Usability Testing: An Introductory Workshop

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Workshop Overview

Module 1: The Types, the Who, the What, the When, and Where of Usability Testing

Module 2: The How of Usability Testing

Module 3: Compiling & Reporting Out Usability Testing Results

Module 4: Additional Information about Usability Testing

Module 1

The Types, the Who, the What, the When, and the Where of Usability Testing



Usability Testing Overview - the <u>Usability.gov</u> Web site has a succinct definition of usability testing:

"Usability testing refers to evaluating a product or service by testing it with representative users. Typically, during a test, 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."

Usability Testing Overview

- Generally, a usability testing of a software or a Web site is done by evaluating the product with about ten users. It can be less or more, but 10 is generally the standard number used in the profession.
- Like much methods in our field, that numbers of tests needed 'depends' since the context can vary, but it is agreed in the field that most of the most common issues will appear in the first 4-6 participants evaluating a system or interface.

Questions Usability Testing can assist with finding

- Uncover issues within your design, workflow, or process
- Validate a design if it works for participants particularly if there is debate on a project team about how something is 'used by users'
- Provide insights into both good and poor issues with an interface
- Give different perspectives and mental models on an interface or issues that are faced by users of the product
- Help raise the level or awareness of the usability team, the benefits or testing, and showing how important it is to obtain feedback from users

Usability Testing goals

- What are you hoping to learn from the test?
- Do you want to know if participants find the correct information to complete a task or are you looking for feedback about the overall experience?

Types of Usability Testing

There are many types and varieties of usability testing:

- Formative vs. Summative usability tests
- Traditional usability lab. vs. other (in-person) testing types
- In-person vs. remote moderated usability testing
- Un-moderated usability testing

Types of Usability Testing – Formative

Formative

"Formative evaluation is a type of usability evaluation that helps to "form" the design for a product or service. Formative evaluations involve evaluating a product or service during development, often iteratively, with the goal of detecting and eliminating usability problems." (Usability BOK)

Formative testing can inform design decisions

This testing uncovers users likes, dislikes, and needs for a product, software, or Web site



Types of Usability Testing – Summative

Summative

 "Summative usability testing is summative evaluation of a product with representative users and tasks designed to measure the usability (defined as effectiveness, efficiency, and satisfaction) of the complete product." (<u>Usability BOK</u>)

Compare and contrast (more/less liked)

Assist with validating/verifying/repeatable processes

Qualitative vs. Quantitative

- "Qualitative research deals with emotions, human behavior, and subjective matters.
- Quantitative research focuses on data and hard numbers."

Qualitative and Quantitative – When to Use

"Qual studies are well suited for identifying the main problems in a design"

• Question: what prevents users from completing a task?

"Evaluating the usability of the site, rather than directly informing the redesign process"

• Question – what percentage of users completed 'x' task?

Qualitative Overview

- More traditionally within the UX 'purview'
- For each study, usually use 8-10 participants
- Often looking to find insights, feedback, desires
- Looking to answer the question(s) "Why"
- Obvious issues uncovered
- Generally quite flexible

Qualitative Overview

- New and more important in the UX field. Often preferred by business & organizations as 'proof' or adding validity/measurability to a usability study.
- Helps also obtain "buy in" from the business or organization
- Statistically significant is often important (>25)
- Often compare and contrast and find issues not 'Why" but 'What'
- Needs to be rigidly applied and is easily repeatable

Qualitative and Quantitative - Comparisons

	Qual Research	Quant Research
Questions answered	Why?	How many and how much?
Goals	Both formative and summative: • inform design decisions • identify usability issues and find solutions for them	Mostly summative: • evaluate the usability of an existing site • track usability over time • compare site with competitors • compute ROI
When it is used	Anytime: during redesign, or when you have a final working product	When you have a working product (either at the beginning or end of a design cycle)
Outcome	Findings based on the researcher's impressions, interpretations, and prior knowledge	Statistically meaningful results that are likely to be replicated in a different study
Methodology	 Few participants Flexible study conditions that can be adjusted according to the team's needs Think-aloud protocol 	Many participants Well-defined, strictly controlled study conditions Usually no think-aloud

