

Usability Testing: How to analyze your WebPacs and Web Sites

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Discussion Overview

- Why test and what is usability testing
- Overview of Testing at WSU
- Methodologies
- What did and did not work
- Implementation of Results
- Costs of Testing
- Conclusion

Why Test?

- More design options in WebPacs
- Increased reliance on Library Web Sites
- Lack of agreement amongst Librarians
- Desire for user centered design

Usability Testing

- Based on User Centered Design
 - Early focus on users and tasks
 - Behavioral measurement of product usage
 - Iterative design
- Analyzes interaction between product and user
- Includes many methodologies

Overview of Testing at WSU

- Jan - Sep 1998 - WebPac testing on Pullman and Vancouver Campuses
- Summer 1998 - Further WebPac testing on Pullman Campus
- Nov 1998 - Web Site testing on Vancouver Campus
- Summer 1999 - Web Site testing on Pullman Campus
- Oct 1999- Feb 2000 - Web Site testing on Vancouver Campus

Methodologies

- Formal/Informal Usability Testing
- Focus Groups
- Site Usage Logs
- Cognitive Walkthrough
- Card Sort
- Category Membership Expectation
- Questionnaire

Usability Testing

- Observers watch participants perform actual tasks in the WebPac or Web Site and record their successes, failures and comments.
- Works better with WebPacs.
- Can be very informal and inexpensive.

Focus Groups

- A method that involves a small group of individuals discussing their opinions and ideas about a defined topic or set of topics.
- Harder to schedule because everyone in group needs to be available at same time.

Site Usage Logs

- A method of using web server (httpd) logs to track users' movements on a web site.
- Need access to the server.
- Good for determining patterns of movement and use.

Card Sort

- A method for testing the structure of a web site or application using index cards, each representing an individual concept or web page. Participants arrange the cards in an order or structure that makes sense to them.
- Requires a larger number of participants in order to analyze results.

Cognitive Walkthrough

- Designers of the web site or product try to predict users' movements and actions by doing actual tasks themselves.
- Good to use while in the early design phase.
- Most designers will behave differently than novice users.

Category Membership Expectation

- A method that tests the participants' understanding of various categories including what they think should be in each category and what the category should be named.
- Can be exhaustive for participants.
- Good for small sites.

Questionnaire

- A set of questions designed to collect responses and opinions from users on a topic.
- Easy to analyze results.

What did not work

- Distinguishing between novice and expert users
- Difficult to analyze results of the card sort test.
- Scheduling sessions for all the participants was difficult.
- Testing of the WebPac was too long

What did work

- Having 8 participants works--usually
- Usability testing of the WebPac allowed us to see participants using the system
- Many participants learned something
- Amount of useful information

Implementation of Results

- WebPac: Action Summary of items needing to be changed was created and acted upon.
- Web Sites: Redesigned web sites based on test results

Implementation: Examples

- WebPac
 - **Problem:** Books about a person
 - Action: Add examples to search screens
 - **Problem:** Sort by date function
 - Action: Teach users about this function
- Web Sites
 - **Problem:** Several “Reserves” pages
 - Action: Reorganize and rename pages
 - **Problem:** Request forms are too far from databases
 - Action: Add more links for forms

Costs of Usability Testing

- Can be very inexpensive
- Budget:
 - Staff Hours
 - Preparation of test materials
 - Actual testing
 - Other Expenses

Budget: Staff Hours

- WebPac Testing
 - 3 Librarians
 - Total Hours: 93
- Web Site Testing
 - 4 Librarians (2 on each campus)
 - Total Hours:
 - Vancouver campus study: 40
 - Pullman campus study: 20

Budget: Other Expenses

- Incentives for participants
 - WebPac: \$10 per participant
 - Web Site
 - Vancouver Study: Free copy card per participant (\$6 value per card)
 - Pullman Study: \$10 per participant
- Minimal amount of office supplies

Conclusion--Was it worth it?

- Costs were low, while the amount of information gained was high.
- The process of putting tests together was worthwhile
- Good PR for the Libraries
- Puts the focus on *users* in both the design and redesign of Web Sites and WebPacs.

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Information from this presentation can be found at the CNI Task Force Meeting web page or at:

<http://www.vancouver.wsu.edu/fac/diller/cni/present.htm>