Usability Testing
for CATQuest

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Why usability?

- Reduce user frustration
- Learn how users actually use the tool
- Improve navigational experience based on user testing
- Create an intuitive interface
- Increase access to information

Designing a Usability Plan

Forming a usability team

- 5 members
  - 3 "core" members who administered tests: principal investigator, facilitator, note-taker
  - 2 members to provide "fresh eyes" to the analysis and the conclusions/recommendations
  - All members participated in planning the study

Creating a Usability Plan

Research similar studies with a "diagnostic" approach:

- Tulane University
- Flinders University
- James Madison

Enhanced guidance:

- Usability.gov and Nielsen

Creating a Usability Plan

Authoring the test:

- Designed to perform tasks most users will perform most of the time
- No trick questions or "traps"
- Progress from easier look-up tasks to a more complicated research task
- Introduction and exit questions to gauge opinions

Designing a Usability Study

Planning for IRB, planning for success

- Planned testing model: Facilitator, note-taker, PI
- Dry runs with staff/student employees
- Recording sessions with Silverback
- Wrote note-taker sheet and scoring sheet
- Video and note analysis
- Recruiting test subjects
- Conclusions/recommendations
- Confidentiality of subjects

Recruiting test subjects

- Desired a "snapshot" of the UVM community
- Aimed for 5-7 subjects
- Offered $25 gift card incentive
- Recruited in front of main library, medical library and in the student center

Administering the test...
setting the tone

- Test was conducted in a private space
  - Anonymous/private
- PI explained to them the reason for our test
  - They weren't being tested, the tool was
- Gummy bears

Administering the test...logistics

- MacBook laptop
- Silverback software
  - Screen capture with video recording of the subject
  - Cheaper and easier to use
  - Only available for Macs
- Placement
  - Participant seated at laptop, facilitator to their left, note taker behind, and PI in the background
- Cue cards
  - Questions on one side, with question numbers on the other side

Administering the test

- Facilitator ran the test
  - Spoke clearly and calmly; friendly demeanor
  - Gave question, allowed the participant to ask clarifying questions
  - Provided help to keep the test moving, but avoided directing them

- Running the test
  - Participants were given as much time as needed to complete tasks (even though we were timing them)
  - Participants were only cut off if a task was taking far too long to complete

Task Examples

Easy!

Surprisingly hard!

Task 1:

Does the library have the book, "A brief history of time: from the big bang to black holes" by Stephen Hawking?

Task 3:

Can you find the article "How to get our democracy back" by Lawrence Lessig?

If so, can you add the articles to your e-Shelf?

Can you open the article in a new window?

Analysis

- Created video mash-ups for each task
  - Silverback creates .mov files
  - Used iMovie to edit

- Team of 3 reviewed the task mash-ups
  - Viewed each task
  - Used scoring rubric to capture quantitative and qualitative data
  - Discussed trends and disagreements
  - Recorded comments verbatim when pertinent

Subject #_____   Scorer Initials_____   Task _____

# of mouse clicks		
Did the subject express any confusion or frustration?	*Verbal* YES NO	*Non-Verbal* YES NO
Did the subject need clarification of the task?	YES	NO
Did the subject use:	Basic Search	Advanced Search
Did the subject refine with either:	Side Facets	Top Level Facets
Time to complete the task		

Task completed?	Completed easily	Completed with Difficulty/Needed Help	Not completed

Notes:

_____

_____

Analysis

- Data was compiled in Excel
  - Collected all raw data from scoring sheets
  - Cumulative data was used to make charts to illustrate trends
  - Descriptive analysis was created based on the raw data

- Drafted synthesized analysis for each task based on compiled data

Drafting conclusions & recommendations

- "Group-think" session to draw out themes and conclusions
  - Broken down into categories
- Categories outlined and fleshed out into narrative discussion
- Conclusions/recommendations were drawn from narrative discussion
- Wrote a report

Conclusions

- Targeted specific areas for more usability testing
  - Labeling, color, and layout
  - Tools such as e-shelf and My Account
- Targeted specific points that need instruction
  - Tools such as e-shelf and My Account
- Learned a lot about the tool, but more about our users
  - Users adapt to the tool quickly
  - "First result syndrome"

Recommendations

- Immediate
  - Encourage all library staff and faculty to use CATQuest.
  - Encourage library faculty and staff to teach CATQuest in classes and at public service points.
- Within the next year
  - Conduct small targeted usability testing on various design aspects.
  - Implement most effective design changes.
- Within the next five years
  - Continue ongoing maintenance and testing.
  - Add new collections as needed to enhance

Thanks!

Any questions?