

Copper Country Historical Images
Usability Test Results

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Executive Summary

To: David Holden
From: HZH Usability
Subject: Executive Summary of Usability Test
Date: April 5, 2020

This executive summary shares an overview of the purpose and research question, methodology, results, and recommendations from our team's usability test on the Copper Country Historical Images website.

Purpose and Research Question

Our usability test focused specifically on the search-order workflow and the intuitiveness of the website layout. Our research questions for usability testing aimed to determine:

- In what ways does the search feature break?
- Where is embedded instruction or explanation most needed?
- What are obstacles in the checkout process?

Our specific research question was as follows: Can researchers easily find images on their area of interest, collect them, order them, and receive them in a reasonable amount of time?

Efficiency was measured by the amount of time it took for the participants of this test to complete the tasks that they were presented with. Critical and noncritical errors were counted, as well as the participants' satisfaction based on their comments and ratings, which were recorded after each scenario and after they completed the entire test.

Methods

There were four methods of information gathering used during the test. The background questionnaires gathered some basic demographics. Participants supplied information such as gender, age, education level, and experience with the Copper Country Historical Images website (Appendix A).

During the test, participants were given four scenarios to complete. These were ordinary tasks relevant to what the Copper Country Historical Images audience may search for on the website. After participants completed the scenarios, they were given post-task questions. All of the questions asked them to rate the ease or difficulty of the task. When the test was over, the participants were given a debriefing interview as well as a product reaction card. The debriefing questions asked participants about their impressions of the site. These questions were more in depth than the post-task questions. The product reaction card provided participants with thirty-six adjectives and asked them to pick the words that best described their experience with the website.

Results

For task one—searching for images and requesting physical duplications of them—4/4 participants experienced a 0% completion rate. For task two—leaving a comment on an image—4/4 participants experienced a 100% completion rate. For task three—finding information to cite images—2/4 participants completed the scenario for a 50% completion rate. For task four—downloading a high-resolution image—2/4 participants completed the scenario for a 50% completion rate. Time-on-task-one varied between 10:42 and 24:36. Time-on-task-two varied between 0:31 and 2:14. Time-on-task-three varied between 0:43 and 1:15. Time-on-task-four varied between 0:24 and 1:54; generally, all scenarios were completed in under 25 minutes. Participants—on a scale of 1 being easy and 5 being difficult—generally rated task 1 as 3.5/5, task 2 as 1.5/5, task 3 as 1.5/5, task 4 as 2.5/5 with average ratings between 2.25 on a five-point scale. When given a list of words to select to describe their usability experience, participants selected positive words such as:

- Valuable
- Convenient
- Calm

Overall, our participants had some difficulty completing the tasks, especially tasks that required them to use the Shoebox and checkout functions, like task 1 and task 4. Participants encountered the following issues, which are fully explained in the report:

- Users had difficulty using the checkout function. Every single one of our participants failed to find the checkout on their own while requesting physical duplicates of images. All had to be directed by the moderator to the checkout to continue the usability test.
 - Checkout button was not very prominent. All of the users clicked on the external link on the same page that took them to the “duplication services page” and had to be directed back to the website.
 - One of our participants found the checkout button, but did not want to click it, afraid that he was agreeing to pay money for the duplications. He had to be directed to the checkout, being assured that clicking it would not be his agreeing to give money for the duplicates.
 - There was also no clear indication in the checkout what kinds of duplications could be ordered on the website. There was no indication that users could order both physical and digital duplications.
- Users had difficulty with the search function
 - Users often broke the search function by searching multiple words, causing frustration.
 - Users had to be careful about spelling as there was no autofill or autocorrect
 - There were no instructions on how to use the wildcard function to expand the search.

- Users had problems with the FAQ
 - It wasn't scannable. Users who tried to use it quickly gave up because they could not find the answers to their questions quickly.
 - The FAQ directs users to an external website that gives information about duplication services and pricing, instead of giving the information directly on the website.
 - The FAQ does not state clearly that no money is being exchanged on the CCHI website or that you cannot choose which types of duplications you would like on the website. It is vague.
- Users were confused by the Shoebox.
 - Some users wanted to be able to save images in the Shoebox and create their own folders full of different categories of images
 - The Shoebox is cleared once the checkout is complete, meaning it is not possible to store photos long term on the website if the user wants to request a duplication.
 - The “x” buttons on the buttons in the Shoebox are very small and obscure. One of our participants clicked on them meaning to select the images for checkout, but ended up clearing all the images from her Shoebox.

Discussion

The main focus of our usability tests was to understand the functionality of the search and checkout features from the perspective of an everyday user. Testing revealed that the search bar was easily broken by searching for multiple words at once or adding punctuation marks, making many users frustrated. There was also a lot of uncertainty about how to request physical duplication of images. Most users were unsure of where to go to request duplicates, or thought they had found how to do it when they were in the wrong location. One reason why this happened was because of the “duplication services” link above the checkout button that led to pricing information. Every user thought they had completed the task by finding the pricing page and did not realize there was an online way to complete the checkout process on the CCHI website. Because this is supposed to be the main function of the website, it is evident that several improvements need to be made to the search and checkout features to make the process easier and more intuitive for every user group involved.

The usability tasks that focused on more non-essential functions of the website were a bit more successful. All participants were able to find where and how to leave a comment on a photo. All participants were also able to find information relevant for citation purposes, but since most of them did not need to cite things on a regular basis, they were often unsure if they had found all the information they needed. None of the participants found the example citation in the FAQ section. There was less success with users trying to download a high-resolution copy of an image. Many users were looking for a link or button and only some resorting to right-clicking on an image to download a low-resolution, watermarked copy. To complete this task correctly, users needed to check out the image. However, there was no indication on the website besides a brief, vague line in the FAQ about how users could learn more about “digital duplication” on an external link. Recommendations can be seen below.

Recommendations

Based on our results, we have suggested the following recommendations:

- Display the pricing and image order options on the same page as the checkout instead of as an external link.
- Make the checkout button more visible, either through sizing or color.
- Provide instructions throughout the checkout process that explain the purpose of filling out the information and what the next steps are.
 - Ex.) “This process sends an email to a contact at the Michigan Tech Archives who will get back to you about what options are available for your requested images.”
- Set up the search bar to recognize typical database search techniques (“term” AND “term”) and/or allow the search bar to be more forgiving to phrases that do not have an exact match within the system (barns in winter still outputting pictures of barns and/or pictures in winter).
- Make the thumbnails that display on the search results and Browse Subjects pages bigger and more visible. Also indicate that thumbnails are clickable by highlighting the border or something similar when the mouse icon hovers over them.
- Allow users to organize the images within their Shoeboxes, perhaps into folders or something similar, and specifically select the images from those saved in the Shoebox that they want to bring to checkout.
- The important information on the FAQ page should be more easily scannable (perhaps bolded), the formatting should look less cramped, and more keywords/buzzwords should be included in the presented questions.
 - Ex.) “You can **download high-resolution** images by... and requesting a **digital image**.”

Introduction

This report describes the results for conducting a usability test during the development of the Copper Country Historical Images website (cchi.mtu.edu). This website allows users to search through a database of historical images from the Copper Country and obtain copies of these images through physical duplication checkout services or digital image downloading. Users can also leave comments, and create a collection of photos within their “Shoebox”. This website is run through the Michigan Technological University’s Van Pelt and Opie Library Archives.

Our report will address our purpose and methodology during usability testing, as well as our results and recommendations for Copper Country Historical Images.

Our usability test focused specifically on the search-order workflow and the intuitiveness of the website layout. Our research questions for usability testing included determining:

- In what ways does the search feature break?
- Where is embedded instruction or explanation most needed?
- What are obstacles in the checkout process?

