Target.com Usability Test
Team Target

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SI 422, Fall 2013 Semester

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Executive Summary

Purpose

Over the past decade, the amount of users on the internet has grown by over 500%. This growth has yielded an increase in annual online purchases of 200 billion dollars. To keep up with the boom of online shoppers, retailers must constantly refine and improve their e-commerce websites to feature their products on the internet. One of America's largest retailers, Target, features a massive e-commerce department marketing their full array of products online.

A large website comes with steep responsibility, including usability, accessibility, and constant maintenance. There is an extremely complex infrastructure in place behind the scenes that makes a large website like Target.com accessible to millions of customers online. Of course, all that the customer sees is the front-end interface. The purpose of this experiment is to test the usability of several Target.com features and the overall appeal of the website from the consumer's perspective.

Background

Target.com was officially launched in September, 1999. The website was started as an attempt to distinguish the chain from other large competitors in the field by providing comparable products at affordable prices. Partnering with Amazon, Target.com was already attracting nearly 300 million annual visitors by 2008. Designing a website around the needs of so many unique individuals is no small task. Target attracts a diverse group of shoppers with differences in technological proficiency, income, age, and gender. As the second largest retailer in the United States, it markets products in every category from kitchen supplies to consumer electronics. Evaluating the usability of Target.com will require the participation of several individuals with unique shopping characteristics.

Opportunities For Improvement

Target.com faces many difficult challenges in the e-commerce space. Although the site manages sales effectively and stands as a very profitable branch of the Target corporation, it demonstrates several opportunities for improvement. As the report will explain in more detail, the aesthetics of Target.com can be distracting and intrusive. Certain functionality like the Compare function and gift message options lack intuitiveness and fluidity. The report will lay out problems that our test subjects experienced with the website and some potential short and long term solutions for areas needing improvement.

Body

Target is one of the largest retail companies in America. With such an expansive landscape and wide variety of products and services, Target needs to provide its customers with a usable eCommerce site. Today, people expect the option to complete tasks online. Whether the customer is trying to develop photos, purchase a new coffee maker, or shop for skin care products, Target needs to make that venture quick and easy. Our mission is to evaluate the intuitiveness and usability of Target.com and report back on its successes and areas for improvement. We will be examining many attributes such as the catalogue, compare function, location of links and menus, help documentation and others. We compared our findings through a usability test. In this usability test we utilized best practices and strategies presented in class including monitoring human test subjects and how they complete specific tasks that we provide for them. This data helps us understand the website's usability, aesthetics, and intuitiveness leading us to possible solutions and recommendations.

Method

We collected both quantitative and qualitative methods for each subject we tested. For quantitative methods we collected data of time per task, pages viewed per task, and total time of all tasks (graphs in appendix). The quantitative data gives us information to compare tasks based on how long they took each participant thus the difficulty of each task. We recognize that different people process information differently and may generally spend more or less time on a page. Although true, the more time spent on a task and more windows viewed has a correlation with the difficulty of the task. We also gathered a lot of qualitative data by having the participants tell us their thoughts while on the site and answering questions following the test. These thoughts provided us with information of what the user is thinking, their frustrations, what they like, and how they believe the site can be improved. These quantitative and qualitative methods provided us with good information to make the best recommendations for target.com.

Personas

We attempted to test a diverse sample of test subjects to gather data on Target that is as representative as possible of the user population. Target attracts users from many different backgrounds. The population varies in age, gender, ethnicity, religion, and countless other criteria that affect online shopping preferences. Each person on the web could interact with Target.com differently based on these identifying characteristics.

On top of these demographic qualities, users differ based on aspects such as experience utilizing different technologies. YouTube needs to support people with varying levels of computer proficiency and device type (desktop, laptop, tablet, phone). Although we are performing this evaluation on a college campus with a relatively homogenous population of students, our goal was to select a diverse participant group comprised of very different individuals. This allows us to address Target.com's successes and shortcomings between different types of users and make specific recommendations for improvement.

Persona 1

- 21 years old**,** White, Male
- Student at the University of Michigan
- Intermediate computer knowledge
- Owns two laptops and an iPhone
- Not a frequent shopper
- Accesses the web mainly for school work, entertainment and social networking

We chose Person 1 because he is male with an intermediate knowledge of computers. Person 1 is not a frequent shopper which is valuable because it shows us how non-shoppers use Target.com. Since our user is a 21 year old college student, it helps us understand how an average young adult male would use the site.

Persona 2

- 22 years old, White, Female
- Student at the University of Michigan studying Communications
- Limited computer knowledge
- Uses a Mac laptop, iPhone, and iPad
- Frequent online shopper

We chose Person 2 because she frequently shops online but lacks the computer proficiency of Persons 1 and 3. Person 2 knows what types of products she's looking for on e-commerce websites but might not understand how to interact with some of the Target.com advanced functionality. Testing with Person 2 will give us a good representation of regular online shoppers that lack computer expertise.