Types of Usability Testing

Traditional Usability Testing Lab

- Emerged as the 'standard' in the profession in the 1980s
- Included a dedicated room with a computer where the participant and the facilitator/moderator would sit with the participant would perform the usability evaluation
- Lab generally included a camera or two to show the actions of the participants on screen and sometimes the participant's facial reactions

Types of Usability Testing

Traditional Usability Testing Lab (continued)

- Lab would sometimes also include a one-way mirror so outsider observers could watch the usability evaluation
- Lab was set up to be specifically 'sterile, consistent, and vaguely scientific' to show a repeatable and objective process
- Lab was also a way for a usability person or team to publicize what they do and attempt to obtain 'buy in' from the project team & organization

Types of Usability Testing – Traditional Usability Testing Lab



Types of Usability Testing – in person vs. remote usability testing

In-person vs. remote usability testing

- As the field has progressed and evolved, the concept of the traditional lab evolved
- Over the last decade, especially with software advances in meeting & conference software, remote testing with software allows for a usability test with the facilitator/moderator in one location and the participant in another location

Types of Usability Testing – in person vs. remote usability testing

Remote usability testing is optimal for several reasons

- Allows for a wider group of participants
- Participants are not forced to come to a specific location
- Participants can use their own machine in a location of their choice, thereby making it a more 'natural' experience
- Greater overall flexibility in the usability testing process

Types of Usability Testing – moderated vs. unmoderated usability testing

Moderated vs. un moderated usability testing

- All of the types of usability testing detailed to date are 'moderated' in that a facilitator/moderator runs the session and asks the usability testing participant questions and keeps control of the usability test
- There has been an increase in 'un-moderated' usability tests. This is when a set of tasks and a URL are uploaded to a particular Web site and a panel of participants perform a usability test based on instructions and the tasks

This type of usability test does not include a facilitator/moderator and includes much smaller and shorter usability tests, but the turnaround with videos most often is quick compared to other types of usability tests which suits when design questions need immediate answers

Types of Usability Testing – Budget

- Moderated testing can be performed with very little cost, particularly if you don't need any equipment. The only cost is that of time for preparation, execution, and analysis and compensation for participants
- Remote un-moderated solutions come with a cost between \$50-\$100 per participant, depending on the software used

Types of Un-moderated Remote Usability Testing

There are two types of un-moderated remote testing

- Qualitative testing where audio of the participant thinking aloud and video of their screen is captured
- Quantitative testing where the "click-stream" data of where the participant clicks is captured but there is no audio or video

Un-moderated Usability Testing Software – Planning

- Un-moderated tests are much shorter, usually no more than 20-25 minutes, so you adjust tasks accordingly. You can't include as many tasks—typically no more than six
- Participants are drawn from a panel provided. You can specify some demographic information. The panel includes participants from several other countries
- Sometimes you can choose your own participants, but that often can get complicated with this type of option
- You need to designate correct answers, particularly if you are using a qualitative tool (there can be more than one)
- These tools typically are only useful on publicly available sites



Un-moderated Testing Software – Summary

- The availability of un-moderated remote testing tools has had a significant impact on the field
- You no longer need a designated lab space and equipment to perform a usability evaluation
- These tools allow the researcher to include a wider audience in the evaluation
- Evaluations can be done more quickly

What to Usability Test

Identifying and recruiting the right participants

- Recruiting and selecting participants is difficult and a time consuming aspects of most moderated usability testing
- Important to get a group of participants who representative users for your site
- Carefully screen participants to be reflective of your users or test is useless. "Know thy user..." (Rubin, 119-121)
- As few as 5 participants may be enough for a particular sample. But always account for some participants not showing up or cancelling so always schedule more than you need!