In terms of efficiency, we addressed whether or not participants were able to complete tasks and we measured the time of the task-to-completion for each task. We anticipated a benchmark of thirty seconds to five minutes depending on the complexity of the tasks for completing each task.

In terms of error frequency, we recorded both critical and noncritical issues. Critical issues were those that deterred participants from successfully completing a task, whereas noncritical issues were those that slowed down but did not prevent successful completion of the task. We anticipated a benchmark of an 0% critical issue-free rate. In other words, we expected that, at most, 100% of the users would experience critical issues, which deterred them from successfully completing their task.

In terms of user performance, we asked participants to describe their impressions and experiences in a debriefing interview. We also asked them to rate the difficulty of each of the tasks, as a post-task question, on a scale of 1 to 5, 1 being *very easy* and 5 being *very difficult*. We anticipated an average benchmark of 2 out of 5 for user satisfaction.

Our research question was as follows: Can researchers easily find images on their area of interest, collect them, order them, and receive them in a reasonable amount of time?

Participants

Please refer to Appendix A for a complete table of participant demographics.

Targeted Participants

According to the client information provided to us from Copper Country Historical Images, website users include a wide age range from high school students to high-school-educated senior

citizens. Users would have some interest in history and would come to the site for presentations, presents, publications or other needs. Users would be characterized by tasks they wished to accomplish, rather than demographic. The site is relatively heavily used by researchers as their initial entry to the Archives.

Actual Participants

We recruited four participants for this usability evaluation. For easier reference, we will refer to all of our participants as P1, P2, P3, and P4. The participants were all recruited through email. All the participants were between the ages of 50-80. None of the participants have had previous experience with the Copper Country Historical Images website.

Due to time constraints, we were unable to recruit participants that were familiar with the Copper Country Historical Images website. However, testing participants with no previous experience of the website was effective in providing valuable information and input about the multiple functions of the search bar and checkout process.

Methods

The evaluation used a usability test that involved representative users and asked them to complete realistic web tasks. The usability test involved participants who were likely users of Copper Country Historical Images websites. Procedures included a background questionnaire, tasks based on scenarios and post-task questions, and a debriefing interview with Product Reaction Cards. A “think aloud” protocol was used throughout the test. These procedures are described more fully below.

Background Questionnaire

Participants completed a demographic and background information questionnaire. The questionnaire asked about demographic information, experience, and familiarity with the Copper Country Historical Images website (see Appendix A).

Tasks and Scenarios with Post-Task Questions

The participants were provided a task description by the moderator and asked to start the task. Time-on-task measurement began when the participant started the task. Once the participant completed a task, they completed the post-task questionnaire and elaborated on the task session with the moderator (see Appendix C). The moderator instructed the participant to ‘think aloud’ so that a verbal record existed of their interaction with the web site. The logger observed and entered user behavior, user comments, and system actions in the data worksheet.

Debriefing Interview with Product Reaction Cards

After all task scenarios were attempted, the moderator asked participants about their impressions of the site and testing experience. Part of the interview involved asking participants to select words from the “Product Reaction Cards” that described their experience (see Appendix C).

Results

Scenarios

We asked participants to rate the difficulty of each of the tasks on a scale of 1 to 5, 1 being *very easy* and 5 being *very difficult*. Please refer to Appendix B for our scenarios and tasks.

Scenario 1

Participant 1

Participant 1 began the scenario on the “Digital Archives” tab. They clicked into the search bar and typed the phrase “italian hall” before clicking the search button. After scrolling through the resulting images and seeing one that fit the prompt, P1 clicked the “add” button beside the image from the search results page. The participant then went back to the “Digital Archives” tab and searched for “barn in winter.” When no results were returned, they scanned the page for any instructions or explanations that might’ve been useful. P1 saw the statement about using the “wildcard” feature to expand search results beneath the search bar, but did not use it because of the lack of further instructions.

Finding no further help, they went back to the search bar and broadened their search to “barns.” They scanned the search results for a while before clicking “add” on an image they presumed was a barn in winter from the thumbnail. From the search results section, P1 expressed that they didn’t see anything about duplication services and guessed that viewing the Shoebox might be the next best step. They clicked on the side panel Shoebox heading to expand the side panel, then clicked the “View shoebox” button. P1 then clicked the “View the duplication services available and their various costs” link instead of the checkout button, which brought them to an external page instead of to where they could request duplication services.

On the external page, P1 was able to find pricing and sizing information, but no request duplication option. The moderator directed them back to the CCHI website. P1 does not think the “checkout” button is where they need to go because to them, “checkout” implies that they’ve already agreed to purchase something, which at this point, they felt like they had not. Unsure of where to go, P1 verbalized that they might go to the FAQ page, but instead checked the “Browse Subjects” tab. After seeing that it did not have what they needed, P1 returned to the Shoebox and tried to right click on the image thumbnails. After giving up, the moderator directed P1 to the checkout button, where they became frustrated with the lack of instructions regarding both what the checkout was and how to use the order status section.

Post-task rating: 5

Participant 2

P2 began the scenario by clicking on the Shoebox. Seeing it was empty, they eyed the banner at the top of the page and asked if those were the images they needed to find. The moderator then directed them to the website's tabs. P2 clicked the "Browse Subjects" tab and saw that there were too many images for them to go through. They noted the "subjects" column and began scanning through the images on the page. They clicked on page two and then page eight, scanning through those as well. The moderator then asked if they saw anything on the page that could help them complete the task.

After this prompting, P2 went to the filter subjects side panel and clicked the "buildings" checkmark, noting that they were clicking buildings because they thought that barns would be under buildings. After this, they asked the moderator what they should do next and continued scrolling down the page. Then they found a picture of a barn, but not one of a barn in winter. While struggling to get out of the expanded image, P2 accidentally clicked the top header and was put back on the "Digital Archives" tab. After this, they saw the search bar and searched "barn in winter," getting no results returned. When asked what they were feeling, P2 responded "Frustration!"

After the failed search bar attempt, P2 returned to the "Browse Subjects" tab and remarked that they would have to go through all the pictures to find a barn. They then checked the "winter" filter in the side panel. Not finding any barns in winter on the first page, P2 said that they did not want to go to the second page because it would be "a lot to do." They then questioned why they had to go two or three pages into the "Browse Subjects" instead of searching "barn in winter" in the search bar. They then said the writing was small. After this, they checked both dwellings and winter in the "Filter by subject" side panel. They saw a thumbnail of a barn in winter.

The moderator then asked what the next step in the duplication process would be. P2 responded that they would print the image out, and then after a pause added "Or I'd put it in my Shoebox." P2 said they would use the website if they were working on a project about barns. When asked what they think the Shoebox tab does, P2 responded that "it saves things for you," and then added the barn in winter to the Shoebox. P2 was then asked to find an image of the Italian Hall.

P2 headed back to the "Browse Subjects" tab (having not deselected winter or dwellings) and remarked that there was no place to search for a subject. Then, P2 checked "buildings" again, scanning the results for "Italian Hall." The moderator stepped in, guiding P2 back to the "Digital Archives" tab. P2 searched "Italian Hall" and remarked "It's getting familiar with the website rather than going the long way around." After scanning images, P2 clicked on an image of the Italian hall and read about the disaster. The moderator prompted P2 to put the image with the other and P2 added it to

the Shoebox. Moderator then told P2 to request a physical duplication. P2 went to the FAQ, scanned it, and found nothing of interest. They then clicked on their Shoebox and saw the checkout button, but instead clicked on the duplication cost link.