Persona 3

- 30 years old, White, Female
- Bachelors of science
- Full time job in e-commerce
- High computer proficiency - computer, laptop, and tablet
- Target.com customer

Person 3 is an avid computer user and online shopper. She has graduated college and is a young professional in the technology world. She is constantly on computers for work, for shopping, and for fun, all in order to make her life easier. She is very confident with computers and is likely to use all features available on a website.

Findings

Gift Message

Finding: Many users were unable to locate and use the gift message feature on the website.

Evidence:
At this task the user had items in their cart and were asked to add a gift message to one item in the cart. Only one out of three participants were able to successfully complete this task and the one that finished the task had some difficulties. Person one and person two, neither of whom completed this task, both spent time looking at product pages for adding a gift message. They read details on product pages looking for any way to add a gift message to the item. They both became frustrated and annoyed that they could not figure it out. Person one even searched “gift message” in the top search bar. They thought they would find the option from searching or find help documentation. The search did not give any positive results and person one gave up completing the task. When participants one and two were asked what they would have done differently if they could do all the tasks again they both said they would figure out how to add a gift message. They wanted to learn the function and were frustrated that they were unable to complete the task.

The third person to do the usability test completed the task of adding a gift message although had some difficulties. They navigated to the cart and looked around there. They tried to delete an item in the cart thinking that they needed to add the gift message while adding the item. When this did not work they tried to check out and add a gift message. Again, this did not work so they went back to the cart, scrolled and looked around, and then eventually found add gift options. 

They pressed the link and added the message. While this user found the gift message function and completed the task the process was not easy for them.

Throughout our usability testing we saw many users struggle with being able to add a gift message. This is an important feature that is currently inaccessible to many users.

Recommendations:
From our usability testing we have found that the process to add a gift message needs to be changed. Many people went looking for the add a gift message function on a product page. One option would be to add the function on the product page and also have it on the page with the cart. When the user clicks the button to add an item to the cart there is always a popup and this window could give the option to add a gift message. Also, when in the cart if the user opens the item it should give the option to add gift options. This gives the user more opportunity to add gift options and notice that it is an available function. This would promote the use of the gift options, make it a more known function, and make it easier to use.

The user should also be able to use the search bar for whatever they need. For example, with this issue, the user should be able to search gift options and receive information. They

should be able to see a help page of how to use gift options and steps of the process. This would make the process much easier for people learning how to use the site.

Lastly, when a user creates a gift message they should receive feedback that it was created. Currently when a user adds a gift message they press save and continue and then the screen goes away. There is no message in the cart that there is a gift message. This could make it really easy for users to not be sure if a gift message is there, forget they added a gift message, or not know how to change their gift message. We suggest that when a gift message is added there is a line next to the item with the gift message attached to that item. Users should also be able to click an x and delete the gift message from the cart page. This would make it really easy for users to always know what they have with the items and change anything they decide they do not want. These updates to gift option functions could make the site much more user friendly and encourage more customers to use the gift option function.

Return Policy

Finding: Target.com does a very good job of making the return policy easy for the customer to find.

Evidence:
When users were asked to find the return policy none of them had difficulties. There are multiple ways to find the return policy and they all give the same information. Person two went to the bottom of the page and pressed return an item and found the return policy. The other two participants went from the cart and pressed view our return policy on the page with the cart. This was the fastest task for all of the users. One of the users also told us that the return policy was the easiest task to do on the site. Target.com does a good job making the return policy accesible and easy to find for all users.

Redundant Structure

Finding: Users had difficulty knowing where to look for specific items and whether the items were the same or different in different locations.

Evidence:
This issue was evident when users were looking for items and when we had a conversation with the user. Currently, the user can navigate to the same page through many different means. For example, if a user is looking for kitchenware they can use the navigation bar at the top and go to home and then kitchen or just use the kitchen tab. Person one told us that they were frustrated because they were not sure where to look for specific items. They were not sure if the kitchen tab had the same items as going through home to kitchen. They wanted items to be found in one location so there was no confusion about where to look and what they would find.

This was another common issue with participant three. This participant wanted to find a phone case and first went to women and then accesories. She thought that there would be cases there

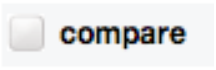
and said that on other sites she had found phone cases this way. After, when she did not find the item, she went under electronics and found phone cases. This was frustrating to her because the items were not located where she expected them to be.

Recommendation:
While we understand that websites put items in multiple locations to follow every users thinking path this also makes it difficult. Users need to know that items are located in one place and that they are always the same items. We propose condensing the site and keeping items in one location to browse through. This will make the site less cluttered and make it clear that those are all the items in that category.

