Julie Riegel. From National to Local: Usability Testing Non-Profit Websites. A Master's Paper for the M.S. in L.S. degree. July, 2017. 49 Pages. Advisor: Mary Grace Flaherty

As people continue to access more information through the World Wide Web, providing effective websites has become increasingly important to the work of Non-Profit Organizations (NPOs). While the needs of individual NPOs will differ, working within industry standards helps build a bridge between NPOs and users regardless of familiarity with the organization's website. Feedback from users is critical to improving the way a site functions.

Though the process of retrieving information on the local affiliations of the larger organizations appears straightforward, this study supports the hypothesis that the user's journey is actually more complicated. In order to assess how users engage with each website, the researcher designed a sequence of usability tests that asked the users to find a specific piece of information on the local chapter for the following organizations: Girl Scouts of America, Youthbuild (a trade skill educator), and the American Civil Liberties Union (ACLU). The researcher recruited 15 participants using a convenience method, and the participants conducted a 4-part usability test. They were introduced to the study, performed 2 tasks, and then the researcher interviewed the participants at the end of the test.

This study found that participants experienced pain-points while using the websites to perform the task. These included trouble with finding information on the local branch of national NPO websites, frequent requests for contact information, frequent requests for monetary donations, and trouble navigating map visualizations.

Headings:

Non-profit organization

User Experience (UX)

Information Seeking

FROM NATIONAL TO LOCAL: USABLITY TESTING NON-PROFIT WEBSITES

by
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A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Science in
Library Science.

Chapel Hill, North Carolina
July 2017

Approved by

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Mary Grace Flaherty

ACKNOWLEDGEMENTS

First, I want to thank my advisor, Dr. Mary Grace Flaherty, for continuous support of my work. Mary Grace's guidance, words of wisdom, and encouragement helped me at every step of the way.

I owe a great deal of gratitude to my professional contacts, including Alice Whiteside, Josh Hockensmith, Emily Daly, Julia Cleaver, and Chad Haefele. Working on the exciting and diverse projects that you all led informed this project, and helped solidify my passion for technology and civic work.

Thank you to my classmates in the SILS and Art History programs, and especially to Lyla, Caitlin, Lauren, and NC. I will always cherish the joy that we shared during our discussions, editing sessions, group projects, and of course, nights out.

Completing this paper would be unimaginable without the support from my family. Thank you to my sisters Shelley and Christina, for being trailblazers in following your bliss. Travelling together and texting pet pictures to one another certainly brightened even my most stressful days. Thank you to my parents Cindy and Mark, for celebrating my successes, and for supporting me as I endured challenges.

Finally, thank you to Martin, for your patience, encouragement, and unconditional love for the past 6 years, and especially for the past 3 years. You've stayed up late with me editing countless drafts, and helped me work through ideas. You make me better, and I couldn't ask for a better partner than you.

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INTRODUCTION

As people continue to access more information through the World Wide Web, providing effective websites has become increasingly important to the work of Non-Profit Organizations (NPOs). While the needs of individual NPOs will differ, working within industry standards certainly helps build a bridge between NPOs and users regardless of familiarity with the organization's website. It is of general interest of NPOs to communicate clear and consistent information to the "average user." Feedback is critical to improving the way a site functions.

While aesthetic appeal is important when assessing the design of a website, functionality also plays a large role in how users find information that they seek.[1] User Experience (UX) design bridges the way a site functions and looks.[2] Usability testing, which is a method in which researchers gather and analyze data directly from users, bears importance when designing a website for an audience, and invites users into the design process.[3] By conducting usability tests, designers at NPOs can learn what works well on their sites, and how to improve their site to meet the needs of users.

The question that this study asks is two-fold. First, how do users navigate the websites of NPOs to find information on the local chapters? Secondly, is this process simple for users, meaning that users find the information they seek on the first try or are there unexpected pain-points in retrieving information? In order to answer these

questions, the researcher designed a sequence of usability tests that asked the users to find a specific piece of information on the local chapter for the following organizations: Girl Scouts of America, Youthbuild (a trade skill educator), and the American Civil Liberties Union (ACLU). The researcher recruited 15 participants using a convenience method, and the participants conducted a 4 part usability test. They were introduced to the study, performed 2 tasks, and then the researcher interviewed the participants at the end of the test.

A few key terms must first be defined before going further. The term "user" will be used as a more general term, meaning anyone who engages with the sampled website. A "volunteer," or potential volunteer, is a term used specifically for a person who has already volunteered at least once, and uses the nonprofit's (NPO's) website to find more specific schedule information to further events. The word "participant" will be used to describe the individuals who took part in the specific usability test discussed in this study.

LITERATURE REVIEW

Non-profits and Technological Innovation:

Assessing the way NPOs think of technology in their strategic plans is integral to this study. Many studies have discussed this topic at length. Research on advances in information technologies has tended to focus on for-profit organizations; less research has been conducted on other contexts, like non-profit organizations.[4] It has been estimated that NPOs are up to five years behind for-profit organizations.