Seeing the duplication services and prices, P2 was confused how they were paying for the photo. Moderator prompted P2 to go back to the CCHI website. P2 kept exploring the duplication services page, asking how the website would know what they wanted and saying that they wanted the 25 cent photos. Moderator directed back to the CCHI website again, where P2 clicked “my account” and asked how the website was going to know what they wanted. P2 then went to the “Digital Archives” tab, then back to “my account,” then back to Shoebox. P2 clicked the “x’s” on both images, thinking they were selecting them to checkout, which accidentally deleted them from the Shoebox. P2 went out and then back into the Shoebox, obviously frustrated. Moderator stepped in and called the task complete. P2 remarks “My Shoebox is empty now and now I have to go through the whole process again.”

Post-task rating: 5

Participant 3

P3 began the task by using the search bar to search “barn in winter,” getting no results returned. Next, they tried going to the “Browse Subjects” tab and checked the “buildings” filter. They then scanned the images on the page looking for a barn. P3 clicked the thumbnail of an image, remarking that they were surprised that it was just one image and that they thought it would be a collection of images. After some confusion, they went back to the “Digital Archives” tab, and searched “barn.” They scanned the results looking for a barn in winter and clicked on an image. After being asked how they thought they should save this image for duplication P3 responded by adding the image to the Shoebox. P3 then began looking for an image of the Italian Hall. They searched “Italian Hall” in the search bar and scanned through the images, clicking the thumbnail of one of them and adding the image to their Shoebox. P3 was then directed to request a physical duplication of the image. P3 clicked the “view your Shoebox” button located within the image of the Italian Hall they were currently on. P3 then proceeded to state that they would probably accomplish this task using the checkout, and then clicked the “view duplication services” link. P3 looked at the pricing and found the duplication request form on the external page. The moderator then directed them back to the CCHI website. P3 proceeded to click checkout, showed how they would fill out the checkout form, and stated that they would choose “complete” for their order status.

Post-task rating: 2

Participant 4

P4 began the task by stating that the website “looks pretty basic.” They searched “Italian Hall” in the search bar and scanned through the results, remarking about the history that they were learning from the image descriptions. P4 added an image to their Shoebox from the results page, and then went to their Shoebox to view it and see if it was the image they wanted because “the thumbnails are pretty small.” P4 then searched for a barn in winter by going back to the “Digital Archives” tab and searching “barn in winter” in the search bar. After getting no results returned, they checked their spelling. P4 then searched “barn in winter Hancock” and again got no results returned. P4 was confused that there were seemingly no barns in winter in the Copper Country and then thought about what keywords they would need to search to get a positive result. P4 typed “barn” into the search bar and scanned the results, adding an image from the results page to the Shoebox before going into the Shoebox to view it. They did not seem to realize that thumbnails of images could be clicked to display a larger image. P4 was then directed to request duplications of the images. P4 looked in the FAQ and clicked on the external link in question 4, which took them to the “duplication services” page. P4 scanned the page, remarking that they did not see anything that looked like it would help them with requesting duplications and that at this point, they would have probably called the library. The moderator directed P4 back to the checkout on the CCHI website, where they showed how they would fill out the checkout form and stated that they would leave the order status on default because they did not understand what it meant.

Post-task rating: 2

Scenario 2**Participant 1**

P1 started on the page that showed an image of a barn in winter. From there they easily found the “leave comment” button and clicked on it. They said they would leave a comment and then leave.

Post-task rating: 1

Participant 2

P2 started on the page that showed an image of a barn in winter. From there they look at the bottom of the picture for a spot to leave a comment. When they could not find a place to leave a comment at the bottom they complained and continued searching. They then found the comment button and went through the process of leaving a comment

Post-task rating: 2

Participant 3

P3 started on a page with an image of a barn of winter. They found the comment button immediately and talked us through the process of leaving a comment.

Post-task rating: 1

Participant 4

P4 started on the CCHI home screen. They then navigated to Browse Subjects and started scanning images. Once they found an image they added it to their Shoebox. P4 then found another image to add to their Shoebox. P4 went into their Shoebox to view the image and then quickly found the comment button. P4 successfully talked through how to leave a comment.

Post-task rating: 2

Scenario 3

Participant 1

P1 started on a page that showed an image. They then noticed the watermark on the image and then saw the information on the side of the image along with the image's title and photographer. With this they declared they had found the citation information.

Post-task rating: 1

Participant 2

P2 started on a page that showed an image. At first they were confused about where to go to find the information. Then P2 noticed the information was right next to the photo and happily exclaimed they had found it.

Post-task rating: 1

Participant 3

P3 started on a page that showed an image. They then started scanning the information on the side of the image. Unsure if this was what they were looking for, they went to the bottom of the photo to see if they could find more. When they could not find more information at the bottom, they returned to the information at the side of the photo. While P3 thought the information was useful for citations, they were unsure if this was what exactly they were looking for.

Post-task rating: 2

Participant 4

P4 started on a page that did not show an image. P4 clicked on an image to go to its page. They noticed the information on the side of the photo and declared they had found the information.

Post-task rating: 2

Scenario 4

Participant 1

P1 started on a page that showed an image. Upon not seeing anything obvious for downloading, they right-clicked the image and selected the option to copy or save the image to their desktop.

Post-task rating: 1

Participant 2

P2 started on a page with an image. They then added the image to their Shoebox in hopes that it would give them a download option. Upon not seeing a downloading option, P2 became confused and frustrated. They clicked on the “My Account” tab to see if they could find anything. After not finding any options for downloading the photo P2 admitted they did not know what to do and gave up on the task.

Post-task rating: 5

Participant 3

P3 started on a page with an image. They scanned the image information to see if they could find anything about downloading it. When they could not, they went to their Shoebox to see if that would give them the option. When P3 did not see anything there, they went to the FAQs and scanned the questions. P3 clicked on the duplication services link in question 4 and read the digital copies information.

Post-task rating: 2

Participant 4

P4 started on a page with an image on it. Upon not seeing any obvious download option, they right-clicked on the image and choose “save image as”

Post-task rating: 2

Scenario Time Completion

Chart 1 shows the scenario time completion for each participant.

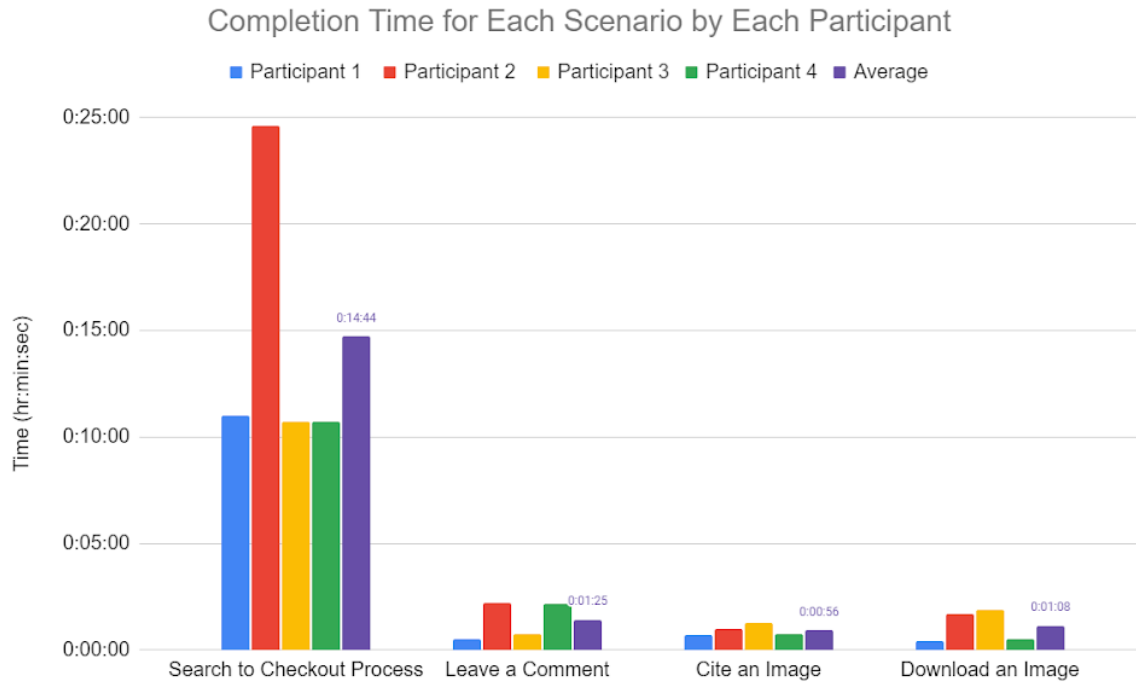


Chart 1: The amount of time it took each participant to complete each scenario.