What to Usability Test

Defining the role of facilitator/moderator & note-taker

- Although there can be many people involved in a usability test besides the participant, the primary people involved include:
 - Facilitator/moderator
 - Note Taker
 - Observers (Sometimes)

Roles – Facilitator/Moderator

The facilitator/moderator is the person who interacts with the participant, asking them the questions, sitting with users through the test and trying to obtain as much data from participants as possible

Moderator/Facilitation Goals

- You must always 'remain in control' of the session
- Primary goal is to "do no harm/protect the user"
- Always tell (and re affirm) to the user that "you are not being tested"
- Be professional, empathetic, and helpful to participants, without helping them with test, "leading" them, or showing any positive or negative "vibes" (body language or speech)
- Your goals is to get the participants to talk-aloud and learn about why they are doing what they are doing in the evaluation

Roles – Note Taker Goals

Note taker

- One who takes notes on what the participant is saying and doing through the entire test
- Since the facilitator/moderator will be focused on running the usability evaluation, the importance of this role is critical to obtain participant feedback
- Although you will often record the session (video, audio, or both), taking notes is crucial to determine main points, and is especially useful for obtaining quotes from the participants

Roles – Observers Expectations

Preparing and managing observers

- Depending on the type of the usability test, you might have observers (either in another room or watching remotely). It is important before starting each testing session that the facilitator/moderator set 'ground rules'
- If observers are watching online, they must remain on mute and not say anything (often the facilitator/moderator can control this), but you do not want observers making fun of the participant or their actions
- If they are in a different room close by the lab, make sure they remain quiet and do not disturb the test or that the participant can never hear what they are discussing in any manner! This can be embarrassing!

Ethics of Testing – Informed Consent

These studies must protect human subjects in testing and require Informed Consent

- Informed Consent means
 - Participants must be made aware of several pieces of information about the test
 - They must *understand* the information
 - They must agree to participate

Ethics of Testing – Informed Consent

Always explain the following in writing in clear language

- Purpose of the test why you are talking to them
- Procedure what will happen during the test
- Recording what will be recorded and explicitly get their permission to record
- Confidentiality their name, identifying information (PII) not tied to results
- Risks what risks there are with the evaluation
- Withdrawal their right to withdraw at any time
- Compensation What compensation they will receive and when



Usability Testing Consent – Ethics Issues

Tricky situations

- Participant arrives late
- Participant arrives and wants their compensation first
- Participant declines to be recorded
- Participant is not the target demographic/persona
- Participant has trouble understanding written directions

Usability Testing – To Record or Not to Record?

Pros

- Can go back and review recording later
- Could potentially use video (or audio) clips in report

Cons

- Often can be difficult in a public environment
- Always need consent form signed
- Might not be culturally acceptable in certain environments or organizations
- Some participants might refuse to participate if being recorded

Usability Testing Planning

- Think about the participants and what groups they should represent. Do you need participants familiar with your site? Are you looking for participants from a wide variety of locations?
- Think about tasks carefully. This is the basis of a solid test. Although it takes time to master this topic of task writing, you can start by writing clear and useful tasks right away
- The article, <u>Seven Tips for Writing Usability Task Scenarios</u> is an excellent introduction to get 'on the right track' for writing clear and usable usability testing tasks

What to Usability Test

Minimizing bias and leading in creating tasks:

- Although it sounds obvious, you want to remember to avoid either including bias you are unaware of or writing questions that are leading to participants.
- Think about any of your own biases you have do you prefer types of widgets (free-form text fixed vs. drop-down menu), how familiar are you (relative to the participant) with the system being evaluated?
- Editing and having multiple people from different subject areas review tasks helps with creating stronger tasks
- Running a pilot test is an excellent option to review the tasks before starting the full usability testing round

Understanding the Think-Aloud Protocol

- The Think Aloud Protocol is a well accepted method when performing usability tests
- The facilitator/moderator asks the participant to vocalize their internal thoughts as they are progressing through the usability test. This is contrary to how many people think and talk, but it is important in usability testing for both the facilitator/moderator to understand the thoughts and mental model of the participant, as well as the observers to understand how and why the participant is performing a task or thinking within a certain way