Compare Function

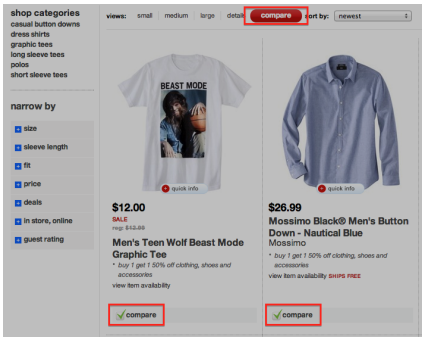
Finding: Users were confused by the compare function and found it difficult to use.

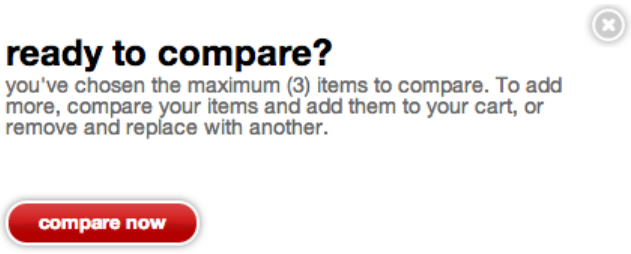
Evidence:
Our second task required users to compare shirts they found appealing. We asked the participant to browse the clothing section and locate a few shirts they were interested in. Then, we asked them to use the Compare function to look at the differences between products. Each item listed on a product page contains a radio button for comparing it to other selections.



Once an item has been selected for comparison, up to two additional items may be chosen. If the user only selects one other item, a button appears at the top of the page for submitting the comparison. However, if the user has navigated below the fold and cannot see the top of the product section, the button is not visible. The page does not notify the consumer that they may begin the comparison or that a button has appeared outside of the view frame.

If the user selects a third item for comparison, a dialogue appears notifying the subject that they have chosen the maximum number (3) of items for comparison and gives them the option to “compare now.” Shown on the left is the compare button when two items have been selected. The image on the right shows the dialogue displayed to users when they have selected three items.





Participants were confused by this interface and struggled to compare items properly. One subject selected two items but was never able to locate the compare button. Other users located the button but spent up to thirty seconds looking for it. All participants that selected three items for comparison were able to interact with the “ready to compare” dialogue and compare their shirts successfully.

Recommendation:
To help make users aware of system status and prevent them from making errors, it would be useful to gently notify them as soon as the comparison function becomes available. Once they have selected two items, a dialogue should appear that makes the “compare” option more obvious. Alternatively, a frame within the page could display the items a user has selected for comparison individually. As the second and third items get added, the option for comparison should become available. This would be visible on any part of the page, rather than solely at the top above the fold.

Store Hours

Finding: Most users were able to find store location and hours of operation fairly easily in a short amount of time.

Evidence:
Our fifth task asked users to locate the store nearest their location and find its weekly hours of operation. To complete this task, most users navigated to the top of the screen and selected the “find a store” option from the navigation. They then entered their zip code in the search field and browsed the list of returned results. Once selecting a store, they viewed its open hours, which are listed beneath its address and telephone number. This objective took most users

approximately 20 seconds.
Although most users ultimately completed the task successfully, they experienced a few frustrations along the way. First, the “find a store” link is very small in comparison to other navigation components. Of the 20-30 seconds users spent on this portion of the usability test, approximately 15-20 were spent searching for the button. That means over half of the time they spent looking up store locations and hours was spent searching for the correct place to click.

Another thing users struggled with was the placement of the “find a store” link. In the navigation, “find a store” is located directly beneath the category drop-down menus, such as furniture, electronics, and video games. If the user moves their cursor slightly above “find a store,” the

menu action is triggered and the drop-down is presented to the user. Many participants initiated this action unintentionally and became frustrated that
the menu covered up the link they were attempting to click on. Some users inadvertently missed the “find a store” link several times in a row.

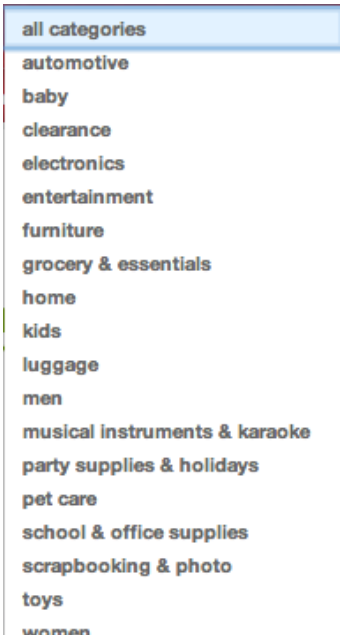
Recommendations:
Making the “find a store” link more obvious would decrease the amount of time users spend searching and help them arrive at the desired information more quickly. Also, if the link remains in the same location, consider making the interaction between it and the navigation drop-downs less sensitive so users don’t trigger the effect accidentally. This could be done by slightly delaying the effect in that region so the user has time to correct their mistake and redirect their cursor to the proper location. Alternatively, consider exploring new locations for the link.

Search

Finding: A few participants interacted with the internal search function and found it useful.

