Remote Unmoderated Usability Testing: Craigslist

Section 003 - Remote Unmoderated Usability Testing April 28, 2020

Authors: Jimmy Dale, Matthew Brennecke, Adriana Termaat-Matthews, Victor Li, Bryan Flowers

Word count: 3524

Introduction

The purpose of this research is to plan, conduct, and assess a remote usability test on a digital platform. Our team will be investigating the website version of Craigslist - an American classified advertisements website devoted to helping users find jobs, housing, services, and various "for sale" products. For our analysis, we will be focusing on multiple aspects of the user interface: the initial home page functionality, how people search for and select postings that address specific needs (e.g. housing, job postings, "for sale" items, etc.), and the effectiveness of the location filter on the site. These are the aspects that we suspect present the most difficulties for users based on our initial assessment of the platform. By conducting these remote usability tests and analyzing the results, it is our goal to develop recommendations that will improve the functionality of these aspects of the platform. Ultimately, we aim to provide suggestions to improve the Craigslist site, as this is important in ensuring Craigslist remains widely used and competitive moving forward.

In order to do this, we have developed two central research questions that will provide the basis for our analysis and guide our test plan. Both our user tasks and post-test questionnaire in each test will be focused around these questions, ensuring our findings will assist in the development of our recommendations. These questions are as follows:

- 1. Is the home page interface of Craigslist conducive to the way that most people utilize it and how do users typically browse on Craigslist? How could it be improved to better fit users' needs?
- 2. What challenges does changing Craigslist's location for searching and browsing present to the user? Are users effectively able to change their location and search for the product or service they are looking for in that location?

Methods

Data Collection

Since the Craigslist website is fully developed and this research aimed to identify pitfalls and areas for improvement within the interface, the best way to conduct this research was by watching how participants interacted with and utilized the interface to complete various tasks. Remote usability testing was the most effective user research method to assess our research questions and use our findings to produce pertinent recommendations because we designed five tasks for the user to complete and we observed how they approached each task. Furthermore, the participants articulated their thoughts during the session, while completing the tasks, so our team could understand not only what they were doing, but the motivations behind their actions and any frustrations associated with the completion of the task as well. Our team completed the

remote usability testing through a website, UserTesting.com, which enabled participants to complete our tasks with their screens shared so that our team could see how they navigated the screen. Furthermore, the participant's audio was connected so we could hear their thoughts in a *think-aloud* exercise during the usability test.

See Appendix 1 for the introduction that each participant received to the study, a detailed description of each task, and the post-test questionnaire questions. Tasks 1, 2 and 3 focused on observing how the participants searched and filtered for the item in various stages of the searching process. This included noting how the participants completed the initial search on the home page, as well as any additional filtering needed to complete the specifics of the task. Our first task, finding a motorcycle that would accept trades in place of cash, focused on how intuitive it was for the user to search for various filters that they might not have known were available to them. Our second task, finding a car with a ceiling on miles per gallon (MPG) and cost, also focused on the intuitiveness of finding and applying filters to their search. Similarly, the third task required the participant to search for a specific full time job position.

Tasks 4 and 5 focused on how easy it was to change the location on Craigslist and search for an item in that new location. Task 4 required the participant to search for an apartment in Boston with cost and size ceilings, while task 5 required the participant to search for a storage unit with a size minimum also in the Boston area.

Data Analysis

We analyzed the data in both quantitative and qualitative methods. Quantitatively, we analyzed the time that it took the participants to complete each task; this can be used as an indicator of the ease of completion of the task for each user. There was significantly more qualitative data than quantitative data, and most of the qualitative data was obtained through observations, the *think-aloud* statements of the participants, and the answers to the post-test questionnaire. Our team compiled our observations of the participants and all salient stories of frustrations or recommendations obtained through the *think-aloud* and analyzed the similarities and differences between experiences. We also compared the participants' answers to the post-test questionnaire to look for themes in the feedback.

Recruitment Criteria

For this study, we decided to look for young adults who may be looking for work opportunities (internship or full-time roles) and would consider relocating on their own for work, without any family. To recruit for this, we applied the following demographic filters to our test on UserTesting:

• Age: 18-30

• Language test is written in: English

• Parental status: No children

Drawing from our own experiences using Craigslist and realizing how confusing the site may be to use at times, our team decided it would also be insightful to recruit study participants such that approximately half of the participants would be "Average web users" and the other half be "Advanced web users," as categorized by UserTesting.