Understanding the Think-Aloud Protocol

- Always encourage participant to talk and think aloud, as it is a great source of information for all involved
- Demonstrate Thinking Aloud by Showing Users a Video from the Nielson Norman Group is an excellent description and practical example of using the Think-Aloud Protocol

What to Usability Test

Creating a test plan

- Creating a test plan is critical to a successful usability test, and creating solids tasks is an important part of this process
- <u>Usability.gov</u> has an excellent section on numerous <u>usability test plans</u>

Usability Test Scripts in a Usability Test Plan

Include the following in a usability test script

- Introduction
- Pre-task questions (including five-second overview)
- Tasks
- Pre-task questions
- Follow up questions/Debriefing

Usability Test Plans and Conducting the Test

- If test plan is well developed, facilitator/moderator should be able to follow test plan exactly
- Always tell (and re affirm) to the user that "you are not being tested"
- Be professional, empathetic, and helpful to participants, without helping them with test, "leading" them, or showing any positive or negative "vibes" (body language or speech)
- As the facilitator/moderator, always 'keep control' of the session

Consent Forms

- If you are testing and recording a person either audio or video, you should have a consent form signed. It is not required in every US State, but it is an ethical and solid practice to use
- The Usability.gov Web site has a <u>solid generic consent form</u> appropriate for usability testing

Non-Disclosure Agreement (NDA) Forms

• If you are looking at a confidential or pre release software or Web site, companies might require all participants to sign a Non-Disclosure Agreement (NDA) to pledge to not share any of the information they saw or learned about while they were performing the usability evaluation. These forms vary by organization but are very common in the software industry

When to Usability Test

When to Usability Test in the development life cycle?

• Although you can usability test at anytime (in development, pre release, or post release) and still obtain valuable information, due to time and resource constraints, organizations often decide on specific times to perform usability testing

What is an ideal Usability Testing frequency?

The ideal usability testing frequency is organizationally chosen and usually depends on your organizational constraints goals!

Usability Testing – Paper Prototypes

Look for the following feedback on paper prototypes

- General concept | clear workflow | clear process
- Overall usefulness
- Overall screen layout
- Missing functionality
- Not looking for specific user interface feedback at this point

Usability Testing – Wireframe Prototypes

Look for the following feedback on wireframe prototypes

- General concept | clear workflow | clear process
- More screen level information content, labels, placement
- More detailed flow feedback (including page transitions)
- Font size, information hierarchy
- Scrolling behavior

Tips

- Get your content as defined as possible to get better feedback
- Make information as realistic and consistent as possible

Usability Testing – Functional Prototypes

Look for this feedback on functional prototypes

- Screen design, visual design what is the feeling when you use it?
- Full end-to-end app experience
- Searching, scrolling, exploration behaviors

Tips

- Make information as realistic and consistent as possible
- Be more open-ended with tasks, if possible

Usability Testing – Full-Working Application

Look for this feedback on fully working application

- Overall experience what is the feeling you get when you use it?
- Overall usability, ease of exploration, self-learning, discovery
- Where do they naturally go to find things?

Tips

- Provide very high-level tasks and let them figure out how to use the app to accomplish it
- Perhaps let them come up with the tasks and see if they can figure things out

Where to Usability Test

With so many more environments and locations now available for usability testing, you can do an in-Lab test that is moderated, remote moderated, un moderated, or a mix of types depending on your needs and constraints

Usability Testing – Where to Test?

Where can you test

- In a lab
- In a coffee shop
- In the field (also called 'guerilla testing')

Usability Testing – In a Lab

Pros

- You have most control over the environment
- Recording is easiest in the lab
- Having project team / client observers is easiest

Cons

- The least "natural" environment so lose "context of use"
- Typically the most time-consuming (recruiting especailly), running, and analysis required

Usability Testing – In a Coffee Shop

How

- Get permission from the store manager
- Buy gift cards (I often get ten \$10 cards at a time)
- Approach patrons. Politely ask them for 10 minutes of their time to give feedback and you will give them \$10 gift card to the coffee shop
- Make sure to have consent forms for signing
- Have a mobile phone for them to use, with app pre-loaded (though people might prefer to use their own mobile phones)