Evidence:
Although most of the users chose to browse for products or functionality during the usability test, a couple chose to use the Target.com search option. One user, Jonathan, used search to look up store locations and hours. He entered the query “store hours” and was directed to the same page as users who found the “find a store” option on the homepage.

One reason users might not have used search more prevalently in our usability test is because our tasks often required them to find articles of clothing or products they found appealing. To do so, most participants browsed the site by category, such as “men” or “women” and refined their selections moving forward. Assigning a more specific task like locating a particular video game might have motivated users to being with a search query instead. In future research, it would be interesting to see if users notice the search refinement option (shown below) and select a category to refine their query.



Recommendations:
Target.com is currently doing a great job with internal search and takes into account the needs of the consumer. Other competing retail

sites haven't built search functions with enough intuitive predictiveness to redirect a user to the store location and hours page in response to a query like "store hours." From what we gathered in our usability test, the search function directed users to pertinent product results as well as information pages very efficiently. The search box is clearly positioned on the homepage and large enough for the user to feel comfortable entering a complete query.

Much like the issue we discovered with the "find a store" link placement, the category selector for the search bar is also closely positioned to the "electronics" and "video games" navigation links. One user attempted to click on the category button but accidentally triggered the drop-down navigation, resulting in frustration. Consider padding the two items farther apart or look into a way to better distinguish the two elements. Overall, internal search is working very well and our users were happy with its performance.

Aesthetics

Overall, Target.com needs a lot of improvements in order to increase the customer experience of its users. Target.com cannot be considered a minimalistic website given that it is not very simple and it has a lot of links, tabs, words, pictures and colors on all areas of the website. Although it is not a minimalistic site, it is a modern site and follows a similar web structure to their competitors. This helps the customer adapt and be easily familiarized with the website. The site overall is interactive and has a lot of features that help the user increase the customer's efficiency and level of satisfaction. Since Target.com has a great variety of products, it is harder to create a simple website if they want to offer all of the same features that the physical store offers. This vast amount of products makes the website contain a lot of links and information. For some users, excessive information is confusing and non-efficient while for others it makes it easier to find their specific product. Target.com has pleasing and bright colors that increase the looks of the website. Another positive aspect about the website is how they display their promotions and deals. It is easy for the customer to see the deals and the current promotions in the site. These deals are usually located in the homepage and when the user scrolls down they can see the promotions in the different products and departments.

Advertisements

Finding: The advertisements on the homepage confuse the customer because they do not advertise what they are looking for, they are very big, and their location changes every week.

Evidence:
During the usability testing, the three volunteers expressed confusion and dislike towards Target's advertisement. When they were asked to browse the website as they "generally would" we were able to learn that the volunteers were unable to ignore the advertisements and they distracted the users from their goal. The three volunteers agreed that the location of advertisements was not consistent with other websites, which made the user feel lost in the site. Also, the volunteers felt that advertisements were not necessary. It shows that Target.com needs to promote their products and thus the customer is encouraged to leave the website.

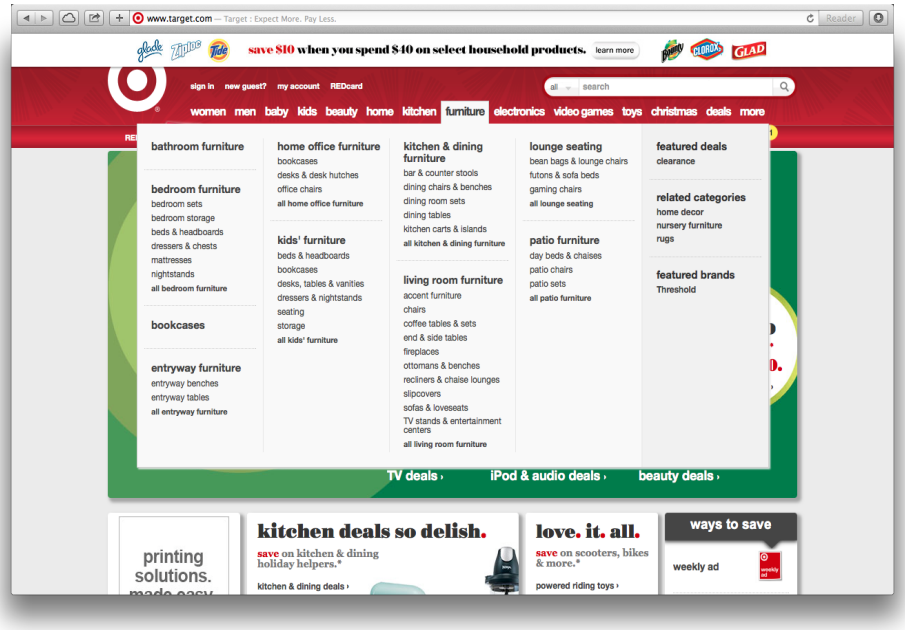
Recommendations:
Given that most of the website has advertisements, and Target.com also wants to include advertisements in the website, they should redesign how it is displayed. The advertisements are less importance than information and less space should be given to advisements. In order to make advertisements more pleasant for the customer, we recommend that they should be located in the right hand side of the website. They should be smaller and the user should be able to navigate to the product through the advertisement. This will help the customer be more familiar with the website by following a common structure and also will reduce the chances of the customer leaving the site.