Post-Task Rating

Chart 2 indicates the participants’ rating for the difficulty of each task on a scale of 1 to 5, with 1 being *very easy* and 5 being *very difficult*.

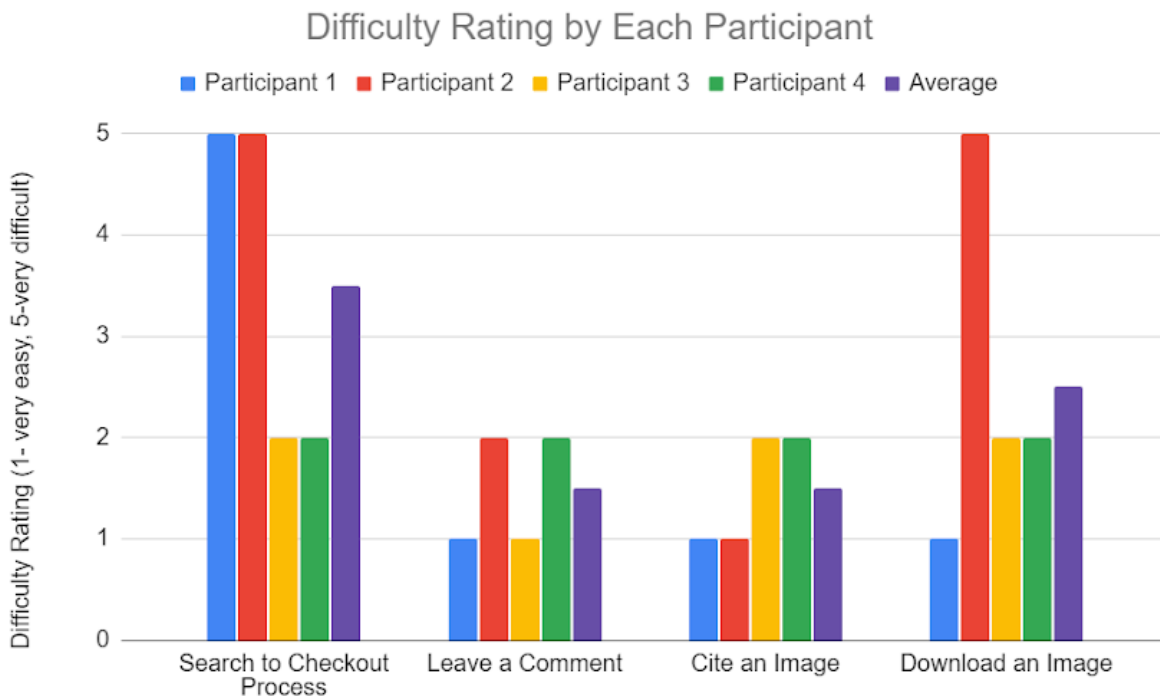


Chart 2: *The difficulty rating of each task by each participant and the average rating.*

Debriefing Interview

When all tasks scenarios were completed, our facilitator asked a series of questions to assess the overall reaction from the participants’ perspective. The questions were mainly focused on qualitative data with questions that focused on the participant’s feeling and experience in a more descriptive manner. We ask participants questions like “What was the most enjoyable part about using the website?” and “Is there anything you would change about this website?” Participants revealed that they were initially confused about the website's function and purpose. One participant had said they thought it would be more like Wikipedia. Participants also mentioned their biggest frustrations was the confusion of the site, whether it was the learning curve or unsurity or the location of information. With this being the participants’ experience, 2 out of 4 participants said they would not use the CCHI over a google search.

Product Reaction Cards

After participants completed the testing, we asked them to complete a “Product Reaction Cards” to describe their overall experience. Each participant chose a few words from 36 words total.

Figure 1 shows the most frequently mentioned words. “valued” was the most mentioned word, from 3 out of four participants. There were 4 words mentioned twice: “ordinary”, “convenient”, “old”, and “confusing”.



Figure 1: Each chosen word and the number of times it was mentioned by the participants.

Discussion

The results provide us with data and evidence which helps answer our research question: Can researchers easily find images on their area of interest, collect them, order them, and receive them in a reasonable amount of time?

Scenarios

Scenario 1

Scenario one tested CCHI's search bar and checkout function, which are the main functions of the website. In this task, we asked users to find two images and request physical duplications of them. CCHI requested that we test what caused the search function to break, so in our first scenario we had users make both a simple search and a more complex search to see how the search bar handled different types of searches. For the simple search, we asked our users to find us a picture of the Italian Hall. For the more complex, vague search, we had users find a picture of a barn in winter. This last search would test how the search function handles nonspecific searches with multiple keywords (both barn and winter are recognized as "subjects" on the website). All users were able to do the simple search quite easily, typing "Italian Hall" into the search bar and quickly finding many results. However, the more complex search gave our users problems. If users typed in more than one keyword, the search bar would break, giving "no results found." So, typing in "barn in winter" or "barn, winter" did not work for our users. Most ended up searching "barn" and scrolling until they found a picture they thought had taken place in winter.

Once users found these pictures, they would need to request physical duplications of them. To do this, they would have to add the image to the Shoebox, go into the Shoebox themselves, and then click "checkout" and fill out the "create order page." Our users were able to understand that to check out an image, they would need to add it to their Shoebox and then click "View shoebox" to take them to the next step. However, once they were in the Shoebox, the problems began. All of our users clicked the blue external link instead of the white checkout button. Most missed the checkout button entirely and had to be guided back to the page before they saw it. One participant said that they saw the button, but said they did not want to click it because they were afraid that it meant they were paying for something and another participant accidentally cleared the Shoebox because they thought that the small "x's" next to the pictures were selection icons. After being guided to the checkout page, users had minimal confusion about how to fill out and submit the form. The only things that confused them were the order status option and how they specified what they were ordering.

Scenario 2

In scenario two, users were asked to leave a comment on a picture to test how intuitive this function was. Three of the users were guided to the detail image page for the image they were to leave a comment on, and one was asked to find how to leave a comment starting from the "Digital Archives" tab. Users expressed minimal confusion with this task, finding the

comment button easily and the comment submission form self explanatory. There was a small amount of confusion about where the comments would appear on the image page if they were to leave one.

Scenario 3

Similarly, for scenario three, where users were asked how they would cite an image, users had little difficulty. We asked them to show us on the detail image page how they would cite the source on the page. Users were all able to point to the image description and show us what relevant information on it they would use to cite the image (Title, photographer, institution, date, ect). However, none of them realized that there was an example of how to properly cite an image on the FAQ page.

Scenario 4

For our fourth scenario, we asked our users how they would download an image from the website. To download a high quality image, users would need to request one through the checkout process in a similar fashion to how they would request a physical duplication of an image. Only one participant was able to find information about requesting high resolution digital images, and even they did not put together that they could request this service in the same fashion as requesting a duplication. Two of the other users right clicked on the photo and selected “Save image as...” obtaining a low resolution, watermarked image. The last user simply became frustrated and gave up.

