

USABILITY V. AFFORDANCES

Usability: Can it be used by the participant in the way we imagine it should be used? Can they visualize other people using it?

Sample questions:

1. I think the interface would help me search full text databases.
2. I think the interface would be easy to use.
3. I feel confident my colleagues would find the interface easy to use.
4. The way the interface worked helped me understand what was happening in the system.
5. The presentation of the search results helped me understand my results.

Affordances: Measuring the relationship of the object (interface) and the *user-perceived* value and use.

Sample Questions:

1. How easy or difficult was it to understand the search function?
2. Could the interface be a helpful tool in your work?
3. Would you want to use this system?
4. If the interface was offered in a database you use, how motivated would you be to use it rather than other tools you currently use?
5. Would the interface be capable of handling the kinds of searches you need to do in your work?
6. If you used the interface in your work, would you need to use other searching tools in conjunction with it?
7. Is the visual representation of results provided by this program helpful in understanding your search results?
8. Can you describe how you would use the browser?
9. Do you have people (colleagues, family, friends) you would be able to ask for help if you had questions about how to use the browser?

USABILITY STUDY CHECKLIST

1. Identify purpose

- a. What is our goal?
- b. What do we want to measure?
- c. Who is our intended audience?
- d. How will we use the results?

2. Project management issues

- a. Who is responsible for the study?
- b. Timeline
- c. Funds
- d. Staff hours available
- e. Feeding results into the larger project
- f. Management-level “sponsor” for project

3. Ethics

- a. What are the ethics review requirements?
- b. Are there any ethical concerns that might need to be addressed? (Key question: can any conceivable harm result to participants as a result of this study?)

4. Study participants

- a. Where will we recruit?
- b. Will we offer compensation?
- c. Do our participants reflect our intended user group?

5. The study

- a. Information/ consent letter (cover ethics requirements: explain purpose; disclose any possible danger, harm that could result to participant; explain how results will be used; state how long records will be kept; describe how anonymity of participants will be preserved)
- b. Tasks
- c. Questionnaire(s) – usability v. affordances questions
- d. Interview questions (pre- and post)
- e. Guidelines for interviewer: e.g., no unsolicited “helps” to the participants –if you feel the need to direct them, that indicates a usability problem.

6. Recording tools

- a. What is possible: Morae
- b. Screen capture: Camtasia or over the shoulder video camera
- c. Sound recordings – always have a backup
- d. Questionnaires
- e. The value of keeping interviewer notes

RECOMMENDED READING

Christenson, Heather, and Roy Tennant (2005). Integrating Information Resources: Principles, Technologies, and Approaches Retrieved Jan 20, 2009

<http://www.cdlib.org/login.ezproxy.library.ualberta.ca/inside/projects/metasearch/nsdl/nsdl_report2.pdf>.

A review of how the California Digital Library built a prototype to demonstrate how the National Science Digital Library can be integrated with other library science and technology collections. This article is useful not only because it touches on principles for testing prototype software, but because the structure of the article itself provides a template for how to think about and approach issues in developing new online services.

Gibson, James J. The Ecological Approach to Visual Perception. Boston: Houghton-Mifflin, 1979.

James Gibson established the concept of affordances in this book—included for your reference.

Harris, Jonathan. “Jonathan Harris: The Web’s Secret Stories.” TED Ideas Worth Spreading. <<http://www.ted.com/index.php/talks/view/id/144>> Posted July 2007 Retrieved Feb 7, 2009.

A video of Jonathan Harris, artist/ computer programmer, giving a talk (with images) on his work to capture and display information in new ways. This is included to give you a broader view of how information can be presented and made accessible to users.

Kaufman, Joshua. “Practical Usability Testing.” Digital Web Magazine. <http://www.digital-web.com/articles/practical_usability_testing/> Posted Feb 13, 2006 Retrieved Jan 20, 2009.

This magazine article describes from a more sophisticated perspective what the goals of usability are, and suggestions for implementation of usability studies.

Nielsen, Jakob. “Why You Only Need To Test With 5 Users”. Jakob Nielsen’s Alertbox. <<http://www.useit.com/alertbox/20000319.html>> Posted Mar 19, 2000 Retrieved Jan 20, 2009.

Jakob Nielsen, usability expert, speaks in this brief article to the value of small usability studies, and how to balance the needs of testing with the needs of your budget. Additional links to other usability articles are also provided.

Nolan, Katherine, OutFront.net "Design Tips > The Usable Site".

<http://www.outfront.net/tutorials_02/design/usability_intro.htm> Retrieved Jan 20, 2009.

This online tutorial provides a simple introduction to some of the basic principles of usability and usability testing. Additional tutorials on the site provide brief articles on issues of web design such as navigation tools and use of colour.

Unsworth, John. "Scholarly Primitives: What Methods do Humanities Researchers Have in Common, and How Might Our Tools Reflect This?" Humanities Computing: Formal Methods, Experimental Practice. King's College, London, May 13, 2000.

Unsworth's approach to interface design provides an easily applied set of criteria with which interface design can be evaluated from a purely practical perspective—namely, that useful interface design enables Aristotle's scholarly primitives (discovering, annotating, comparing, referring, sampling, illustrating, and representing).

Testing/Recording Tools:

Morae <http://www.techsmith.com/morae.asp> (Usability testing; \$1,500)

Camtasia <http://www.techsmith.com/camtasia.asp> (Basic screen capture; \$300)

Tape recorder + video camera

Interviewer notes