Usability Testing – In a Coffee Shop

How (continued)

- Ask them to perform tasks and ask questions
- Watch time: "I want to respect your time, we're at 10 minutes."
 Sometimes they will want to continue to talking with them let them, for a little while, then thank them and give them the gift card

Usability Testing – In a Coffee Shop

Pros

- You can get participants quickly and cheaply (works best for general consumers)
- You can do this more often because it's cheaper than lab testing
- Setting is more realistic than a lab

Cons

- Challenging to record I recommend not recording, or just audio recording. Take good notes!
- Some managers do not like this but buying gift cards helps

Usability Testing – In the field ('Guerilla Testing')

When

 Best for situations where you need to test location services, or functionality that depends on the user "being out and about"

How

- Recruit participants using any method including approaching them,
 like in the coffee shop example
- Have them sign a consent form
- Conduct the test
- Recording can be challenging. Optimal to have someone follow you with a video camera



Usability Testing – In the field ('Guerilla Testing')

Pros

- Setting is most realistic
- You'll get a lot of "context of use" observations
- You can get a lot of "usefulness" feedback in real-life situations

Cons

- Challenging to record I recommend not recording or just audio recording. Take good notes!
- Some managers do not like this but buying gift cards helps too

Module 2

The How of Usability Testing



Session Overview – mostly divided into these groupings

- Initial meeting and welcome the participant
- Facilitator/moderator details outlines of the test and sets expectations
- Facilitator/moderator asks any background questions
- Participant commences with the test and performs tasks
- When participant is done with tasks, the facilitator/moderator then asks participant what they liked/would change in the application
- Wrap up and hand participant any compensation (if part of the plan)
- Dismiss the participant

Participant greeting and pre-test briefing

■ Whatever type of usability test you perform, you will always greet the participant and welcome them. Once they are situated, you should give a brief overview of the session to describe what will happen — and you should do this consistently with each participant

Participant greeting and pre-test briefing

- Be sure to include the following:
 - Introduction and your role
 - Detail type of design or fidelity of product
 - Make clear you did not design/create the product, you are the evaluator
 - Tell them to ask any questions and you will try to answer
 - Describe the Think-Aloud method
 - Tell them they can stop anytime if they choose
 - Describe if there is recording or not (and appropriate consent forms)
 - Give idea of time frame of the sessions
 - Allow them to ask questions before starting

Presentation of tasks

- Can be verbal or written or both.
- You can either have a printed out copy of the tasks or send to them (if remote) prior to the test
- You as the facilitator/moderator can read them out verbally
- You can use both versions if the participant prefers
- Being clear about this and what your expectations are regarding this is critical

Monitoring body language

- This is a nuanced requirement of being a good facilitator/moderator, but you should be careful to make sure your own body language is not making the participant uncomfortable (being too close, seeming tense, etc.)
- It is also imperative that the facilitator/moderator makes sure the participant is as comfortable as possible: the nature of usability tests can often make people nervous or tense, but as much as realistically possible make participants relaxed is a professional and solid moderation technique

Knowing how and when to intervene

- Depending on the situation (technical issue, a participant becoming too stressed, etc.), sometimes a facilitator/moderator needs to interrupt the session to change something or stop the test
- The most frequent cause is technical difficulties when the software or Web site crashes or needs a reboot/cache cleaning
- Another common issue is also giving an 'assist' to a participant sometimes when they are stuck and you think that your 'assist' will not change the result. This is a judgement that varies according to each facilitator/moderator's perspective and situation

- Note taking and logging data
 - As note earlier, it is often optimal to have someone besides the facilitator/moderator taking notes and being able to document the participant moves much more. This is also an excellent way to obtain participant quotes too
 - Though sometimes there is only one person that has to do all the roles (facilitator/moderator and note taker), that is not optimal as you will not get to record or view all the feedback from participants

