

Usability Testing for Beginners on a Tight Budget



Introduction

- Web Development Librarian at LSU
- Formerly Web Services Librarian at Tulane
- Held several web design positions at major corporations
- Usability enthusiast since 2000, when I led my first testing efforts at the Paychex Corporation
- Certified Usability Analyst
- Tested websites, Federated Search (Metalib), Discovery (Primo, soon for EDS)



Common Methods of User Research

- Focus groups
- Interviews
- Usability Testing



Common Methods of User Research

Focus Groups

- A focus group is a moderated discussion that typically involves 5 to 10 participants. Through a focus group, you can learn about users' **attitudes, beliefs, desires, and reactions to concepts.**
- **How a Focus Group Differs from a Usability Test or Contextual Interview**
 - In a typical focus group, participants talk. During the focus group users tell you about their experiences or expectations but you don't get to verify or observe these experiences.
 - In a typical usability test or contextual interview, users act. As a result, you are able to watch (and listen to) them and draw conclusions from that.

<http://www.usability.gov/how-to-and-tools/methods/focus-groups.html>



Common Methods of User Research

Contextual Interview

- In a contextual interview, you watch and listen as the user works. You don't usually give the user tasks or scenarios.
- To understand what a user is doing or thinking you can ask questions as the user navigates the site. The results are usually qualitative, observed data, rather than quantitative, measured data.

<http://www.usability.gov/how-to-and-tools/methods/contextual-interview.html>



Common Methods of User Research

Usability Testing

- Usability testing refers to evaluating a product or service by testing it with representative users.
- Participants will try to complete typical tasks while observers watch, listen and takes notes.
- The goal is to identify any usability problems, collect qualitative and quantitative data and determine the participant's satisfaction with the product.

<http://www.usability.gov/how-to-and-tools/methods/usability-testing.html>

Common Methods of User Research

- **Combining Contextual Interviews and Usability Testing**
- [Taking scenarios](#) along during contextual interviews. Combine watching users do their own work in their environments with asking them to try a few of your tasks.
- **Interview users after a usability test to find out the sorts of questions, issues, tasks they would come to the site with. Let the users do their own tasks but have them do some of your tasks as well.**

Equipment you need

- Laptop with webcam and microphone
- Recording Software
 - Not essential, but VERY helpful
 - Captures everything, including facial expressions, every word spoken, and mouse movements
 - Enables you to share highlights with stakeholders in a way that is far more convincing than words alone)
 - Examples
 - Usability Studio (\$40)
 - Silverback (\$40) (Mac only)
 - Camtasia \$\$
 - Captivate \$\$
 - Morae \$\$\$\$



Skills you need

- Patience
 - Empathy
 - Listening
 - Observation
 - Facilitation
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- I.e, the skills required for helping a patron at a service point, or teaching an instruction session



Dangers

- Creating leading questions
 - One example is using leading jargon, such as a term like Interlibrary Loan, or the name of your catalog, unless it is in proper context (i.e. a professor assigns students to search in a particular database)
- Interrupting too often
- Not creating an effective report or summary of results

More Info:

http://www.uie.com/events/roadshow/know_your_users/articles/usability_testing_mistakes/



Steps

- Identify Goals
- Create test plan
- Recruit participants
- Refine scenarios and/or tasks
- Pre-test
- Execute Tests
- Discuss testing results and changes to make



Goals

- Should be in line with your design goals
 - Redesign Goal: Make navigation easier
 - Test Goal – ensure participants can navigate easily
 - Can then be converted into specific tasks
- For example:
 - One of your design goals is to make Interlibrary Loan more readily accessible.
 - Write a task that asks the patron to locate the Interlibrary Loan pages (not necessarily using that term, though!)
 - Another goal might be to make finding journal articles easier
 - So create a task that asks users to identify several articles

Goals and Tasks

- Task Success should be measurable
- Examples:
 - Pass/fail
 - p finds the item in x seconds=pass
 - p does not = fail
 - (Goal) All participants succeed in task
 - Time buckets
 - P finds the item in 1-4 seconds, 5-8 seconds, etc.
 - X number found in 1-4, y found it in 5-8
 - (Goal) Most participants find in 1-4 seconds; none take longer than 10 seconds



Create Initial Test Plan

- Should include:
 - Goals
 - General idea of what needs to be tested
 - Number of participants desired
 - Recruiting ideas

Recruiting Participants

- University environment makes finding participants cheap and easy
- Select participants that are typical of your patrons
 - Consider multiple user groups with targeted questions
- Recruitment Methods
 - Blog post
 - Feature spotlights
 - Email to faculty or researchers
 - Sign-up sheet at service point
 - Flyers
- Don't forget IRB approval or exemption!



Recruiting Participants

- Compensation
 - It's a good practice to reward each participant with some form of tangible compensation
 - \$5 Gift Cards for food or coffee have been sufficient incentive for me thus far



Tasks/Scenarios

- A task is a simple assignment that requires no background
 - “Click on the email icon”
- A scenario includes some background information to put the task in perspective, and often involves more than one step
 - “You’re working on a research assignment. You need five per-reviewed articles on “x”. Identify five articles, then email each citation to yourself.”



Tasks/Scenarios

- Choose typical tasks that users will need to do on the website
- Some sources for test questions are:
 - Course assignments
 - Search terms from website or catalog
 - Reference Statistics
- Assign tasks that you suspect will be problematic
- Avoid leading users to conclusions



Roles

Facilitator

- Provides overview of study to participants
- Defines usability, and purpose of usability testing, to participants
- Responds to participant's requests for assistance, but does not lead patrons to answers
- Leads debriefing sessions



Roles

Test Observers

- Observes silently
- Records participant's actions and comments, as supplement to recording
- Note problems, concerns, coding bugs, and procedural errors



Test Script

- Test Facilitator reads script to participants
- Script typically includes:
 - Testing the system, not the participant
 - Think aloud
 - Inform them that they are being recorded
 - Let them know they can stop at any time



Pretest

- It is very important to “test the test”
- Student workers are excellent for this
- Can detect many problems such as leading questions, technical glitches, timing problems (too many, or too few scenarios)



Before the test

- Inform about recording
- Sign consent form



After the tasks

- Review any trouble spots
 - Return to screen where participant had trouble
 - “this process seemed challenging – what would make it easier?”
 - “this term seemed confusing to you – what would be more clear?”



Post-test questions

- Consider asking participant to complete a short survey, with questions like:
 - How would you rate the usability of (this site, this feature, etc.)
 - How likely are you to use this (site/feature) again?
 - Do you have any more comments?



Testing Report

- You'll need to present your findings in an digestible format
- Reports should include:
 - Overview of study
 - Number and types of participants
 - Scenarios and tasks
 - Results per scenario
 - Lessons learned

Resources

- <http://www.usability.gov/>
- Steve Krug
 - [“Don’t Make Me Think”](#)
 - [“Rocket Surgery Made Easy”](#)
- Jacob Nielsen (Nielsen Norman Group)
 - [User Testing Articles](#)
 - [Designing Web Usability](#)
- Jared Spool
 - [User interface Engineering](#)