ITI0209: User Interfaces

06. Usability Testing

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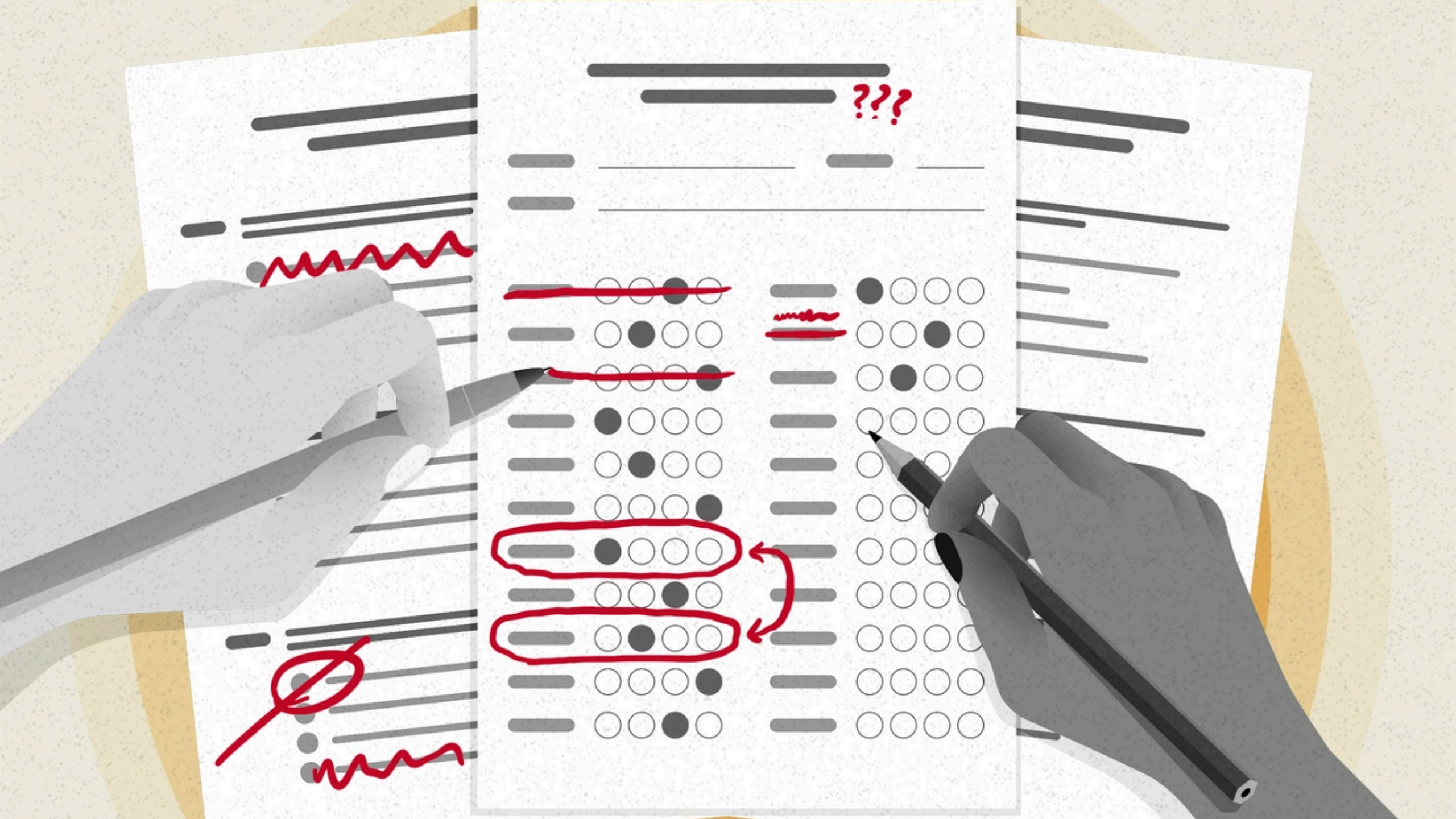
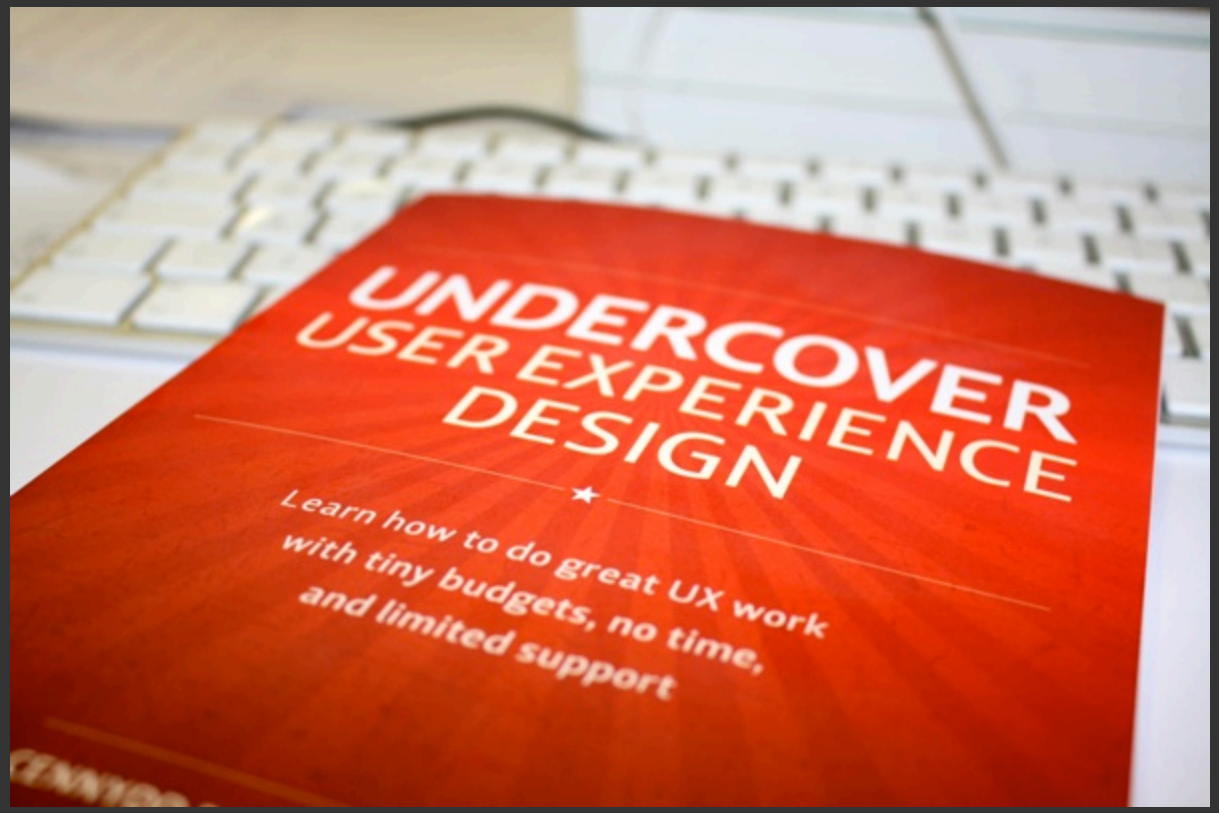


