

U-HAUL Usability Assessment – Resources Used

Preparation

CUE-9 materials were reviewed and files briefly examined to ensure that the content and intent was understood. I then reviewed some articles to identify a set of heuristics for the project. I felt that the 15 participatory heuristics proposed by Muller, Matheson, Page and Gallup would be appropriate for this study.



Approximate hours: 4

Watching Videos & Taking Notes

A complete run through of the five videos was done first. This was followed by a detailed review of each test activity where timings were recorded and findings categorized using the 15 heuristics. The task success, ease of use and accuracy information were also collected. Session information was captured in its own worksheet using the template provided. This work was carried out in the order of the moderator files (1 – 5).

Approximate hours:

4 hours for initial video review

12 hours for heuristic and task timings

Writing the Report

Report preparation and data review took more time than expected. I examined the data, cleaned-up some timing records, integrated the heuristics from all spreadsheets and made some summary charts. I then began the report write-up.

Approximate hours:

7 hours report preparation

7 hours report write-up

Total time spent on CUE-9 study = 34 hours

Typically, work intervals on the CUE-9 project were 2 -4 hours.

Reflections on CUE-9 study

I felt that the CUE-9 study was quite typical of the type of work that I might be asked to do. I have used a task-driven approach to assessing user interaction and application difficulty in the past. I have usually been interested in assessing the skill level of the participants when doing such work. I have occasionally recorded these sessions. I usually collect timing information as part of my observations.

I was a little surprised that one of the sessions we reviewed had previously stored cache data (address locations). I was going to ignore this data initially, but then I felt that the moderator made a good decision for the test activity to continue. Some timing data might have been faster than expected for one participant, but I don't think this influenced the overall CUE-9 study.

I did not report timing averages or ranges for the data collected. I did not modify or correct this data as the sample size is small (for example, I did not determine geometric mean or calculate confidence intervals). Instead I choose to report provide ranges (min, max) and discuss some task times in a general way. I did this because I did not examine the U-Haul site to determine optimal times, or alternative paths through for the tasks given. With a larger sample size (greater than 10), I would have corrected

I look forward to discussions on task success. I tried to go with the moderator on determining task success – so when the moderator skipped post-task questions, as task was classified as a fail. I also concluded that a participant had failed a task if the participant's response was incorrect. If I was designing the study myself, I probably would spend some time in advance of the test sessions identifying how task success would be identified and measured.

Additional Questions

1. How familiar were you with the company U-Haul before we announced that we would use it for CUE-9?

I had little familiarity with U-Haul and had not used a moving service previously. I had some brand awareness of U-Haul and their moving services. I was not aware of how extensive their network was until participating in the study. I was not aware that they provided supplies and long-term storage.

2. How familiar were you with U-Haul's website before we announced that we would use it for CUE-9?

I had never visited the U-Haul website before CUE-9.

3. Approximately how many times have you rented a car?

40+; I usually rent a car once or twice a year. Some years I have rented more.

4. Approximately how many times have you rented a car on the web?

30+. I only rent using the web now.

5. How much time did you spend analyzing U-Haul.com before you watched the first video?

None. I did not examine the U-Haul site at any time during the CUE-9 study

6. Approximately how many times did you pause the videos to deliberate or catch up with your notes?

I did this frequently during my second and third viewing of the videos. I paused to record timings or to jot down a quick note. I also used the pause to identify start and finish times for tasks.

7. Did you watch all or parts of the videos several times? If yes, approximately how many times did you watch each part and how long were the parts of the videos that you watched several times?

I went through each video at least twice. As I examined the observations and determined the start/stop timings I reexamined the videos again. However, during the third pass I skipped through or advanced to specific points in the videos. I also spent some time collecting some screen images. I intended to show more of these than presented in the report, but I didn't have sufficient time.

In summary, I watched each video at least three times. The first two times were observations from start to finish. I spent further time reviewing segments of the videos. I did not reexamine videos based on new knowledge. For example, if I saw something in video 4, I did not go back to video 1 to see if I could identify the same issue/finding.

8. Were there any burning questions that you would have asked the test participants during or after the video recorded sessions if you had been moderating the sessions? If yes, what were they?

