User Experience For every library (Via User Testing)

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You are not your user(s).

- What works for you, may not work for your users.
- Usability is contextual
- Stakeholders and designers may fall into Religious debates—deeply held personal beliefs about how things should work
- First time or infrequent users have a different experience than expert/repetitive users
- If you know exactly what you are looking for, you look for it differently than someone who will know only it when they see it.

So how can you know if it works for your users?

Why not just ask them?

What does usability testing do for you?

- Shape your design/content organization based on user needs
- Pinpoint user experience problems – 'pain points' -- with your current or proposed design
- Gather feedback about what's important to your users
- Make users feel included
- Develop user-focused mindset
- Minimize design wrangles

Some Types of User Experience testing

- Card Sort/Sticky Notes
- Paper prototype/paper and pencil testing
- User observation testing
- Journey Mapping

When should you test?

- With your existing site
- Before creating a new design/organization
- While creating a new design/organization
- After the new design/organization is in place

How many users?

- Rule of thumb: 3 to 5, depending on how many distinct user groups you have. (Nielsen: 5-15; Krug: 3)
- Why?
- Each user gives you some new information, and some duplicate info
- Better to test more often, with fewer users, then not test at all!
- The less specific your test, the more users you need (survey vs. observation)

Recruiting users
- Guerrilla testing: find people in the building who have nothing to do for 10-15 minutes
- Bribes: Coffee and donuts, give-aways
- Ask your frequent fliers
- Public events
- Recruit from advisory groups
- Teen advisory board/club
- Friends of the Library/Board members
- New employees, volunteers, family members
- Look for 'naïve users'– but don't be surprised by who that is!

Card Sorts/Sticky Notes
- Write each piece of content on a card or sticky note.
- Individually or in groups, users arrange the cards/notes in piles or categories that make sense to them.
- Users create labels for each category

Card Sort: you'll need…
- Individual or groups of users/stakeholders
- [Content Inventory]
- Set of cards/sticky notes with each piece of (prospective) content written on them
- Large space to spread out and arrange content– table for cards, whiteboard for stickies
- Ways for sorters to label categories– blank cards/stickies, markers
- Additional Cards/stickies to repeat (links to) content in different categories– this is a website!
- Way to capture resulting organization (rubber bands, camera)

Paper Prototyping
- Use paper and pencil, a drawing program, or a presentation program to make rough outlines of what each page will look like.
- Users 'perform' tasks by pointing to where they would click.
- Ask for user reactions

Paper and Pencil Variant
- Print out web page
- Users given copies of printouts and colored markers
- Ask users to mark 'important'/'not unimportant'   OR   Specific categories OR
- 'makes sense/confusing'.   OR   'would use'/'wouldn't use'

User Observation Testing
- Working with stakeholders, develop a list of 3-10 *important* types of tasks users should be able to perform *easily* with the site
- Create sample questions for each category
- Users are asked to perform these tasks while being observed/recorded, and to verbalize their thoughts.
- Each task is timed
- Resulting recording/notes analyzed for 'pain points,' dead ends, confusion

Examples of user tasks
- Find out whether the library have any travel videos of Spain?
- I want to take my two year old nephew to a storytime. When are the storytimes and what do I need to do to attend?
- I've heard the library provides tax help. How can I use this service?
- You want to listen to mystery audiobooks in your car: figure out how to do that.
- Renew your library books.
- Does the Library have *Consumer Reports* reviews of used cars?

User Observations: you'll need...
- A user
- Script including 3-10 important tasks & introduction
- Get user permission to record the test
- Timing device (3 minutes is as long as you can stand to see them struggle)
- Someone to read the tasks and time
- Observer to take notes
- Way to record user interactions and thinking-out-loud
- Half hour to 45 minutes.

Recording technologies
- NOTE: you will need a **microphone** to record the user's thinking-out-loud. While many Laptops have an integrated microphone, desktops generally don't.
- Some examples of free, open source, or already owned tools:
    - Screencast-o-matic (free online tool)
    - CamStudio (free, must be installed)
    - Jing (only short clips)– or upgrade to Snagit (inexpensive)
    - Online conferencing software such as Zoom with recording turned on
    - Livecasting technologies (Youtube live, private)
    - OBS (Open Broadcaster Studio, from livestreamers)*

User Observation Tips to remember:
- Reassure the users that you are stress testing the site – not them!
  Every time they get lost, they've given you good information.
- Urge users to talk through their thought process out loud.
- Users will ask for help. Be strong.*
- Have someone take notes even if you're recording– backup is good.
- Have a copy of the task question printed
  out for the user to refer to.
- Protect user privacy.
- Take note of unexpected results!

User Observation Lite Ideas:
- Set up some test stations and (with permission) shoulder-surf.
- Or ask users to try some of the tasks on those test stations and answer a brief survey about whether they were successful
- Get a group of users with computers to try out the tasks at home and let you know where they encountered difficulty.
    - Sometimes you can recruit computer classes to do this

Journey Mapping

- Can be web only, or web and physical.
- Role-playing as a user
- Create user persona(s) – be specific!
- Focus on a Specific information need or task
- Walk yourself/your group through the entire process of the persona performing the task or meeting the need
    - Touch points: where user interact (physical/online: front door, website, bathrooms, search engine)
    - Decision points
    - Pain points: problems, delays, sources of confusion.
- Document process, including touch points, decision points and pain points

Using your results

- Transcribe user observation recordings, if any
- Summarize data with spreadsheets
- Google Forms are a good way to simplify data entry
- Make a list of common issues/results
- Show designers &/or stakeholders data and recordings
- Iterate your design/organization to avoid the issues and maximize positive results
- Test again!
- Websites evolve! You don't have to get it 100% the first time– make it good and then make it better!

Accessibility Testing in Brief

- Web accessibility: can users with disabilities and users with different interfaces use your website?
- Technology offers some ways to make the web more accessible – but it also causes accessibility issues

Non-Exclusive List of Things to consider

User Characteristics:
Color blindness and contrast
Visually impaired (large text or screenreader) user
Hearing Impaired
Limited motor control
Dyslexia
Limited English Proficiency
Limited Computer proficiency

Technological Characteristics
Different Browsers and versions
Different Operating systems
Large or small browser window size?
Mobile vs. Desktop/Laptop
Enlarged font sizes
Browser extensions, such as Adobe Flash and PDF

Accessibility Hints: Be aware of:

- Navigation menus and how they work
- Skip menu
- Alt Text
- Color choices
- Terminology choices
- Separate mobile page(s) vs. CSS– does it degrade gracefully

- Scalability
- Expectations (what do you expect users to do/know)

Testing your site for Accessiblity
- WAVE: http://wave.webaim.org/
- Screenreaders: NVIA (free), JAWS
- Screen reader extensions in browsers
- Screen reader and magnification in computer and mobile operating systems
- More information:
  - The Web Accessibility Initiative: https://www.w3.org/WAI/test-evaluate/
  - From the Feds: https://accessibility.18f.gov/ and https://section508.gov

Remember:
- Any usability testing is better than none.
- You don't need a lot of users.
- You don't need to spend a lot of money.
- You'll find out things you didn't know.

Basic Starter Resources
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