Navigation Bar

Finding: The navigation bar has more information than the customer can process. By putting the mouse on top of the categories, it opens one of the tabs which blocks most of the page.

Evidence:
When our volunteers were performing the different tasks we saw that the three of them struggled with the vast amount of information that the website has. Person 1 was instantly overwhelmed by the amount of options and instead of using the navigation bar to look for a product, he decided to use the search bar instead. When person 2 was going to perform the same task, she decided to use the navigation bar instead. This caused her a few problems first being as soon as she placed the mouse over an option a big tab with more options opened that did not let her see the rest of the website. This problem caused her to keep opening and closing tabs until she was able to find the option that best described the item she wanted. Also the vast amount of options confused person 2 decreasing her efficiency and increasing her total time on the website.

Person 3 also had a negative experience with the navigation bar and the amounts of options given to her. She felt confused and it took her some time to find what she was looking for. Like person 2, she experienced some difficulties when the different tabs opened as soon as she placed her mouse on the categories. With our three volunteers, we were able to see that the vast amount of details, links, and options used by Target.com can confuse and frustrate their customers.



Overwhelming amount of options under the category "furniture"

Recommendations:
Although the navigation bar works in a proper way, there are a few ways to make it better and help the user have an easier experience. Given the vast amount of options, Target.com should find a way to combine the options to reduce the amount of words displayed in the navigation bar. One of the methods that Target.com should use to improve the navigation bar is perform card sorting testing to better understand what categories should go together and which products can be combined. Anther way in which Target.com can reorganize their navigation bar is by removing all of the subcategories of the categories. In order for the user to access those categories, he or she would have to access the main category first. This can be beneficial because the user will not be overwhelmed by the amount of options and it will make the customer view more products while searching for his or her subcategory.

Recommendation Prioritization

Each of the following observations is assigned a priority. This rating is based on the Nielsen 4-point scale:

> **0** I don't agree that this is a usability problem at all
> **1** Cosmetic problem only—need not be fixed unless extra time is available on project
> **2** Minor usability problem—fixing this should be given low priority
> **3** Major usability problem—important to fix, so should be given high priority
> **4** Usability catastrophe—imperative to fix this before product can be released

We assigned each recommendation a 0-4 rating for frequency, impact, and persistence:

- Frequency: how often the problem occurs to the user during their visit
- Impact: How much of a detrimental effect the problem has on the user's goals
- Persistence: Whether or not the issue continues to arise and affect the user during their session

Please reference page 47 of Usability Inspection Methods for an explanation of these criteria (Tidwell, 2005).

1. **Navigation bar**
    a. Frequently used, essential to a user's interactions with the site.
    b. Rating: Frequency - 4 Impact - 3 Persistence - 4
2. **Compare feature**
    a. Users wishing to browse multiple items need a way to compare them easily.
    b. Rating: Frequency - 2 Impact - 3 Persistence - 3
3. **Advertisements**
    a. User gets distracted and confused by the current advertisements on the page.
    b. Rating: Frequency - 2 Impact - 2 Persistence - 2
4. **Gift options**
    a. User has a difficult time finding and using the gift message function.
    b. Rating: Frequency - 1 Impact - 2 Persistence - 2

Future Research

Redundant Structure:

Ideally, for this issue we would like to follow through with more testing. First, we would like to do a card sorting to learn about headers users expect to find and which categories go in that header. This card sorting test will help reorganize the categories into specific headers in order to keep them in one location.