Scenario Time Completion

Our benchmark time-on-task completion rate for each scenario was 30 seconds to five minutes depending on the task. **Chart 1** shows the data of completion times for all the participants. We found that the longest task, as predicted, was scenario 1. However all participants went over double the amount of predicted time. This is attributed to the problems with the search bar, disorganization of the Browse Subjects page, confusion with the Shoebox, and the complications with the checkout process. With scenario one testing the main function of the website, it was a surprise to see how all the participants greatly struggled with it.

Scenarios two through four were closer to the predicted times. Scenario 2 tested how participants would leave a comment on a photo. All participants had little to no difficulty and were able to complete this within a few minutes. Scenario 3 tested how participants would find information needed to cite a photo from the CCHI. Participants were able to find the information quickly, but some were confused whether it was really what they were looking for, thus adding time onto the task. Scenario 4 tested how participants would download a high resolution copy. Some participants quickly decided to right click on the photograph and save it to their computers, other participants searched the website for a download button or information on downloading. While the task was still completed in the predicted amount of time, many participants still expressed difficulty or confusion with it.

Post-Task Rating

The post task ratings are used to let participants reflect how difficult a task was on a scale of one to five, with one being very easy, and five being very difficult. Table 2 shows each post task rating, and the average rating for each task.

We believe that the post-task ratings do not accurately reflect the difficulty of the website, specifically for scenario one and scenario four. Participants tended to be polite with their rating, and even when they were unable to complete a task, would give ratings on the easier side, such as a two, when an incompleteness of a task is listed as a five. This skewed the rating to the easier side, making the CCHI seem less difficult than it really is. Scenarios two and three are a more accurate reflection of the completion of tasks, but users had little difficulty with these tasks.

Product Reaction Cards

The frustration and confusion of finding images and requesting duplicates of them is further supported by the most frequently mentioned words by the participants. 10/19 of the words mentioned were negative. “valuable” was the most mentioned word, by 3/4 participants, which shows that the information on the CCHI is important and captures people’s interests. Other frequently mentioned words were less positive. They included “confusing”, “ordinary”, and “old”. This shows that people found the sight visually unattractive difficult to navigate. For a sight that people saw such value in, it is important that they should be able to easily access and find this information.

Conclusion

It is safe to say that the Copper Country Historical Images website has some substantial usability issues, as users had difficulty with or were unable to complete tasks that pertained to the main functions of the website. Users struggled with the search bar and the checkout. During the first scenario users often broke the search bar with multi word searches and were generally frustrated by the task. Users were also unable to find the checkout function on their own and needed to be directed to it by the moderator. The post-task rating and completion time for this scenario reflected how users struggled with this task, scoring the highest average difficulty rating of all the tasks. The checkout function also gave users difficulty during scenario four, not because they struggled with finding the checkout, but because they were not even aware that they could accomplish their task, downloading an image, with the checkout function. Instead they downloaded a low quality, watermarked image or could not complete the task at all, not even aware that there was a better option. These tasks highlight the significant usability roadblocks present on the site. When asked to choose words they thought described the site, users chose words such as distracting, disconnected, old, and confusing.

However, while the CCHI website had significant usability issues, there are some highlights from our usability test that outline the website’s strengths. All users were able to, with minimal difficulty, add comments and find citation information. Many of our users also commented on the history they were learning from the website as they were scanning through

images and expressed how they would use the website if the functionality of it was improved. One user mentioned that they would find this website useful for scrapbooking. This shows that while the functionality of the website is poor, the information and writing accompanying the photos is well written, engaging, and informative. Out of all the words that were chosen from the product reaction card, “Valuable” was the one chosen the most. While our users had difficulty navigating the website, they still recognized its value and the service that CCHI can provide in archiving history for the public. This is why the CCHI website needs to be improved, so more people can have accessible information available to them about history.

Recommendations

Our recommendations are based on the significance of our findings, what they imply, and what users wish had been incorporated to help them navigate the site. We wanted to test how easy it was to find images, request physical or digital duplication of them, and do other tasks on the site like leave comments and find citation information. From our usability test, we found that users had significant difficulty navigating the checkout, Shoebox, and search bar, which are all critical to the site’s functionality. Because of these findings, we would like to make the following recommendations that we believe will improve the site’s usability.

Recommendation 1- Changing the Search Function

The search function is easily broken, which led to frustration in our usability test participants.

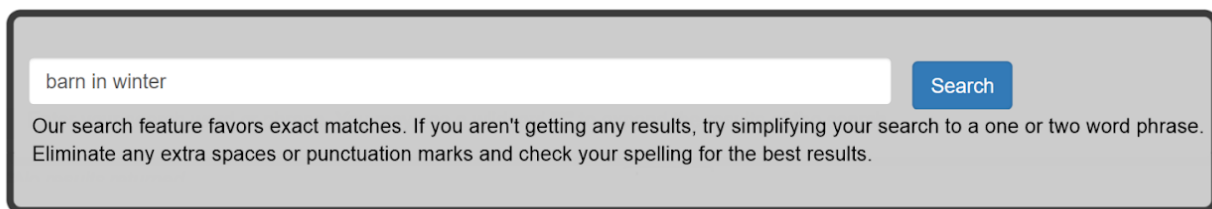
One of the ways the search function breaks is multi-word searches. The search bar seems to favor exact matches, so even if a search uses multiple relevant words at once, it may return no results. This is a major source of frustration for users. The search bar should be able to **show results for searches like “barn in winter” and “barn, winter”** even if there are no exact phrase matches in the system. Both barn and winter are valid subjects on the CCHI website, and the website should be able to display search results that are tagged with both “barn” and “winter.” If there are no entries with both tags, then it should still display results for only “barn” and only “winter” just in case there is a result that is what the user is looking for but is not tagged in the way they expect.

The search bar should also be updated to **recognize typical database search techniques** such as: “term” AND “term.” People who work with databases often, like researchers, professors, and students, are more likely to use these techniques when they encounter a database search bar.

Additionally, extra characters like spaces and punctuation marks at the end of the word or phrase can also break the system. Having some sort of set up that will **filter out extra characters** would be helpful for returning results in these situations.

Misspelling words also causes problems for users. To fix this, we’d recommend the site **implement a spell check feature** on the search bar.

Finally, the instruction under the search bar should be clearer. Currently it says, “Enter your search word or phrase. You may use a wildcard "*" to expand the results of the search.” These current instructions are not specific, and do not mention how to use the wildcard function or what “expanded results” mean. The instructions should be more specific, giving users tips on the best ways to get relevant results for their search, like using a one word search. If none of the above recommendations are feasible, then we highly recommend you **use the instructions under the search bar to explain why there are no results returned and how to improve results**. A visual example of this is shown below.



**No results returned.*

Figure 2: Search bar instructions example

Recommendation 2- Redesigning the Shoebox

A number of the difficulties our users had with the CCHI website stemmed from the layout of the Shoebox. Our first recommendation is to **allow internal organization of the Shoebox**. Some of our users expressed a desire to organize the Shoebox into folders where they could save related images for specific projects or purposes. This further customization and organization would make the Shoebox a more useful and unique function of the website instead of a simple shopping cart that precedes the checkout process.

We also recommend that users should be able to **select which images they would like to order** from the Shoebox. Currently, when checking out images, everything in the Shoebox goes to checkout. The only way to not check out an image in your Shoebox is to remove it completely before starting the checkout process.

Additionally, **images should not be deleted from the Shoebox once they are checked out**. This defeats the implied functionality of the Shoebox. Traditionally, a shoebox under the bed was used as a place to store a collection of images. When the checkout process removes the images from the Shoebox, it is essentially “dumping out the box” and making the user start from scratch. This makes things more difficult if they want to look up specific information about the image they ordered, such as citation information, since the image would no longer be saved in a handy location. This could also be a huge problem if the user was working on a lengthy research project and had many images saved, but wanted to order them at different times.