Testing **is a method to check whether the *actual* software product matches *expected* requirements and to ensure that software product is defect free.**

“You never know that a design is successful until it’s being used. The site could meet your business requirements exactly but be hated by users, or give users exactly what they want while making the company lose money.”

Undercover UX

Cennydd Bowles. 2010




NO SMOKING
SAFETY FIRST


IT IS AGAINST THE LAW TO
KEEP ALCOHOL OUT OF
THE HANDS OF YOUTH
SUPPLY ALCOHOL TO MINORS.
NAPA COUNTY
Friday Night live
PARTNERSHIP
OTS
CALIFORNIA OFFICE OF
TRAFFIC SAFETY

User Testing: Does the user need my app?

- Needs-focused.
- **When:** Right after you have got the idea.
- **How**: coffee shop discussion, in-person discussion at friends' place, office, club, bar, surveys, forums

Testing the users

Usability Tesing: Is the user able to use my app?

- Behavior-focused
- **When:** Having first sketches
- **How:** we see during this lecture

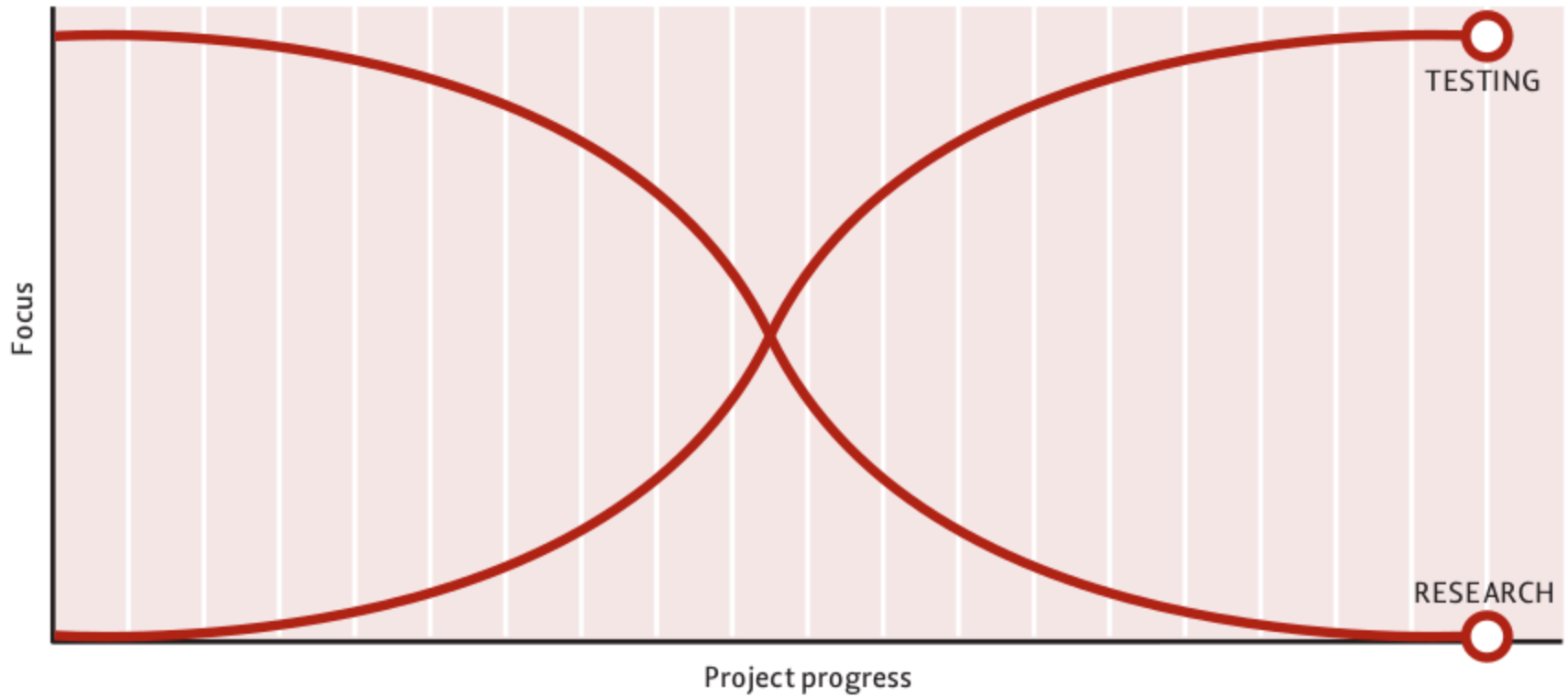
Testing the interface

Usability testing can ..

- Uncover significant problems with labeling, structure, mental model, and flow, which will prevent your product from succeeding no matter how well it functions.
- Let you know whether the interface language works for your audience.
- Reveal how users think about the problems you purport to solve with your design.
- Demonstrate to stakeholders whether the approved approach is likely to meet stated goals.

Usability testing cannot ..

- Provide you with a story, a vision, or a breakthrough design.
- Tell you whether your product will be successful in the marketplace.
- Tell you which users and user groups are more important than others.
- Substitute for QA-testing the final product


TESTING
RESEARCH
Focus
Project progress

A user interface is like a joke.
If you have to explain it,
it's not that good.