I would have asked the participants for three items they might change and three items they really liked (then see if there are common responses). If there are specific features that U-Haul had a specific interest in, then I would construct some questions to identify Awareness – Usefulness Gaps. For example, "Did you know you could change the insurance option on your vehicle..." followed by: "How would you rate this feature..."

I would ask for some feedback about the bottom navigational elements (footer) and what they expected or looked-for in this area of each website.

Appendix: Participatory heuristic evaluation

A set of heuristics were used to categorize usability issues and findings. This set of heuristics is based on a list of 15 categories identified by Muller, Matheson, Page and Gallup (1998).

M.J. Muller, L. Matheson, C. Page and R. Gallup, Participatory heuristic evaluation, Interactions 5 (5) (1998), pp. 13–18.

System Status

1 SYSTEM STATUS. The system keeps users informed about what is going on through appropriate feedback within a reasonable time.

User Control and Freedom

2 TASK SEQUENCING. Users can select and sequence tasks (when appropriate), rather than the system taking control of the users' actions. Wizards are available but are optional and under user control.

3 EMERGENCY EXITS. Users can

Easily find "emergency exits" if they choose system functions by mistake (emergency exits allow the user to leave the unwanted state without having to go through an extended dialogue).

Make their own decisions (with clear information and feedback) regarding the costs of exiting current work.

Access undo and redo operations.

4 FLEXIBILITY AND EFFICIENCY OF USE. Accelerators are available to experts, but are unseen by the novice. Users are able to tailor frequent actions. Alternative means of access and operation are available for users who differ from the "average" user (e.g., in physical or cognitive ability, culture, language, etc.).

Consistency and Relevancy

5 MATCH BETWEEN SYSTEM AND THE REAL WORLD. The system speaks the users' language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms. Messages are based on the users' real world, making information appear in a natural and logical order.

6 CONSISTENCY AND STANDARDS. Each word, phrase, or image in the design is used consistently, with a single meaning. Each interface object or computer operation is always referred to using the same consistent word, phrase, or image. Follow the conventions of the delivery system or platform.

7 RECOGNITION RATHER THAN RECALL. Objects, actions, and options are visible. The user does not have to remember information from one part of the dialogue to another. Instructions for use of the system are visible or easily retrievable whenever appropriate.

8 AESTHETIC AND MINIMALIST DESIGN. Dialogs do not contain information that is irrelevant or rarely needed (extra information in a dialog competes with the relevant units of information and diminishes their relative visibility).

9 HELP AND DOCUMENTATION. The system is intuitive and can be used for the most common tasks without documentation. Where needed, documentation is easy to search, supports a user task, lists concrete steps to be carried out, and is sized appropriately to the users' task. Large documents are supplemented with multiple means of finding their contents (tables of contents, indexes, searches, etc.).

Error Recognition and Recovery

10 HELP USERS RECOGNIZE, DIAGNOSE, AND RECOVER FROM ERRORS. Error messages precisely indicate the problem and constructively suggest a solution. They are expressed in plain (users') language (no codes). Users are not blamed for the error.

11 ERROR PREVENTION. Even better than good error messages is a careful design that prevents a problem from occurring in the first place. Users' "errors" are anticipated, and the system treats the "error" as either a valid input or an ambiguous input to be clarified.

Task and Work Support

12 SKILLS. The system supports, extends, supplements, or enhances the user's skills, background knowledge, and expertise. The system does not replace them. Wizards support, extend, or execute decisions made by users.

13 PLEASURABLE AND RESPECTFUL INTERACTION WITH THE USER. The user's interactions with the system enhance the quality of her or his experience. The user is treated with respect. The design reflects the user's professional role, personal identity, or intention. The design is aesthetically pleasing— with an appropriate balance of artistic as well as functional value.

14 QUALITY WORK. The system supports the user in delivering quality work to her or his clients (if appropriate). Attributes of quality work include timeliness, accuracy, aesthetic appeal, and appropriate levels of completeness.

15 PRIVACY. The system helps the user to protect personal or private information—belonging to the user or to his or clients.