N=15 users participated in our remote usability study. Of the 15 participants, 8 were females while 7 were males. There were 8 participants from the US, 4 from the UK, 2 from Canada, and 1 from Mexico. 9 of our participants claimed to be "Average web users" while 6 of our participants claimed to be "Advanced web users." See Figure 1 and Figure 2 for the age and income distributions, respectively, of the study's participants.

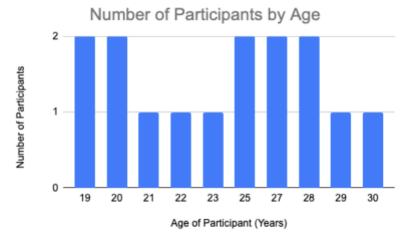


Figure 1: Age distribution of the participants of the remote usability study

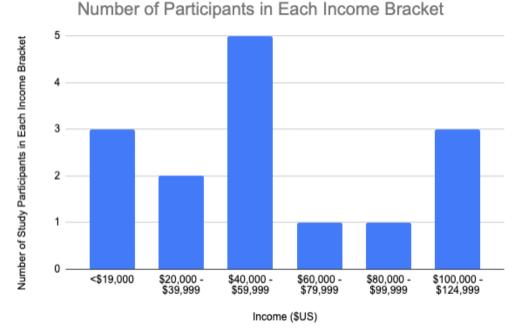


Figure 2: Number of Study Participants in Each Income Bracket

Findings

Summary Results

The following results from our remote usability study demonstrate that many of the elements of Craigslist's interface do not align with the wants and needs of users. Among other issues, many of our test participants struggled to find various filters, settings, and features that were available on Craigslist but proved to be difficult to find. This ultimately meant that test participants took more time to complete the tasks in our test plan than we would have expected because they spent additional time trying to locate the features that they needed to use. The following subsections describe the key findings from our study in further detail.

Key Finding 1

Upon gathering the data from each of our participants, we were able to calculate the average time it took to complete each of our tasks (see Figure 3). Task 1 took significantly longer than the other tasks because participants had difficulty finding motorcycle listings that were available for trade. Overall, participants recorded faster times on the tasks that had more accessible filters and categories, such as Task 3 and Task 4.

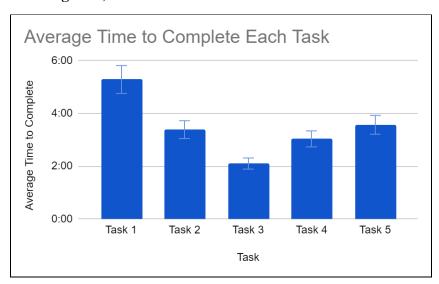


Figure 3: Average completion time for each task for the n=15 study participants

Key Finding 2

In our research questions, we aimed to address the use of Craigslist's search function against the use of its filter and category options. Through our observations, we found that most users prefer to initially use the category feature on the homepage to find what they are looking for. If this proves unsuccessful, users will subsequently utilize the search function to find their desired results. This finding was not unanimous across all users, but the large number of categories that Craigslist uses makes it difficult for users to ignore them. The homepage of

Craigslist offers eight main categories (community, housing, for sale, jobs, services, discussion forums, gigs, resumes). Within those categories, there are many subcategories or filters. For example, "for sale" has 45 subcategories and "jobs" has 31 subcategories. Most users in the study used these categories and subcategories from the homepage and then went directly to the filter after that stage. When filters weren't available, such as during Task #2 (specific MPG filters were not an option when searching for cars), multiple users then turned to the search bar in order to narrow their results. However, even in the cases where participants chose to initially use the search bar, they would still end up turning to various categories and filters throughout the process of finding results. One user said that they preferred to use the listed options because "it gave a more clear point of view for what I am looking for so that I wouldn't as easily get sidetracked." When struggling to find an item, another user said that "[I] definitely should go back and see if I can actually filter here. That should be the first thing I always need to remember to do - check my sidebar." Hence, both features are essential in order to provide users with the most accurate results, but it is important to know that most users first look to categories and filters to narrow their search.