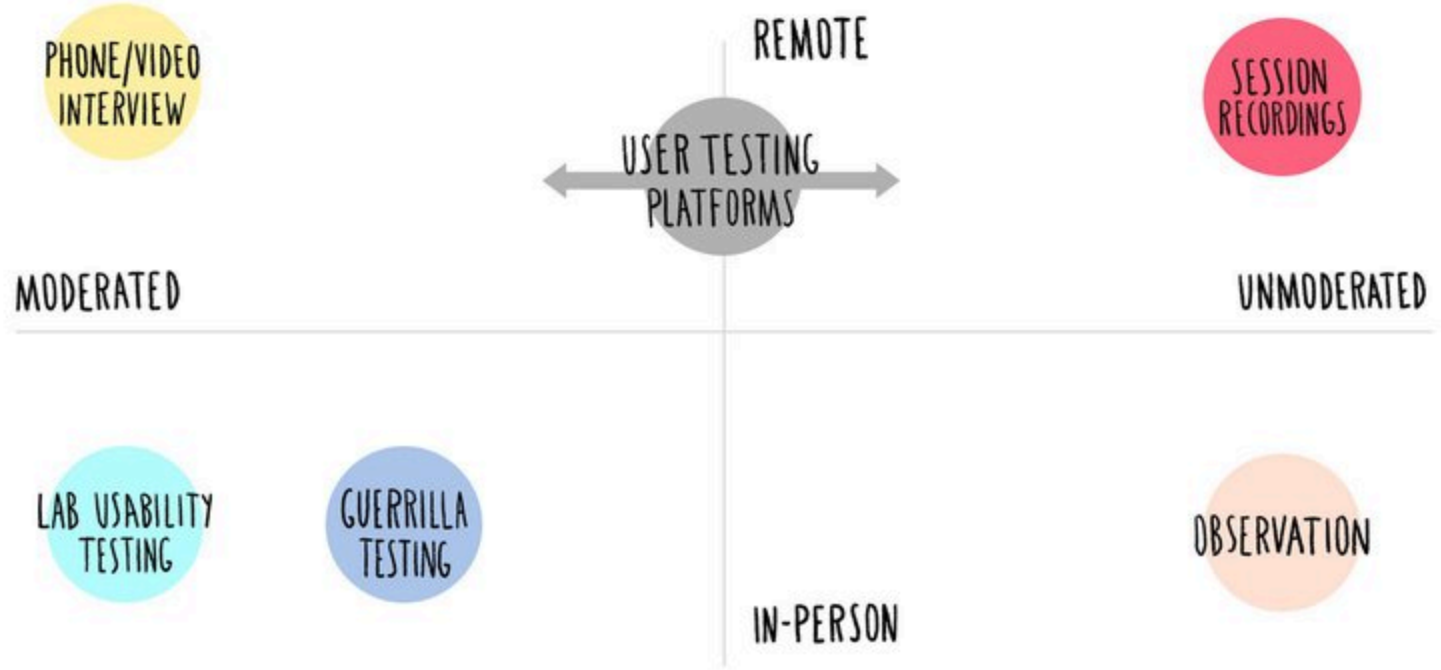
Data

Quotes and observations that indicating:

- **Goals** - what the participant wants to accomplish that your product or service is intended to help them with or otherwise relates to.
- **Priorities** - what is most important to the participant.
- **Tasks** - actions the participant takes to meet their goal.
- **Barriers** - the person, situation, or thing that prevents the

etc.

Methods


PHONE/VIDEO INTERVIEW
REMOTE
SESSION RECORDINGS
USER TESTING PLATFORMS
MODERATED
UNMODERATED
LAB USABILITY TESTING
GUERRILLA TESTING
OBSERVATION
IN-PERSON

Corridor Test (Guerilla Testing)

- Watch people using your existing site.
- Ask them to through some critical tasks on the site. By watching how they use the site, you can uncover flaws with the existing system
- Called corridor test because all it takes is a laptop (or paper proto) and a passerby.

Avoid:

- People too involved in your site

One-to-one Intervierw

If at possible, and with permission - record it.

Do:

- Ask open-ended questions that encourage the participant to elaborate.
- Avoid leading questions that might distort responses.
- Clarify understanding by paraphrasing what the participant says

Observation (Contextual Inquiry)

- Technique for examining and understanding how users interact with products or services in their natural environment.
- Using a combination of direct observation and interview, the technique provides detailed insight on tasks, pain points and user preferences.