Usability Testing Debriefing

- A crucial part of the usability test is to debrief the participant at the conclusion of the test
- Best to have a standard set of questions you want to ask, but allow for a free flow of discussion of information if the participant wants to discuss related feedback from the evaluation
- Be informal and get participant to talk about general impressions

Compensation

- Generally considered good practice to give some sort of compensation (between \$10 to \$250 depending on the time involved and complexity of the evaluation)
- Often in less formal testing, gift cards of a nominal amount are fine
- Certain organizations do not allow payment (government agencies) so sometimes 'organizational SWAG' (coffee cups, t shirts, etc.) can work
- Although the cost is not often covering the entire cost to the participant, it is considered an acknowledgement and thank you for them to take the time and effort to assist with the usability evaluation

Usability Testing – session examples

 The following is a video example of a Usability Test from Rocket Surgery Made Easy (by Steve Krug) that shows the respective participant and moderator

https://www.youtube.com/watch?v=QcklzHC99Xc

Usability Testing – Practical Tips for Moderating a Usability Test

- Test as often as you can: you find more issues with iterative tests
- Practice your initial "approach" for coffee shop testing
- Practice & pilot the test before testing with "real" users
- Write a checklist of everything to bring and use it
- Always test users on the OS that they're used to
- Always be prepared for something to go wrong
- Chocolate buys a lot of favors

The Future of Usability Testing

- Being able to plan and run a usability test, whether it is moderated (in person or remotely) or un-moderated, is a skill all user experience professionals must know
- Like everything else in the field, it has changed and evolved in the last 15 years and will continue to evolve

The Future of Usability Testing

- At one time, all testing was done in person on desktop computers in a usability lab
- With global users and products, and tools that allowed us to connect around the world, remote moderated testing took off
- With the appearance of platforms that allowed us to test sites and applications online with a preset panel and no moderator, we saw a huge change in how user experience professionals could collect feedback
- Now with mobile devices we need to be able to test any time anywhere

Module 3

Compiling and Reporting Out Usability Testing Results



The standard format followed for putting data together for usability test include

- Compile and summarize data as you test
- Record quotes that are useful, relevant, or 'pithy' or note where they are in the time of the test to review later
- Usually record completed task successfully, failed task, or stopped participant
- Can throw out results that are totally "off"
- Can sometimes count time and/or clicks, but that is considered less important today
- Severity scales as appropriate (usually have most important issue first and then list in descending order)



When starting to compile evaluation results, you start by coming up with the general themes that emerged from the sessions (good and bad)

- Note problems with the software or Web site that each user found; however, that is the easy part! A broken link, a missing step, a mislabeled button, etc.
- Finding issues that are more subtle and not obvious is often the most trying and difficult part of this analysis. For example, is there a cultural reason why an icon was not used or did participants say one thing and then do something different when interacting with the system?

- When you are looking at tasks completed in a usability test or specific answers within a survey (answered yes/no, true/false, or picked out of a multiple choice answer), they are often easy to understand and analyze
- Trying to analyze and understand why participants said something specific, answered something in free-form text, and something that might be construed in different ways can be difficult to analyze and this is the crux and one of the difficult parts of a usability expert

- There is no 'silver bullet' way to effectively and objectively interpret results of results of a usability method or evaluation
- There are tools to help, but in conjunction with the tools: relying on your experience, experience with analyzing data, context of the evaluation, and recognizing your own personal biases (or at least being aware to negate them) allows for solid analysis and interpretation of usability evaluations!

- Being aware of your own biases (such as having a preference for freeform text fields vs. drop-down menus, etc.) as this is important to recognize in analyzing and interpreting results
- Additionally, cultural biases are more engrained and difficult to recognize
- We cannot rid ourselves of our own biases, but if we are aware of them
 - we can keep them 'in check'

- One nice visualization is called Wordle: http://www.wordle.net/
- This is a way to upload data and produce a visual representation within a particular group or section
- This is particularly useful when you have quantitative data and want an accurate reflection of what participants are saying

Assessing the Severity of Findings

- You may want to apply severity issues to the issues uncovered in your usability evaluation. With that, there is a plethora of various <u>usability</u> <u>severity scales</u> available, which could be useful.
 - Personally, I have always found the Wilson scale the most clear and complete one when given the option of using a usability severity scale.
- Additionally, many organizations will often use the same severity system and scales of the development/engineering organization. Often, you can create a separate usability section and then map the severity of the issues to the nomenclature of your organization.