Key Finding 3

Our third finding comes from Craigslist's UI for changing the user's location. Similar to the rest of the Craigslist homepage, the user is presented with a list of nearby cities and states, which they can select to refine their location for browsing listings. After having users work through our test plan, we found that while most of them were able to eventually figure out how to change their location, many of them had great difficulty in finding this feature at first. In fact, prior to discovering the list of location options on the homepage, a few of our users tried to use the listings search bar to specify their location by conducting queries such as "apartments near Boston." After the users had completed our test, we asked them a series of post-test questions, one of which asked them to rate the ease of changing their location on Craigslist using a Likert scale (0 = very difficult, 5 = very easy). From the data, we found that 7 of our 15 testers responded with a rating of 3 or less, which suggests that almost half of our testers struggled with Craigslist's location feature in some way.

Key Finding 4

Our fourth finding focuses on what items people search for and purchase most frequently on Craigslist, and what items they are more likely to use competing platforms to search for. Below is a consolidated list of the answers of the post-test questionnaire responses regarding other preferred competitor sites from the study participants.

General Competitors: Gumtree, Ebay, Facebook groups, Kijji, Google, Amazon

Jobs: Indeed, Google, Handshake

Cars: Ebay, 2nd hand dealership, Facebook Marketplace, Cars.com, Auto Dealer Housing: Zoopla, Apartments.com, Georgiamls.com, Rightmove, Zillow, Trulia,

Storage units: Yelp, Google

Many of the participants claimed that they would not trust or use Craigslist to make big purchases such as cars or housing, and would likely use more specialized competitors (as listed above). Users are more likely to use Craigslist to search for smaller and cheaper items such as the storage unit. A recurring theme for many of the study's participants was a distrust in Craigslist and its items; many participants spoke about the "sketchy" nature of Craigslist, saying that they wouldn't easily trust the seller or item to be as described. As one user described, "Not gonna lie, I think that is what is wrong with this website, it tries to do literally everything. Like if I am going to buy or rent an apartment I'm not gonna go to Craigslist, I'm gonna go to Zillow or somewhere that specializes in apartments. Also, I probably wouldn't trust Craigslist with something that serious. I mean no offense, but your reputation is a little sketchy. Maybe it's cheap, but do I trust this? Do I trust these people?" The big and impactful items on Craigslist have many specialized, robust competitors that are trustworthy, and most of our participants would rather use those competing platforms to search for items like a car or housing.

Key Finding 5

There were many conflicting perspectives about the UI of the Craigslist website; some participants described the white background and plain blue browsing categories as "unintuitive and dated" or "cluttered, unfinished, and messy," while another participant said she enjoyed the "minimalist design" of Craigslist and finds it "easy to navigate." **Overall, more than half of our participants commented negatively on the interface of Craigslist.** There were consistent complaints of an overwhelming amount of items advertised and information on the interface. As seen in Figure 4, the homepage has dozens of filters; understandably, it takes more time to read through all the categories and choose the appropriate one than to type the desired item or category into the search bar.

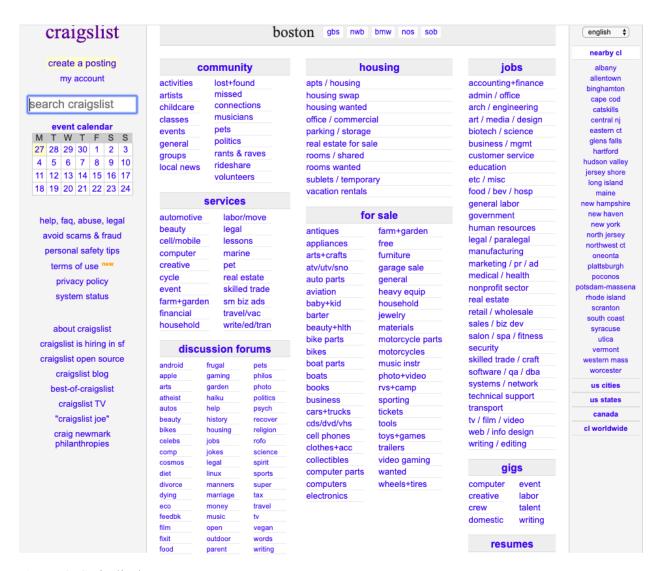


Figure 4: Craigslist homepage

Key Finding 6

Across our team's compiled dataset, we found that the most common pain point for users when using Craigslist involved finding and utilizing the search and filter options most relevant for what they were looking for. Almost all of our task criteria were able to be filtered for using the built-in filters on Craigslist (e.g. distance from current location, price range, etc.) such that users did not have to manually sift through the text of each listing to find what they were looking for. Even so, some task criteria and navigational flows remained too difficult for some users to complete efficiently.