Questions to ask:

- What one thing could we do to make your life easier?
- What other sites or companies do this well?

Surveys

- Quick, cheap, and easy to analyze, even with lots of responses.
- Unambiguous and direct
- Should consist mostly of closed questions, yes/no responses, and Likert scales.
- Low response rates

Other

- Focus groups
- Customer feedback
- Eye tracking
- Drunk testing: https://theuserisdrunk.com/

Analysis

Steps 1..4: Describe what you did

1. Summarize the goals and process of the research: What did you want to find out? Who from your side participated and in which roles?
2. Describe who you spoke with and under which circumstances (number of people, on the phone or in person, etc.).
3. Describe how you gathered the data.
4. Describe the types of analysis you will be doing.

Analysis

Steps 5..8: Describe what you uncovered

5. Pull out quotes and observations.
6. Group quotes and observations that typify a repeated pattern or idea into themes; for example “participants rely on pen and paper to aid memory,” or “the opinions of other parents are trusted.”
7. Summarize findings, including the patterns you noticed, the insights you gleaned from these patterns, and their implications for the design.
8. Document the analysis in a shareable format.

9 Rules of Usability Testing

Preparation:

- Add a hypothesis and a goal to the test questions in the test script.
- Each usability test requires five to seven test persons.
- Perform test run.

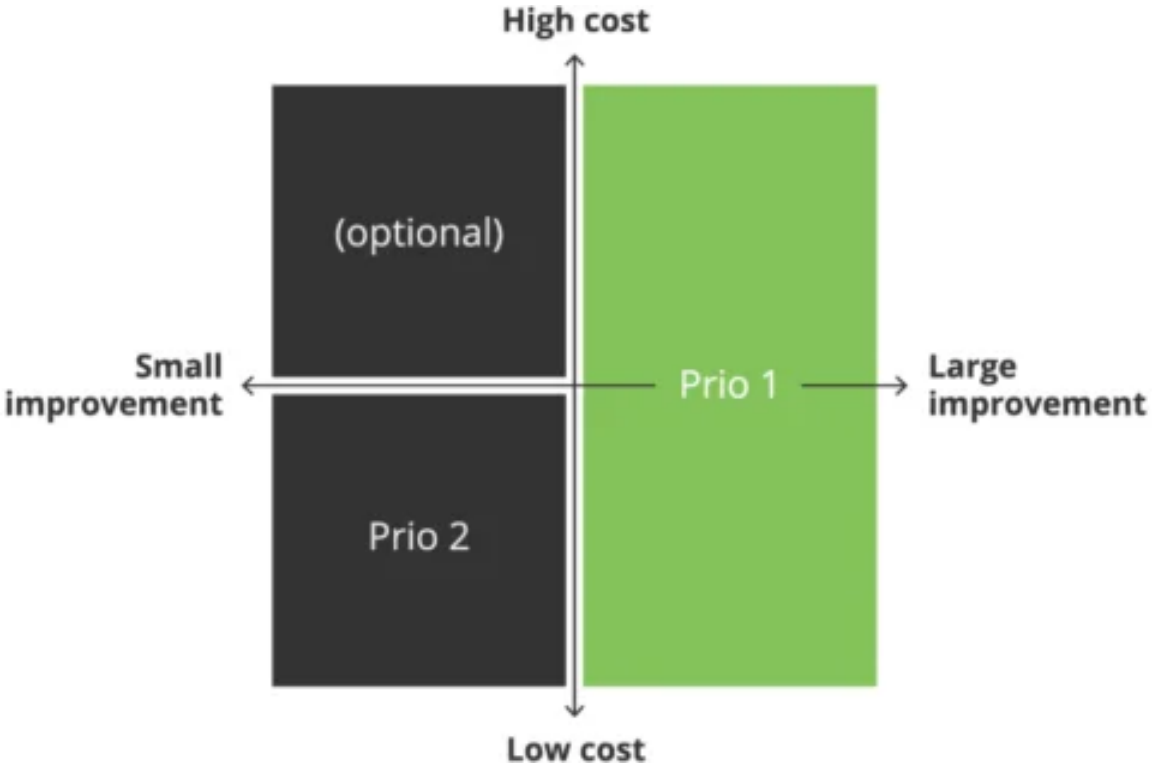
Execution:

- Encourage your test users to think aloud.
- Do not ask suggestive questions.
- The only people speaking during the test are the moderator and the test user.