Another recommendation for the Shoebox is to **reformat, remove, or replace small and confusing icons**, such as the “x” button to remove images. These can be easily mistaken for selection tools, causing users to accidentally delete the images they had just found. To combat this problem, we’d recommend you **reformat the remove button to look like the add button**

visible from the “Browse Subjects” tab. The checkout button also presents some problems in that it is either not noticed because of the “view the duplication services available and their various costs” link or is ignored because the name “checkout” implies it is the end of the process. To remedy this, we’d recommend you **remove the external link and change the “checkout” button to a “next” button.**

The image thumbnails throughout the site are also on the small side. We’d recommend the site to **make the thumbnails bigger** so that they are more visible, especially to users who may not have the best vision.

Finally, we’d recommend the site **imbed a brief description of what the Shoebox is for** within the Shoebox itself so users don’t have to navigate to the Frequently Asked Questions tab to find out. It could be something like “Welcome to your Shoebox! Here, you can save images as you search and return to them when you’re ready!” **A brief description guiding users to the checkout process** would also be helpful. This could be at the bottom of the screen and say something like “Select the images you wish to order and click the next button to proceed to checkout.” A visual representation of the above recommendations is presented below.

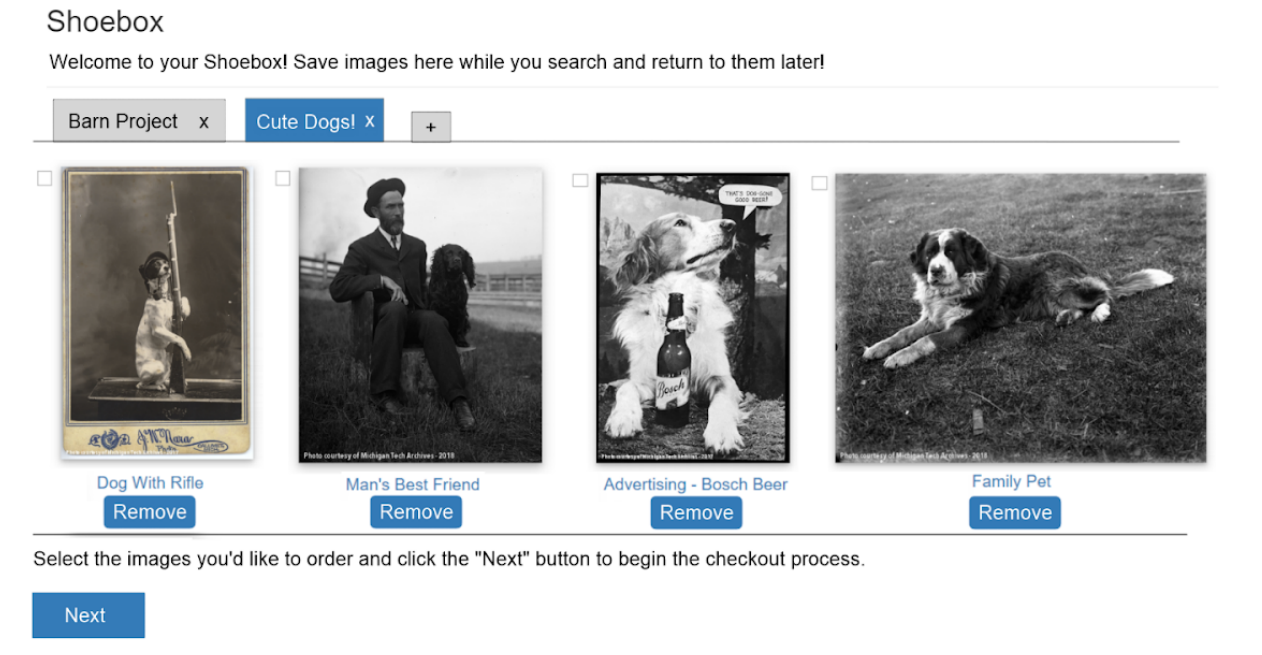


Figure 3: Example Shoebox redesign

Recommendation 3- Reformatting the Checkout Page

The checkout page is also sparse in instructions for users. We recommend that CCHI **implement more information about the checkout process** on the checkout page itself. Currently, pricing information for duplications services can only be viewed by clicking an

external link. This information should be on the checkout page, or in an on-site page between the Shoebox and checkout, so users can determine what service they would like to request. We also recommend a feature similar to the current order status feature that will allow users to **select what kind and size of duplication they would like on the checkout page**, instead of over email after they “submit order.”

The site should also **inform users what exactly the checkout does** on the checkout page. It should inform the users that the checkout process is simply putting them into contact with someone at the Michigan Tech Archives.

Payment information should also be more clear. For example, if users are expected to pay upon pick up, that should be stated in the checkout. Including more instructions in this process will make users want to use this function more, as the uncertainty from the unclear instructions make some of our users wary to even click on it.

Finally, **the order status option should be removed**, because it does not make sense that users can set their own order status.

Recommendation 4- A Clearer Frequently Asked Questions Page

During the usability test many of our participants looked at the FAQ. However, they were often not able to find the help they needed. As it stands, the FAQ is difficult to scan through quickly. When our participants were unable to find what they were looking for right away, they left the page, even when there was information on it that would have helped them. To remedy this, we suggest that CCHI **bold keywords** for easy scannability and **make the questions a bigger font than the answers**.

One of our participants was led astray by the FAQ when looking for steps on how to request duplications. Though that information is present on the FAQ, the user was drawn to the blue external link for the duplication services page, which led them off site and ended with them needing to be redirected to the CCHI website. For this, we recommend CCHI **have all relevant information on-site** in the FAQ instead of in external links.

The order the questions are presented in is also important. **Similar questions should be grouped together** and they should generally be ordered in a way to **present the most frequent or problematic questions first**. For example, we believe questions five and six, which are about duplication services, should be higher in the list than they currently are, considering that ordering image duplications is one of the main functions of the site.

There are also some areas of the FAQ where jargon is heavily used. This can cause problems for the average user who is not familiar with the terms. Examples would be the use of “metadata” and “holdings” in question one. For this we recommend CCHI **be concise and use language that is understandable to a general audience**.

A few of the above recommendations are presented in an example format below:

1. How do I search for Images?

On the **Digital Archives** tab, you can enter brief words or phrases into the **search bar**. If **no results** are returned, try

searching for something less specific, checking your spelling, and eliminating extra characters like spaces or punctuation marks.

You can also locate images on the **Browse Subjects** tab. For more specific searches on this page, you can **filter images by subject** by selecting subjects from the menu on the **right-hand side** of the screen. Multiple subjects may be selected at the same time.

Recommendation 5 - General Site Design

Some design elements of the CCHI website could also be tweaked to make it more accessible. Our test group was composed of older adults, many of whom complained about the small size of the thumbnails that are presented in the search results, Browse Subjects page, and Shoebox. We recommend that CCHI **make the thumbnails about two or three times larger** so that the images can be viewed more easily, especially by those with visual impairments. The thumbnails could also be more interactive, showing the user that they can be clicked on. One of our users did not realize that the thumbnails could be interacted with from the results page. They instead added all of them to their Shoebox to view them. To show that they can be interacted with, **the thumbnails should make some sort of indication when the user hovers over them.**

One of our participants also had a difficult time finding the search bar again after they clicked out of the Digital Archives tab. To avoid this confusion in the future, it may be beneficial to **rename the Digital Archives tab to the Search tab** or something similar.

Finally, our older participants were displeased with the banner and header of the website. They were frustrated by how much the Copper Country Historical Images header covered up the banner of historical pictures. They expressed that they felt like they were missing something because it was covered up, and that those images should be more prominently featured because they are what the site is all about. For this, we recommend to either **make the banner more visible** in regards to the header that covers nearly the whole thing, or **make a designated home page that features many of the images** and is an easy landing page for first time visitors.