For each task, users generally started by using the search box to look for the item specified in the task, with some users explicitly stating that they preferred search over reading through all the categories to find which one they wanted. One problem we noticed that arose when users started off their search this way was that the search box couldn't account for location. Task 1, Task 2, and Task 3 asked users to either search from their current "ZIP code" or current "area." For these tasks, users were able to simply go with their current location as automatically determined by Craigslist and/or enter their current ZIP code into the location filter. Users did not have trouble figuring out the location for these tasks. On the other hand, for Task 4 and Task 5, users were asked to specify Boston and South Boston as their search locations. Outcomes for whether users were able to successfully change their location to Boston were largely mixed. Many users started by going to the home page and entering both their location query and item query into the search box (e.g. "Apartments in Boston"). Here, we saw that the search box couldn't account for location and most users eventually discovered that they had to change their location using the right sidebar on the homepage.

After figuring out the correct location for their search, users either searched for or navigated to the appropriate category for their search (e.g. "housing for rent or motorcycles for sale"). Once on this page, users generally had little trouble filtering for the other criteria of the task (e.g. size, distance from location, and price). However, users complained throughout the tasks about the lack of intuitiveness in using the site's search and filtering functionality to get to the listings they wanted. Overall, most users were confused or bogged down by the way the filters worked and found that search didn't always get them the results they needed and many participants explicitly expressed their preference to use freeform search rather than browsing and filtering.

Recommendations

Recommendation 1

For each of the five tasks, users tended to prioritize searching over browsing and filtering the criteria they needed for completing each task once past the homepage. As described in Key Finding 6, we found that the search function usually did not meet the needs of users in filtering listings for criteria, so users often had to scrap their search query containing the task criteria (e.g. "50 sq ft storage unit") and switch to browsing and filtering (e.g. Navigating to the "parking / storage" category then applying the surface area filter) to get to the listings they needed. To address this pain point, Craigslist should implement natural language processing into their search function such that it website can automatically assign filters to each search query and sort the listings by relevance such that users only get the most relevant listings (e.g. A general query for "motorcycle under \$5000" brings up motorcycles for sale/trade and not motorcycle jackets). In addition to search functionality, users will still need to use filters to narrow down their search results to find the listings most relevant to what they are looking for.

As also seen in Key Finding 6, users had to click through each of the filter categories (e.g. condition, color) to expand the list of filters before they could select/deselect each filter. Many users were frustrated by this design choice and we additionally recommend that Craigslist address it by having the filter categories expanded by default such that users won't have to manually expand each category.

Recommendation 2

Regarding the browsing and search features of the platform, we recommend that the number of categories and subcategories be scaled down and more user friendly. Furthermore, if the categories are scaled down, it is crucial that the search function become more user friendly. When citing their biggest issues with the site, one user said that "organization is my biggest complaint. It is difficult to find your way around just because there are so many things that are being advertised at once." Many users spent a significant amount of time looking at the home screen, parsing the categories for the option that best fit the task. This took a lot of time, and combining some of the subcategories on the home screen would reduce these struggles. However, if Craigslist does end up implementing this, per our prior recommendation, it is important that the search function becomes more effective, allowing users to discover more specific results beyond the broad range of options that the category search provides.

Recommendation 3

As stated in Key Finding 4, many users indicated that they prefer to use Craigslist to find smaller, cheaper items instead of important items such as a car or housing that have robust and specialized competitor platforms. Therefore, our team recommends that Criagslist should focus the improvements to the UI on the most used and purchased items/categories. Moreover, improvements that are specific to a particular category, such as the individual filter changes and upgrades, are less important for items like cars and housing, and should be focused on for smaller items like the storage unit. This strategy will maximize the efforts for the UI improvement and result in significantly improved user satisfaction.

Discussion

Upon reflecting on the study that we conducted, one obvious limitation was the number of participants that we were able to conduct our test with. While the data from these 15 participants still produced meaningful results, we believe that a larger sample size would allow us to get a better understanding of the shortcomings of Craigslist's UI by reaching a more diverse group of testers. Additionally, we restricted the demographics of our participants to individuals between the age of 18 and 30 with no children, in order to find testers that would likely be open to relocation in a job search scenario. While these demographic restrictions served to ensure that our participants were similar in age and familial status, they restricted the diversity of the users in our study. An appropriate continuation of this study would be to conduct a survey with a large

range of participants, particularly focusing on including a wider age group. One of the research questions we would seek to answer in the survey would be *What are the main items people search for and purchase on Craigslist?* This would verify and improve upon Key Finding 4 and its respective recommendation to focus the UI improvements on the most used categories of items, especially the improvements on the filters.