9 Rules of Usability Testing

Analysis:

- Do not wait too long to do the evaluation.
- Do not jump to conclusions based on individual statements.
- The report should also include positive feedback.



Some Sample Questions

Can you try doing this <new way of solution>?

How would you like to login to this solution?

Can you get <a small task in your solution> done in 10 seconds?

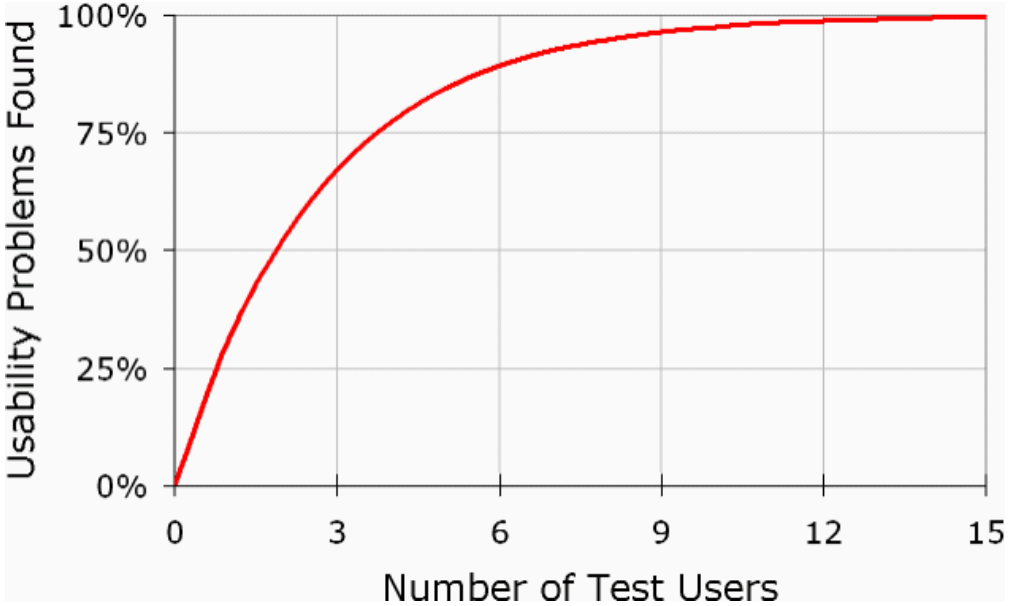
Just Enough Research

Erika Hall. 2013

How much to test?

Elaborate usability tests are a waste of resources. The best results come from testing no more than 5 users and running as many small tests as you can afford.

Source:
https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/



Don’t validate designs - test them!

User research should uncover many negatives and some positives

If your user study did not find any issues, something is wrong with your study or with your team. The perfect user interface has not been seen yet, and it’s unlikely to make its first appearance in world history during your current project.

Let's play:

https://cantunsee.space/

where *"X"* means - *"don't do it"*

Some Case Studies

- Caviar: https://medium.com/tradecraft-traction/caviar-usability-case-study-5c0f61a11956
- Zara: https://uxdesign.cc/zara-a-usability-case-study-981b7ca93db8

Links

- User Testing vs Usability Testing. https://testsigma.medium.com/usability-testing-vs-user-testing-c26f2497659d
- The different types of usability testing methods for your projects. https://www.hotjar.com/usability-testing/methods/
- A Comprehensive Guide To User Testing. https://www.smashingmagazine.com/2018/03/guide-user-testing/
- Why You Only Need to Test with 5 Users. https://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/
- Twelve Emerging Best practices for Adding UX Work to Agile Development. https://www.jpattonassociates.com/emerging_best_agile_ux_practice/

Links

- UX Without User Research Is Not UX https://www.nngroup.com/articles/ux-without-user-research/
- How tracking user behavior on your website can improve customer experience. https://www.hotjar.com/blog/user-behavior/

Thank you!