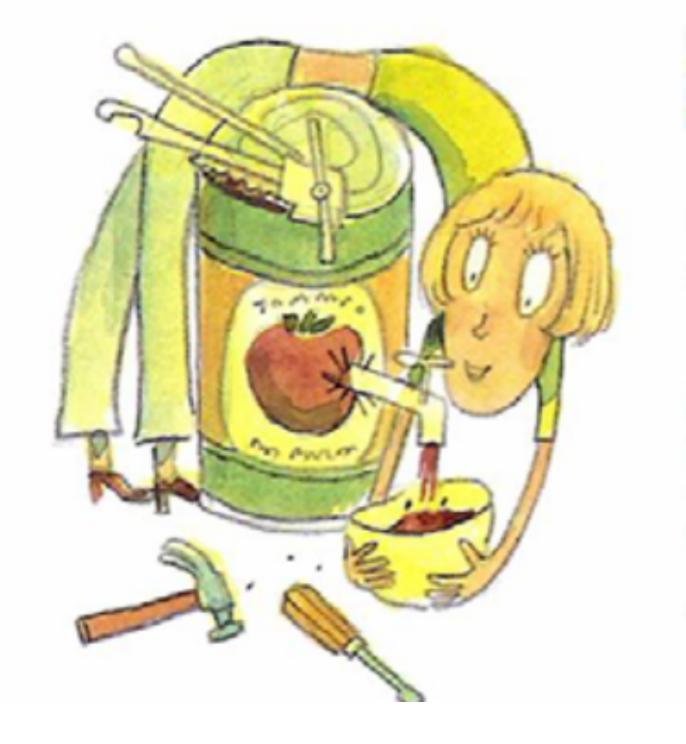
Opportunities for innovation lie within the disconnect between action and words.



#### Listen to people's personal stories

Let them relate their successes and failures.

Stories encompass the implicit rules that govern and organize peoples lives and reveal what they find normal, acceptable and true. They reveal moral codes, sources of pride, shames, shoulds and shouldnots.



### Watch for "work arounds"

People make do and work around the shortcomings of products and situations.

In everyday life, we all come up with "work arounds," clumsy or clever, that we usually are totally unaware of.

You must take note.



### Distinguish between needs and solutions.

Needs open up possibilities, solutions constrain them.

If you start with a solution then you may overlook the possibility of coming up with an entirely new and revolutionary product or service.



### Look beyond the obvious.

Your research may seem so routine and familiar that you feel there is nothing new to be learned.

Boredom and frustration easily set in. Stay alert.

The epiphanies and insights emerge from the nuances.

## Group Project

- Let us know if you're having trouble with recruiting, and we can try to help! You may need to broaden your search or pivot slightly if you cannot reach your target group. Talk with us and your classmates to get feedback.
- User research may reveal some issues with your initial problem space as you conceived it (or reveal some hidden assumptions you may have had) so that you may need to reframe your problem slightly. That's okay too!

# Design Process in a Nutshell

1: Three Project Proposals



26, 2c User Research User research Competitive Analysis



Brainstorming
Ideation through Sketching
Participatory Design

2a Project Ideation

Scenarios
Storyboards
Personas
Design Rationale

Find a Good Solution

Refine the Solution

Wireframes
Lo-fi Prototypes
Early Evaluations
Mid-fi prototypes
Additional Evaluations

# Grading

- Reminder that each assignment so far has been worth somewhere between 2-4 points towards your total grade (see Grading section of each assignment on Canvas).
  - We report grades as always out of 10 but remember to scale it to the number of points the assignment is worth!
  - 9/10 = 90% on an assignment for 3 points is 2.7 points out 3.
  - So each point really counts very little (.3 on a 3 point assignment).
  - We're happy to answer questions about grading and consider regrade requests.
  - But don't stress too much about your grade. If you're doing the work and participating, you'll be fine.

## Group Presentations

- We'll put you in breakouts with another group
- Each group presents their final 2b plan, any issues they're running into, and any preliminary results from conducting user research.
  - Other group gives feedback and suggestions on the plan and discusses interpretations of the results. Then switch!