Conclusion

The purpose of this project was to plan, conduct, and assess a remote usability test on the website Craigslist. Through our research we gained some valuable knowledge about the usability of the site, and were able to gather some key findings. We found out that when using the site, users had trouble with the filters, categories, and changing their location. This as well as their preference for competitors along with their dislike of the website's design. Using these key findings, we were able to create three recommendations for improving Craigslist's UI. These were to focus on the products, scale down and improve the categories, and to implement a natural language processor. By implementing these recommendations, Craigslist could be transformed into a more user friendly site that would ultimately increase use and profit of the website.

Appendix 1. Usability Test Plan

Introduction	Tasks	Post-test questionnaire
Thank you for agreeing to participate in our study. We are interested in researching how people use Craigslist to find various products and services. In the following test,	Task 1: Now that you are out of college, you wish to own a motorcycle but you don't want to dip into your savings in order to purchase one. Find a motorcycle for sale in your local area (within 50 miles of your current zip code) where the listing specifies that owner is willing to accept trades in place of cash.	Question 1: When given a specific task, did you prefer to browse the listed options or search for the general topic? If "it depends," what factors does it depend on?
you will be asked to perform a series of 5 tasks, which will involve using Craigslist to achieve a specific goal, based	Task 2: You are looking for a new car in your area. Your new job is an hour away so you need it to have good gas mileage and be cheap. Find a car with at least 30mpg and is under \$5,000	Question 2: What frustrated you most about this site?
on the scenario you are presented. As you work through each task, please do your best to communicate your thought process out loud so that we can get a better	Task 3: You are looking for a "technical support" position in your area on <i>Craigslist</i> . The position must be "full-time" and be located 50 miles from your current zip code. Select the option that best fits this criteria.	Question 3: Is there another site that you would have preferred to use to complete certain tasks? If so, which websites would you turn to for each product / service search?
understanding of your thoughts and feelings with regards to the interface and usability aspects of Craigslist. Please be sure to mention any	Task 4: You are moving to Boston and are searching for a new apartment to rent. Search for a 2 bedroom apartment for under \$3500 per month that has street parking available and is at least 600 ft ²	Question 4: How easy was it for you to change your search location on Craigslist (0=Not at all easy, and 5=Very easy)?
confusing or difficult aspects in the interface as you navigate through the website and complete the tasks. Thank you!	Task 5: You have arrived at your new apartment in Boston and are now realizing that the place does not have enough space for all your belongings. To store your items, look for a storage unit that has at least 50 ft ² of storage space and is within approximately 5 miles of the South Boston area, where you will be living.	

Appendix 2. Questionnaire Responses

	What frustrated you most about this site?	When given a specific task, did you prefer to browse the listed options or search for the general topic? If "it depends," what factors does it depend on?	Is there another site that you would have preferred to use to complete certain tasks? If so, which websites would you turn to for each product / service search?	How easy was it for you to change your search location on Craigslist (0=Not at all easy, and 5=Very easy)?
User 1	It is a lot nicer to browse the listed options, as you can learn more from a website in that way. That is a good indicator whether it is user friendly or not.	At first I wasn't too sure how I can change the location, as it is not quite clear for someone that is not very familiar with this website.	In the UK, for properties to rent, we have Rightmove which is very useful and easy to browse through. We also use Facebook Market for cars/motorcycles. Craigslist is nice that it has everything in one place.	0-Not at all easy at first; 5-Very easy once I figured it out
User 2	It depends. If there seemed to be an easily identifiable category that that query belonged to, I would choose the category. Otherwise I would search.	It was difficult to see the options for parking while searching for an apartment because it was a pull-down list that only said "parking", so it was easy to miss.	For jobs I would probably try Google first. For apartments I would check out websites like apartments.com and georgiamls.com first. For storage units I likely would have turned to Yelp first.	5
User 3	If it was possible to narrow down the listed options using filters, then I found a match using them. If there were no filtering options, then I would resort to search.	The overall layout and design of the page felt very dated and clunky, with not much intuitiveness.	Jobs - indeed.com Cars - ebay, 2nd hand dealership Storage - ? Housing - zoopla	0
User 4	It was really difficult to navigate around. Absolutely everything was a link rather than a drop down box of options. It looked so busy and there was just so much going on it was hard to really find what I needed to. I personally would suggest changing the entire website. It is really difficult to find what i needed to	Well I searched for motorcycles at the beginning and nothing came up which made me then click on motorcycle on the main list of options. I think both of the ways to search were not useful and difficult to really work out where I needed to click and search for.	I think craigslist is really hard to use so i personally wouldn't use it again. I have used Ebay and Gumtree before to look for cars/ motor vehicles. These are laid out much easier to search for the products you want and also give you a wider variety of filters to narrow down the options that come up afterwards. I also think Google in general is a better way to search for everything else. This then brings up the	1 - I found it quite difficult. At first I wasn't sure where this even was to change my location. Then in the drop down it only gave you certain areas and not where i lived so I then had to type in my post code which seemed to work. But there were so many

