

User Observations

CAC 430
Amber Wagner
Birmingham-Southern College

Quantitative Research

- Emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques
- Focuses on gathering numerical data and generalizing it across groups of people or to explain a particular phenomenon

Qualitative Research

- More exploratory in nature
- Delves into thoughts, feelings, and behaviors of participants
- Interviews, focus groups, usability testing
- Benefits:
 - Provides in-depth data that can help make informed decisions
 - Provides information on how the product or item being tested actually fits into users' lives
 - Powerful in small quantities

User Observations

- “the systematic description of events, behaviours, and artefacts in the social setting chosen for study” - Catherine Marshall and Gretchen Rossman
- Three observational research processes:
 1. Descriptive observation: research notes everything
 2. Focused observation: researcher only analyzes material relevant to the study
 3. Selective observation: researcher looks at specific activities

Preparing for User Observations

- Decide what is expected to learn from the observational study (i.e., structured or unstructured)
- Recruit participants; must have a relevant sample size based on the user base in order for results to be meaningful
- Recruit observers - define how to observe participants
- Develop explanation to participants - what will they be doing, why they are being observed
- How will the participant's data be used/not used

Types of User Observations

Controlled Observation

- lab environment
- focus on quantitative data (might have qualitative observations)
- observations are planned with yes/no or likert ratings
- might video the observation for follow-up

Naturalistic Observation

- involves studying the user “in the wild”
- tends to be less structured (can be structured but takes place outside of the lab)
- leads to qualitative outputs because researcher merely observes casual use of the product

Comparison

- Controlled Observations
 - ★ Easy to reproduce
 - ★ Easy to analyze
 - ★ Quick to conduct
 - Hawthorne Effect: an understanding that the act of observation of how someone does something can change their approach to carrying out the task
- Naturalistic Observations
 - ★ More reliable
 - ★ More useful for ideation
 - Difficult to include a representative sample
 - Difficult to make them replicable
 - Hard to manipulate external variables

Observation Guidelines

There are two main reasons to have guidelines for study observers:

1. To prevent observers from accidentally messing up the methodology
2. To gain better insights from all the additional people who supply input to your analysis

What to Observe

- What are users actually doing?
- What routines do users have with the product?
- Record details
- Ensure you're examining activities in entirety
- Use quantitative information when possible
- Document - don't analyze:
 - "Observation without evaluation is the highest form of intelligence" - Jiddu Krsishamurti

How to Observe

- Sit out of the participants' line of sight
- Be completely silent
- Don't engage participants in conversation, offer advice, correct them, or answer their questions
- Don't be a distraction
- Don't laugh at the participant unless he/she tells a joke

Taking Notes

- Make many notes - write down as much as possible
- One observation per note - categorize later
- Write down questions

Taking Notes

- You might document:
 - Mistakes
 - System errors/error messages
 - Click-paths
 - Strategies and tools
 - Search terms and results
 - Quotes
 - Anything that seems overlooked, misunderstood, ambiguous, or confusing
 - Suggestions, questions, and comments

Taking Notes

- Write your research observations at the time of your research session
- Don't discuss the session with your teammates until you've compiled all of your observations
- If possible, record the audio in your sessions (or video)
- Write down timestamps for anything important
- Include smaller details in your observations
- Don't neglect the big things (templates can be helpful)
- May use a research tool for gathering data (e.g., Reframer)

User Observation Assignment

Determine an interface/application that you would like to know more about regarding usability. Design a user observation study. You'll need to prepare 5-10 activities for a user to complete on the application (If they are simple activities, do more. If they are complex activities, do fewer).

This will be the same interface you write about for the interface analysis.

Is this structured or unstructured?

Observation Plan

- Create a template for the user observation
 - What are the activities?
 - Do you need time stamps?
 - Are there any particular questions you want to ask the user?
 - Are there any quantitative details to collect in the observation?

References

- Material for this presentation gathered from:
 - <https://www.interaction-design.org/literature/article/how-to-conduct-user-observations>
 - <https://uxmastery.com/how-to-write-effective-research-observations/>
 - <https://libguides.usc.edu/writingguide/quantitative>
 - <https://libguides.usc.edu/writingguide/qualitative>
 - <https://www.nngroup.com/articles/observer-guidelines/>