How to Test Usability

Web Design World 99
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Usable Web: http://usableweb.com/

Overview of Presentation

- How and why to test usability
- Informal versus structured testing techniques
- Case studies: what actual tests reveal
- Tips and tricks for usability testing
- Goal: get you interested, get you started, read more, try it
About the Web Page for the Presentation

- http://usableweb.com/instone/howtotest/
- Copy of these slides
- Links to material mentioned here
- Other related links
- Updated as presentation evolves (gets better from your feedback)

References to links at the web page will appear here underlined

What is usability (user) testing?

- Pick some important tasks and watch quietly as people try to do them
- Not: link or load or code testing
- Not: having friends view your pages on their computers
- Not: online surveys or focus groups
Client first experiences

- “It is such a rush. This is what I want to be doing!”
- “Not good news. A real eye-opener. We gotta get the developers involved so they can see where people are struggling.”
- “The testing was not too hard, but now how do we get the results taken seriously?”
Why to Test Usability

- Value of usability testing
- Cost of usability testing
- Role within usability engineering
- Role within your software development lifecycle

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Why: Value of usability testing

- “A bad design can cost 40% of repeat traffic, half of potential sales” - CIO / Forrester
- “People will gladly waste a million dollars on their fancy design and not spend $4,000 to see if it works” - Nielsen
- Intranet: lost time = lost money
- Reduced calls to help line: do the math

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Why: Cost of usability testing

- $0: do-it-yourself, no-budget, invest time
- $2k: low budget, do-it-yourself
- $20k: hire out usability testing, portable lab
- $100k: fancy lab with trimmings
- Compare with Fortune 1000s: spending $2 mil/year on redesigns

Why: Beware limited views of usability

- “How Does Usability Relate to IA?”
- Usability testing ranges from observing how users react to color palettes to timing how long it takes someone to find a log out button. Sometimes testing is one-on-one, with a moderator asking an individual tester to go through the process of using a Web site—asking questions along the way about what they like and don’t like, what is easy and difficult, and how it could be improved. Other times it consists of 10 to 20 person focus groups that also work with a moderator to determine preferences of target audiences and look at big picture issues, such as color treatment and content needs.
Why: Usability Engineering

- Know the user: characteristics, tasks
- Competitive analysis
- Usability goals
- Parallel & Participatory design
- Guidelines and heuristic evaluation
- Prototyping
- You are here: Usability testing
- Iterative design
- Feedback from field use

>> Usability Engineering book

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Why: Software Development Lifecycle

- Fit usability testing into your own way of doing things
- The sooner in the process, the better
- The more often you do it, the better
- Not a good idea: do testing just before a fixed release date

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How to Test Usability

- Plan
- Do
- Follow-up

>> Several how-to links

How: Plan

- Purpose and audience of site
- Usability goals
- Tasks
- Participants, scheduling, payment
- Materials
- Setting
- ...Expect to hear bad news

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How: Do

- Introduction for participant, list of tasks
- Watch quietly
- Record behavior (take notes, tape)
- Interact with participant
- Debriefing, questionnaire, payment

How: Follow-up

- Tabulate data
- Findings
- Recommendations
- Actions
Informal vs. Structured Techniques

- Opportunistic usability testing
- Quick and dirty
- Multi-purpose rooms
- Full usability labs

Techniques: Opportunistic

- Do mini usability tests whenever/wherever opportunity arises
- 15 minutes = opportunity
- Violin lessons, after short meetings, cleaning lady, nosy relatives
- Jakob’s 1-hour usability test: tradeshow, laptop, 50-line email
Techniques: Quick and Dirty

• Shortcuts on the planning: get convenient participants, not ideal ones
• Schedule an hour worth of tasks
• Convenient locations, realistic tasks
• Debriefing very important: ask why
• Shortcuts on the write-up
Techniques: Multi-purpose Rooms

- Use available space as laboratory-for-a-day
- Bring in portable equipment
- Convert an empty office into a full-time lab
- Use a lab for other things to help justify cost
- Since people coming to you, do more planning
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Techniques: Full Usability Labs

- Build rooms just for this purpose
- Adjoining, sound-proofed rooms
- Video cameras, scan converters, two-way mirrors, microphones, etc
- Cost: $80-120k
- Do it all of the time to recoup investment

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Techniques: Full Usability Lab

- Examples: Ameritech, Sun, Lotus, Microsoft
- A few vendors...
- STC Usability SIG page for more pointers
- Find someone who has built one similar to what you need

>> Links to selected labs and more information

Techniques: A Comparison

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Case Studies

- Examples of when usability testing of a web site is particularly useful
- That is, situations where usability testing has helped, repeatedly
- That is, situations where usability testing has helped, repeatedly

>> Several Case Study links

Case: When you do not do your homework

- “Of course my site is easy to use, I use it every day”
- Introduction to importance of usability engineering
- Wake-up call to the organization
- Very common in the early days of the web, still too common

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Case: When good GUIs go bad

- Well-designed desktop applications are not necessarily well-design web applications
- Limiting technology (today)
- Different context of the Web

Case: When you are allowed to break the rules

- “Animation is bad, never use animation on the Web”
- Tog: many tests/re Designs over a few days
- With a thorough understanding of his users and the problem, he used animation to improve usability

Trials and Tribulations of Web Application Design
Case: When a side-effect dominates

- Test existing site to determine most important usability problem
- Redesign and build prototype
- Test prototype: some side-effect makes it worse than before
- Iterate to remove new usability problem

Tips and Tricks

- Little things that you should not forget
- Some of my own tricks but most I learned from someone else
- “Everybody loves tips and tricks” - Jim Heid

>> Section of Tips/tricks links

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Tips: Note-taking

- Map out several possible routes
- Use screen printouts to scribble on
- Words and body language as important as what they are doing
- Time-stamp

>> “Following a fast-moving target”
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Tips: Participants think they are dumb

- Play dumb: “I do not know how to do it either, I am confused too”
- Join the club: “Everyone else has had trouble too, so it is not just you”
- Blame the designer: “If you are having trouble, then it must be the designer who is dumb”

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Tips: Uses for video/audio tapes

- Support note-taking and remind you what happened (audio and cheap video)
- Review session with people who could not be there (video)
- High-lights tape (quality video)
- Sit on a shelf

Tips: Recruiting users

- Broadcasting does not work
- Friends of friends
- Return participants
- Find an organized group for a special audience (e.g., senior citizens center)
- Focus group recruiters

>> When to outsource the recruiting of test users, UIE participant tips

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Tips: Do not forget about other techniques

• Surveys
• Log analysis
• Focus groups
• User feedback

Tips: Do it before you get very far

• Existing site
• Competitors’ sites
• Paper prototypes
• Templates
• Vertical prototypes

Testing templates for web pages, Test your old site
Tips: Remote testing

- Coordinate over telephone
- Screen capture over Internet
- But, more set-up time than quick & dirty (and lots more things to go wrong)
- Best to overcome geographic boundaries

>> “Remote usability evaluation”, DevHead Cheap Usability Tests

Conclusions

- Why? Benefit >> cost
- You will get surprises, I promise
- Plan, do, follow-up
- Find right techniques for your situations: from opportunistic to full lab
- Any case studies look familiar?
- Pull from pool of tricks as needed

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