			best options to chose from and you can make your own choice of what you need.	different areas where you could change your location although done of which were easy.
User 5	Finding storage was the most frustrating. It would be helpful to have more dropdown menus.	I like to browse listed options to help narrow my search.	I would look on facebook, next door, or yelp.	4
User 6	The interface was very complicated and mashed together in a way that conflicted with how easily I could find products that I wanted.	At first, I opted to search since that was the way that I have always looked for products but then it became clear to me that the search products are different from if I used the general category topic.	Most likely Amazon or Ebay.	3
User 7	In the beginning with its search layout.	I went to the specific area of the things I was looking for because it was easier to find it that way then just using the search engine.	I use offers for cars and similar apps for housing and other random stuff.	A 3 because only if you have used the site before, it's not that difficult but for others who have not, I can see why they might find it hard to use.
User 8	Trying to find more specific things when you are not given the option on the left side bar to filter what you're looking for.	Browse the listed options. it gave a more clear point of view for what i am looking for so that i wouldn't as easily get sidetracked.	I can't think of a site as useful locally as this site but I might use google or amazon in the future to make sure I'm getting a good deal or to research more of the item.	5
User 9	It's difficult to navigate.	I prefer listed options, but if I can't find what I'm looking for, I'll search for it	I would use Zillow to find housing. I would probably use Google to find a quality storage company. I would use an auto dealer to find a car. And I would use Handshake to find a job.	1
User 10	search for a general topic and refine it as possible. Does depend on the availability of the options to refine the search	the listed data isn't necessarily completely accurate. The square footage of the apts I'm pretty sure were invalid.	Yea! I would prefer dealerships and car companies website for vehicle searching and realtor sites for apt/house searching.	5

	though. Sometimes it's easier to just use their listed options	and most of the vehicle listing didn't the estimated mpg required on them. which made it hard when i was looking for those specific requirements	more reliable and up-to-date. and less likely to be scammed compared to a craigslist item.	
User 11	I prefer to search using the listed options because it gave you a specific listings that matched.	Some listings would match what I'm looking for, but when you click on it the information is sometimes incomplete.	For apartments search I would mostly use Zillow or Truilia. For cars I will usually search on cars.com.	5
User 12	I preferred to search for the general topic and then sift through the options available. I felt that this gave me more freedom to change my mind on certain things.	I was frustrated in not knowing the zip code for South Boston so I had to estimate with just using the map.	No, I typically go to craigslist for most of my used vehicle and apartment renting needs. If i had to list another site, I would list zillow or facebook marketplace.	5
User 13	I thought I would prefer to use the search bar but actually ended up using the search terms on the front [sic] page as they were exactly the terms I needed to search for during the test.	It assumed I lived in London and was searching for things in London without giving me an obvious way of changing that. I had to change the URL myself to get it to change to Boston. In addition, the website is all grayscale with boring blue text. Needs more visual elements and a general re-design, as there's way too much text in general.	I got frustrated with this website very early on in the test and was thinking about how much easier this would have been on Gumtree or Ebay.	0. Extremely difficult, I couldn't find how to do it on the website so had to change the URL myself, after a few minutes of not getting anywhere.
User 14	if i could control find it i did that, other wise i searched it	the look and the hard to use filters	facebook groups! They have everything	5
User 15	I always browse the listed options first. If i can't find it I will search the general topic	Th [sic] lack of options to complete tasks	Kijji for almost all. The postings on this site in ontario is small compared to kijji	4