- Once you have compiled, analyzed, and interpreted your results you have must present them in a format to audiences that is often eagerly awaiting them – or fearful of the results! This is a critical component of our field
- Realistically, often we have 'one time' to get the involved parties together for a specific time and talk about the usability results
- Use this time wisely or risk losing any momentum for change or even your influence

- Always start reports and presentations with a few positive results
- We often we in this field focus on the negative, but even the worst sites often have good aspects and participants often have positive feedback
- Then after that you can discuss the issues and problems uncovered in the evaluation in detail

As usability evaluations have evolved, there has been a proliferation of types of ways/methods to report out to clients:

- A traditional report in prose or presentation format listing many of the issues
- An executive summary of several pages of high-level discussion of issues/recommendations
- Quick email listing the main issues uncovered
- Debrief with team immediately after testing (either each testing or once all testing is completed)
- Video clips of the primary issues uncovered

- Again, there is no correct way to produce a report and with so much of our field – 'it depends' on the environment, context, situation, and time
- This is one area of our field that is evolving and I would recommend working out which is best for your particular situation

Questions?

Chris LaRoche & Katherine Wahl

usability@mit.edu

Module 4

Additional Information About Usability Testing



Usability Testing Links & Tools

Usability Testing Links

- Usability.gov: www.usability.gov
- United States Web Design System: https://designsystem.digital.gov/
- Usability Body of Knowledge (BOK): www.usabilitybok.org/
- Nielsen Norman (UX Consulting Group): http://www.nngroup.com
- Moderator's Survivor's Guide videos:
 http://www.modsurvivalguide.org/videos/
- Tips for Writing Usability Test Tasks: https://measuringu.com/task-tips/

Usability Testing Links & Tools

Moderated & Unmoderated Testing Tools

- UserTesting: https://www.usertesting.com/
- Loop 11: https://www.loop11.com/
- UserZoom: https://www.userzoom.com/
- TryMyUI: https://www.trymyui.com

Bibliography

Courage, Catherine & Baxter, Kathy. (2005). *Understanding Your Users: A Practical Guide to User Requirements*. San Francisco, California: Elsevier/Morgan Kaufmann.

Dumas, Joseph, S. & Redish, Janice, C. (1999). *A Practical Guide to Usability Testing, Revised Edition*. Exeter, UK: Intellect Press.

Dumas, Joseph, S. & Loring, Beth. (2007). *Moderating Usability Tests, Revised Edition*. Amsterdam, Netherlands: Elsevier/Morgan Kauffman.

Kuniavsky, Mike. (2003). Observing the User Experience: A Practitioner's Guide to User Research. San Francisco, California: Elsevier/Morgan Kaufmann.

Morville, Peter & Louis Rosenfeld. (2006). *Information Architecture for the World Wide Web – Third Edition*. Sebastopol, California: O' Reilly Media, Inc.

Nielsen, Jakob. (1993) Usability Engineering. San Francisco, California: Morgan Kaufmann.

Bibliography

Norman, Donald. (2013) Design of Everyday Things (Revised and Expanded Edition). New York, New York: Basic Books.

Pearrow, Mark. (2007). Web Usability Handbook, Second Edition. Boston, Massachusetts: Charles River Media.

Rubin, Jeffrey. (1994). Handbook of Usability Testing. New York, New York: John Wiley & Sons, Inc.

Schumacher, Robert. Editor (2009). *Handbook of Global User Research*. Amsterdam:, Netherlands: Elsevier/Morgan Kaufmann.

Wilson, Chauncey. (2009). *User Experience – Re-mastered*. Amsterdam: Netherlands: Elsevier/Morgan Kaufmann.