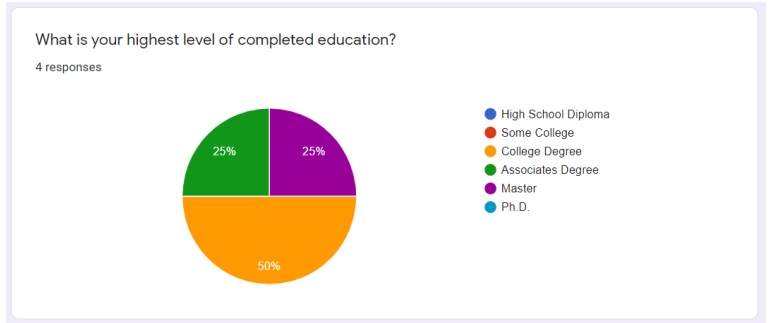
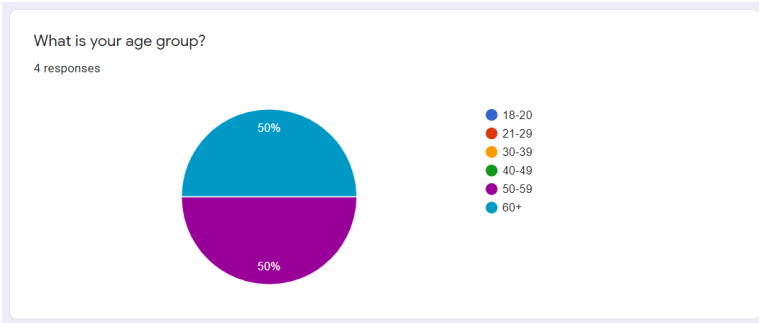
Works Cited

- Barnum, C. M. (2021). *Usability Testing Essentials* (2nd ed.). Morgan Kaufmann.
- Gould, J. D., & Lewis, C. (1985). Designing for Usability: Key Principles and What Designers Think. *Communications of ACM*, 28(3), 300-311.
- Johnson, R. R. (spring 1994). The Unfortunate Human Factor: A Selective History of Human Factors for Technical Communicators. *Technical Communication Quarterly*, 3(2), 195-212.

Rubin, J. (1996). Conceptual Design: Cornerstone of Usability. *Technical Communication*, 2nd Quarter, 130-138.

Appendices

Appendix A: Participant Demographics, Experience, and Familiarity with the Website



Appendix B: Tasks and Scenarios

Moderator Script

Hi, I'm Claudia Zinser. Welcome to our session. I'll be facilitating your session today.

I'm from HZH Usability, and we're helping Copper Country Historical Images to test their website. One of the design team's goals is to make the website as intuitive and easy-to-use as possible. They have some questions about it, so we've asked you here to use it and tell us what you think — what's easy to use, what's difficult, and what can be improved.

Give intro to design

Today, you'll be trying out the Copper Country Historical Images website and helping to evaluate its usability. The Copper Country Historical Images website is an archive that stores images from the history of the Keweenaw peninsula. This archive is run by the Van Pelt and Opie Library at Michigan Tech, and this website is free for anyone to use.

The most important thing to remember today is that **you are doing the evaluating**. You are not being evaluated in any way, and you don't have to worry about making a mistake.

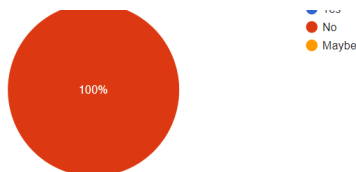
Typical tasks / Think out loud:

So you have some context for evaluating the design, we'll give you some everyday tasks that people would complete. While you show us how you would complete these tasks, we want you to say out loud what you are doing. Tell us what you are thinking as you go. Say what you're looking for, and what you think of what you see. Describe your experience almost as if I was trying to follow along but I can't quite see your screen. If there's anything you didn't expect, if something confuses you, or if there's something you like as you're going through the site, let us know.

We want to make sure we can pick up all of your thoughts on the process, so it would be great if you could speak as clearly as possible—like you might do over the phone.

Testing Setup

- Next, I'm going to share my screen with a web browser up, and two tabs: one is our list of tasks, and the other tab is the website we will be testing. Can you read the text on your screen clearly? Now I'm going to give control of my screen to you, so you can use it like if you sat at my desk.
- During your session you'll take control of our screen from your location. That means you will experience some lagtime issues. Your controls might feel a little different, you may need to scroll more slowly. That's all part of the experience.
- Can you move the cursor around for me?



Introduce Tasks

Before we start, can you give us your initial impressions of the site?

- So, for your first task, we'd like you to find two images for us and try to request physical duplications of them. The two images we'd like you to find are a picture of the Italian hall and a picture of a barn in winter. As you're doing this, remember to say your thoughts allowed, and remember, you can't do this wrong, so don't worry about that. Do you have any questions before we start?

Post task questions:

- Did you find anything frustrating about the search function? Anything that was helpful that you liked?
- Was anything about the checkout process frustrating? Anything helpful?
- On a scale of 1-5, 1 being very difficult and 5 being very easy, how would you rate this task?

Next, we'd like you to navigate back to the Digital Archives tab before we start the next tasks. (The user does that).

- For your next task, we'd like you to navigate to an image, any image you would like. Once you find the image you would like to work with we'd like you to leave a comment on that image. You can make the comment whatever you want it to be, but if you would not like to make your own comment, you can simply comment the phrase test comment.

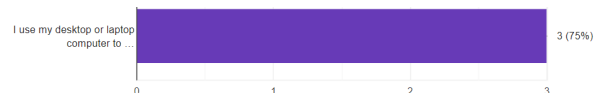
- Was there anything about that task that was surprising or you didn't expect? Anything frustrating?
- On a scale of 1-5, 1 being very difficult and 5 being very easy, how would you rate this task?

- On that same image, can you show us if you were to cite this image, where would you find the information you would need to cite it?

- Was there anything about that task that was surprising or you didn't expect? Anything frustrating?
- On a scale of 1-5, 1 being very difficult and 5 being very easy, how would you rate this task?

- On that same image, if you were to download that image onto your computer, can you show me how you would go about downloading that image?

- Was there anything about that task that was surprising or you didn't expect? Anything frustrating?



Appendix C: Post-Task Questionnaire, Task Rating Scale, Product Reaction Cards

Debriefing Script

Qualitative Questions

1. Did your first impression of the site change over the course of testing the site?
2. What was the best part of the experience using the site? What was the most frustrating part of the site experience?
3. Is there anything you would change on the site?

Quantitative Questions

How easy was the site for you to use overall, on a scale of 1-5

1-Very easy	2-easy	3-neutral	4-difficult	5-very difficult
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Ordinary	Distracting	Low maintenance	Innovative
Convenient	Impersonal	Accessible	Unapproachable
Gets in the way	Connected	Sophisticated	Not secure
Comprehensive	Unrefined	Disconnected	Clear
Confident	Old	Secure	Collaborative
Undesirable	Annoying	Inconsistent	Irrelevant
Cutting edge	Poor quality	Uncontrollable	Anxious
Valuable	Confusing	Stimulating	Slow
Busy	Calm	Boring	Complicated

Appendix D: Participant Quotes

Situation: First Impressions of the Site

“Looks kinda drab.” - P1

“Not very exciting at all.” - P1

“The heading is covering the images I’d like to see.” - P2
-referring to banner images

“Are these the images I’m supposed to find?” - P2
-referring to banner images

“I wouldn’t use the copyright tab.” - P2

“Looks historical: black and white.” - P3

“Looks pretty basic.” - P4

“It seemed very basic and empty. The only things that were there were the search bar and a couple of tabs. It made it easy for you to find stuff.” - Test the Test

Situation: Search Bar and Search Results

“I put it into the search, and if I have to go back to [Browse Subjects], I have to go through all of them, which is making my search harder.” - P2
- when search results returned nothing

“I would go to the Browse Subjects tab next.” - P3
-after getting no results for search “barns in winter”

“They all have Italian Hall in the description of these pictures.” -P3
-referring to image results for search ‘Italian Hall’

“I’m looking at a bunch of search results talking about funeral processions and disasters.” - P4
-scrolling through search results for “Italian Hall”

“Further down is “Italian Hall Calumet”.” - P4

“My first instinct is the Italian Hall Disaster. Would I click add?” - P4

“Thinking [about] what keywords I need to type in to get a positive search.” - P4
-when searching for a “barn in winter”

“Less is more with this search box.” - P4

“The search function didn’t autofill for me. No predictive typing.” - P4

“It’s very hard to see what these pictures are just from the little snippet.” - Test the Test

Situation: Browse Subjects

“Are they classified?” - P2

-to results listed under Browse Subjects

“I’m pushing on “building” because I think a barn would be a building?” - P2

“What do I do now?” - P2

-when a barn in winter was not shown on the first page after filtering for buildings.