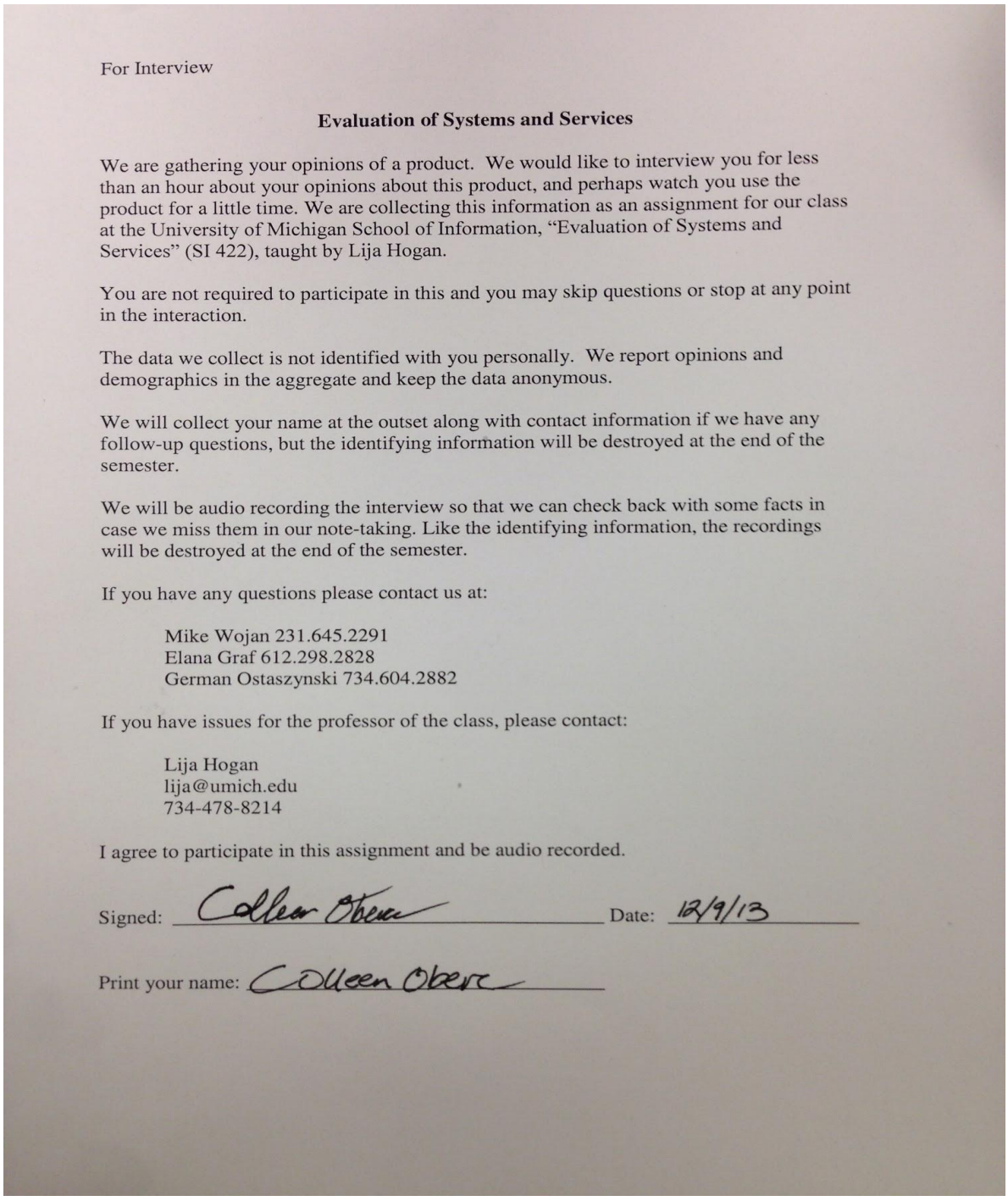
After the categories are reorganized we would like to follow through with A/B testing. This will give some users the website with categories only in one location and other users the website with categories in multiple locations. We would want to find how long it takes users to find items they are looking for. If users are finding the items they want faster with the categories in multiple locations we will continue this otherwise the test will show that it would be better to only have the categories in one location. This testing will let us make a better informed decision about whether the categories should be in only one location or many locations.

Recommendation Criteria and Challenges

When analyzing the results of our study and creating short and long term recommendations, we referenced the Nielsen Usability Heuristics for User Interface Design. We focused primarily User Control and Freedom, Aesthetic and Minimalist Design, Consistency and Standards, Flexibility and Efficiency of Use, and Match Between System and the Real World (Nielsen, 1995).

It would be beneficial to have future testing with some of our recommendations. This can get expensive making it difficult for the company to follow through.

Appendix



For Interview

Evaluation of Systems and Services

We are gathering your opinions of a product. We would like to interview you for less than an hour about your opinions about this product, and perhaps watch you use the product for a little time. We are collecting this information as an assignment for our class at the University of Michigan School of Information, "Evaluation of Systems and Services" (SI 422), taught by Lija Hogan.

You are not required to participate in this and you may skip questions or stop at any point in the interaction.

The data we collect is not identified with you personally. We report opinions and demographics in the aggregate and keep the data anonymous.

We will collect your name at the outset along with contact information if we have any follow-up questions, but the identifying information will be destroyed at the end of the semester.

We will be audio recording the interview so that we can check back with some facts in case we miss them in our note-taking. Like the identifying information, the recordings will be destroyed at the end of the semester.

If you have any questions please contact us at:

Mike Wojan 231.645.2291
Elana Graf 612.298.2828
German Ostaszynski 734.604.2882

If you have issues for the professor of the class, please contact:

Lija Hogan
lija@umich.edu
734-478-8214

I agree to participate in this assignment and be audio recorded.