“I’m going to have to go through all of these pages to find a barn.” - P2

“I’m not going to go to page two because it’s a lot to do.” - P2

“Why do I have to go through two or three pages to find a barn in winter. I should be able to put it into the search bar and find a barn in winter.” - P2

“To go through all of this is... I don't want to go through all of that.” - P2

-referring to how many pages of results there were on the Browse Subjects tab

“The writing is small.” - P2

“When you say “copper” down here, does it mean Copper Country?” - P2

-referring to filters

“There is no place to search for a subject.” - P2

“It only gives me the one image.” - P3

-after clicking on a thumbnail

“I thought maybe there would be several images of barns or something.” - P3

-after clicking on a thumbnail

“I don’t know where else to look.” - P3

“I would go back to search and change it to just “barn”.” - P3

Situation: Shoebox

“What is the Shoebox? Seems like I could put questions in there.” - P2

“Am I saving things in my Shoebox?” - P2

“Saves things for you.” - P2

-in response to prompt “What do you think the Shoebox does?”

“My Shoebox is empty now and now I have to go through the whole process again.” - P2

-after clicking x buttons to remove images, thinking they were selection tools

“I’m guessing add to Shoebox.” - P3

-from search results

“To see if it’s really what I wanted it to be.” - P4

-viewing images in Shoebox because they didn’t realize they could expand images by clicking on the thumbnail from the search results.

“Now I’m expanding the picture because the thumbnail is pretty small.” - P4

“I’m a little confused because I don’t know where it is in the Shoebox. I guess it’s just in the Shoebox.” - P4

-after adding an image to the Shoebox

Situation: Trying to Checkout

“I didn’t [click the checkout button] because when you go in to view duplication prices, it gives you prices but doesn’t tell you you’re paying for it. “Checkout” implies you’re already paying for something, and I didn’t agree to any prices for the images I wanted.” - P1

“I’d print this [image] out, or I’d put it into my Shoebox because maybe I’m doing a project on barns.” - P2

-confused about where to request duplications

“How am I paying this? How does it know what I want?” - P2

-from “view duplication services” external link

“I want to do the small ones at \$0.25 each.” - P2

-from “view duplication services” external link

“How do they know what I want?” -P2

-after clicking “my account” looking for the checkout.

“I feel frustrated.” - P2

-trying to find checkout

“Probably checkout.” - P3

-notices the checkout button but clicks “view duplication services” link instead

“All I see is checkout.” - P3

-after being directed back to CCHI from the external “view duplication services” link

“At this point, if I really wanted the photos, I would probably call the Library.” - P4

-after not finding the checkout

“Odd because name is usually broken out into two fills.” - P4

-referring to fill-in information in checkout.

“In message, I would put what kind of photo I wanted.” - P4

“I don’t know what that means, so I would probably just leave it as the default status.” - P4

-referring to Order Status option

Situation: FAQ

“Because I don’t know how to do that.” - P2

-responding to prompt “Why are you going to the FAQ page?” after being told to request physical duplication of images.

“How do I print that out?” - P2

-not seeing information they expected on FAQ about requesting physical duplication

“Sent me to the Library. Looks like I might’ve left the page.” - P4

-clicking external link from FAQ

“It didn’t open up a new tab for me when it took me out of the FAQs.” - P4

Situation: Commenting on an Image

“I would add a comment at the bottom of the image.” - P2

“There are a lot of clicks to get to add a comment.” - P4

“I don’t see where comments go.” - P4

Situation: Citing an Image

“I don’t know, where?” - P2

-in response to “Where would you go to cite an image?”

“In the information about the photo.” - P2

-in response to clarification about “Where would you go to cite an image.”

Situation: Downloading an Image

“To download, I would add it to my Shoebox.” - P2

“How do I do this?” - P2

“It doesn’t say, or I don’t know enough...” - P2

-looking for download information from the Shoebox

“I don’t know how to unload it onto my computer.” - P2

-last thing said before giving up on trying to download an image

Situation: Post-Test Reflection

“It’s difficult to use for a first time user.” - P1

“If you’re looking to duplicate [an image], you think it’d be obvious, but it’s not, at least for me.”
- P1

"The learning curve [was the most frustrating]. The first page is really off putting for trying to go deeper into the site. I probably wouldn't have gone any further. [The first page] was very confusing. I wasn't sure how to do anything." - P1

"I would change the header to not be over the background banner. Looks like I'm missing something underneath." - P1

“It’s getting familiar with the website rather than going the long way around.” - P2

-referring to looking through the Browse Subjects tab because they couldn’t find the search bar again once they clicked off of it.

"I wanted to move the heading to below the photos [banner] because you were clouding up what the CCHI was. I wanted to see the images in the banner." - P2

"I liked the idea of the Shoebox. It's a great way to save things and organize things. I like the idea that I can go back into the historical images [browsing] and look at them. I could see doing images there that would make a good book. Fascinating. Could put together a "barns in winter" book with the images. Learning it was fascinating." - P2

“Once I figured out the search function it was okay, but at first, it was a little unclear.” - P3

“It took me to what I asked for.” - P3

-trying to find positive things to say after experience

“Checkout seems a little weird. It would be more beneficial to checkout at the place that offers prices and sizes.” - P3

“Probably good that they have a place to type messages.”
-referring to checkout order form

“It wasn’t super clear, but we got there.” - P3

“At the beginning, I was curious as to what the functionality [of the site] was. I didn't understand what the Shoebox was. I assumed it'd be like a Wiki, but it's more of a photo archive. The Shoebox metaphor makes sense to people my age who actually kept Shoeboxes filled with photos under the bed.” - P4

“Finding the barn was kind of frustrating.” - P4

“Thumbnails could’ve been two to four times the size they are.” - P4

“The thumbnails are too small.” - P4

“The photo descriptions were really good.” - P4

“The checkout process is non-intuitive.” - P4

“It’s not easy to figure out how to order images.” - P4

“Nothing helpful in the checkout process.” - P4

“I would have expected when I clicked on the image add button... I was expecting a bunch of pictures to show up.” - P4

“I had to add it to the Shoebox to add a comment.” - P4

“I don’t really understand the purpose of the Shoebox.” - P4

“Thumbnails are hard to see unless you add it to your Shoebox.” - P4

“It’s interesting to see the history and photos and to see that's being preserved.” - P4

“There’s a lot of content on the site, so it’s good that it began simple.” - Test the Test

“The tiny thumbnail pictures were hard to see until I opened them fully.” - Test the Test

“They should add a few more tags to make it more obvious what’s in it or make the thumbnails bigger.” - Test the Test

Situation: What are you feeling?

“FRUSTRATION!” - P2

-after scrolling through many pages of Browse Subjects and getting a no results return from the search bar