Signed: Colleen Obere Date: 12/9/13

Print your name: Colleen Obere

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Print your name: Allison Hayes

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German Ostaszynski 734.604.2882

If you have issues for the professor of the class, please contact:

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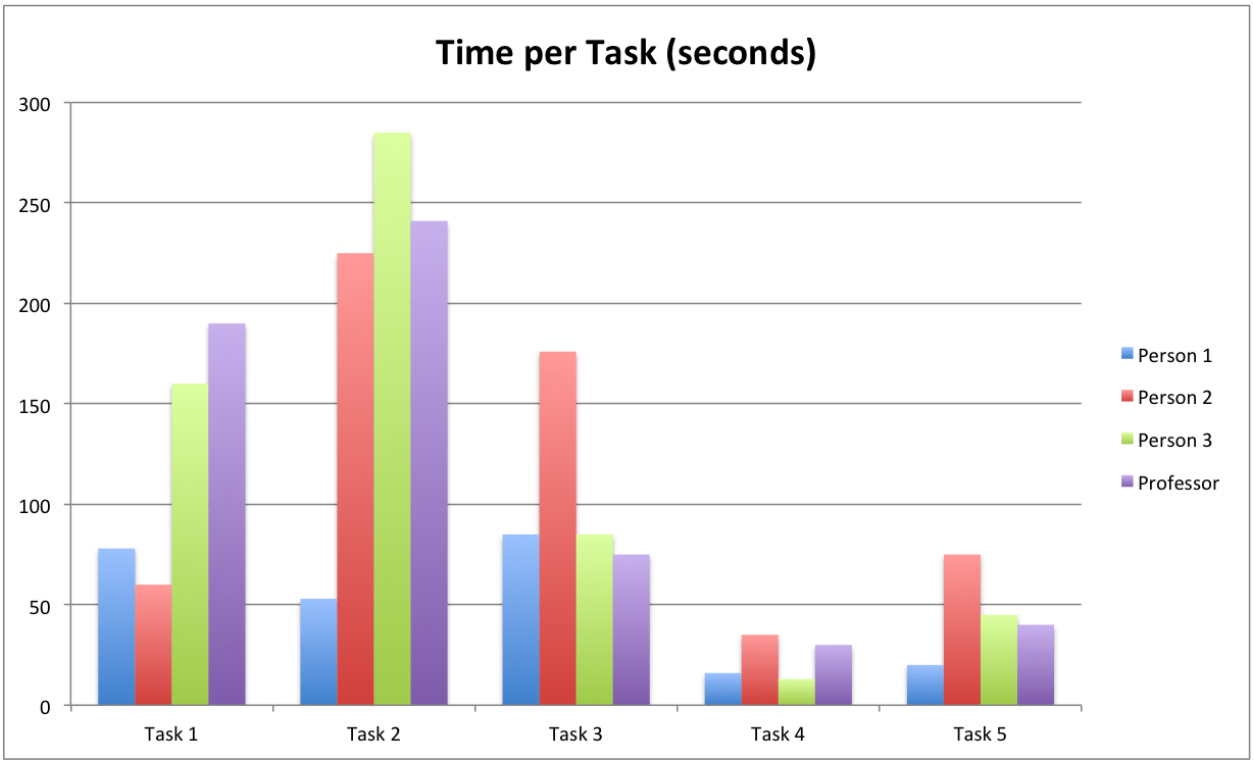
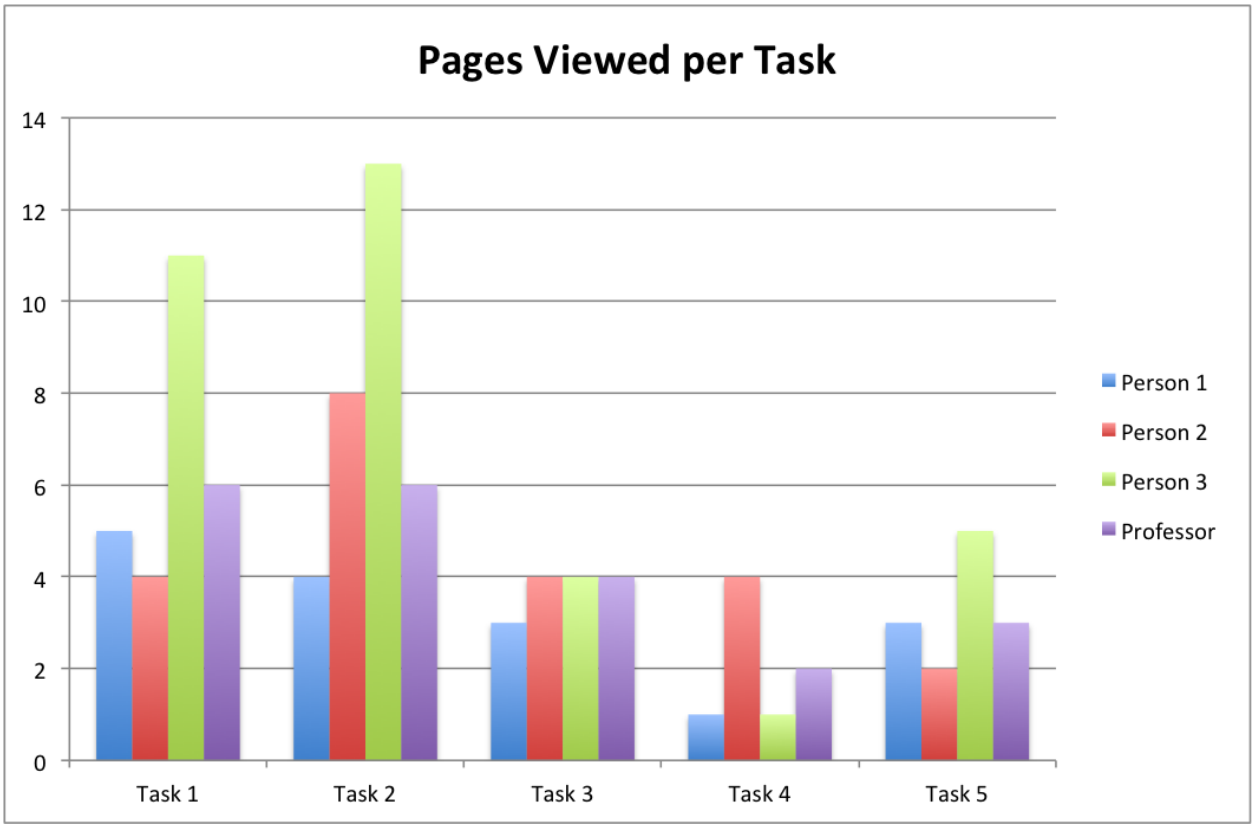
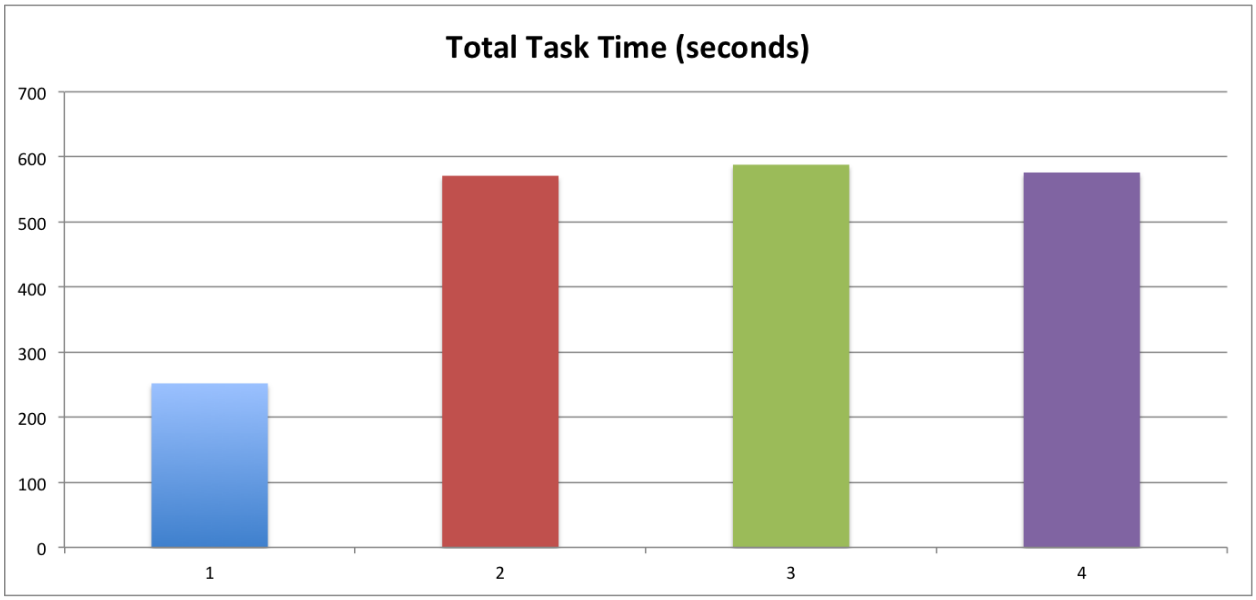
I agree to participate in this assignment and be audio recorded.

Signed: _____ Date: 12/5/2013

Print your name: Lija Hogan


Time per Task (seconds)
300
250
200
150
100
50
0
Task 1
Task 2
Task 3
Task 4
Task 5
Person 1
Person 2
Person 3
Professor


Pages Viewed per Task
14
12
10
8
6
4
2
0
Task 1
Task 2
Task 3
Task 4
Task 5
Person 1
Person 2
Person 3
Professor


Total Task Time (seconds)
700
600
500
400
300
200
100
0
1
2
3
4

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