By interpreting how non-profit managers understand the benefits of information technology to their institutions, and the obstacles associated with the implementation of technology, the study found that advantages apparent in for-profit contexts could cross-over to the non-profit sector.[5] A few examples of benefits include product/service promotion, new sales channels, customer service, brand image, reaching a large population at a low cost, and gathering feedback from customers.[6] Some obstacles faced by for-profit and non-profits alike include lack of access to technological infrastructure, and perceived security threats that limit businesses to adopt new technology.[7]

In one study, the researchers retrieved quantitative data about technological innovations by sending a self-completion questionnaire that addressed benefits and obstacles associated with the internet to 10 non-profit managers and 4 respondents working in academia in Portugal.[8] The survey found low levels of internet adoption from

Portuguese NPOs. However, of the NPOs who did have internet and who did have a website, many subjects involved in the study said that the internet helped the NPOs emphasize networking, the NPO's social image, and economic motivation. A 2014 study explored internet usage by NPOs in Norway.[9] This investigative study asked if communication over the internet strengthens local voluntary organizations by analyzing sustainability, vitality, and the use of Norwegian local voluntary organizations who use the internet. This study found that internet usage helps NPOs interact with users. Specifically, through a quantitative analysis, the researchers found that Norwegian local voluntary organizations appreciate that the internet distributes information through a one-way path, over communicating two ways with constituents. Data from this study shows that organizations who use the internet are more likely to grow compared to organizations who do not use the internet. The researchers found that using the internet may strengthen the sustainability and vitality of the organization. There are many reasons that an organization could sustain itself, so it is hard to tease out if there is a cause and effect relationship between the use of the internet, and an organization's sustainability.

One study explored the perceived benefits of information technology innovations through a qualitative analysis.[10] The findings in this study suggest that technological innovations can occur in several areas of NPOs, including in administrative, service, and marketing areas. The author used a document analysis of applications for technology awards as a way to answer the questions of "in what areas of organizational functioning can information technologies be implemented," and "what are the expected benefits associated with the implementation of those technology innovations?"[11] This study found that NPOs aspire to use technology to benefit their respective NPOs by improving

communications with clients, to advance the NPO's finances, and emphasizing the NPO's public image by building relationships with stakeholders.[12]

Understanding how different NPOs allocate resources for their web presence also bears importance. One study explores website management issues of community-based non-profit organizations within 17 organizations in two locations: Victoria, Australia and Tuscany, Italy.[13] The researchers interviewed key actors in the organizations, mapped relationships, and examined websites. Their findings suggested that the organizations who created the websites that satisfied the needs of the organization had a combination of resources available at their disposal. Many organizations hired staff who were already equipped with technological skills, and these organizations had access to external resources.[14] The authors recommended six broad areas related to the development and maintenance of websites for non-profit organizations, including strategy, technical knowledge and design, project management, support, training, and funding. However, none of these categories explicitly mentioned user testing to discover the needs of the end-users who are also stakeholders in the design of the website.

This paper aims to show a different side of the website development story, and foreground the needs of users in the website design process. Instead of relying on a heuristic evaluation by web-design professionals, this study will ask the users what they need to successfully find information that they need on websites. By engaging with end users, and asking for feedback, non-profits can learn of the challenges that users face when searching for information, which might influence NPOs adjust their web development strategy. This paper argues that learning more about how users seek information will enable NPOs to strategically manage and refine their online content.

Usability studies on the Web

In his book *Don't Make Me Think!,* author Steve Krug argues that the most important thing a web designer or content manager can do is to make the design of their website obvious, so that the user does not have to stop and think about what they are doing on the web site.[15] Users interactions with sites sometimes last only seconds, yet that time adds up as users navigate a page. Krug argues that design should be self-evident, and designers should not rely on wordy directions to lead users through the site.[16] Instead of reading the entirety of a web page's content, users tend to skim the page, searching for enlarged titles and specific words that will lead them to complete their chosen task.[17] Emphasizing best practices, like large titles, concise content, and descriptive taglines, Krug's book offers technical logic to organizing a web page. Though he focuses on for-profit contexts, his findings can be generalized to the non-profit sector.

Another 2012 monograph focuses upon the importance of usability testing in the realm of civil service work. This book compiles a breadth of possibilities for government workers to test their websites, protocols, and systems to illicit user feedback. Some of these possibilities include eliciting user responses from emergency response procedures, content strategy on government websites, and testing accessibility standards for people with disabilities. The authors argue that improving the usability of government systems will ultimately help streamline the activities of the people who use the sites.[18]

Visualizing geographic information is another component that deserves mentioning. In one study, researchers tested websites that presented location-based information in many ways, including lists, maps, and augmented reality (AR). Each of these map interface types chosen have strengths and weaknesses in communicating

information to the user. This article uses an empirical evaluation to compare the usability of each method on mobile devices setting up a test to see how users searched and browsed location-based information by using open and closed ended task types.[19] This experimental study asked 180 participants to use an Android mobile phone to test the different interfaces. The authors found that the list interface performed better than the AR interface and map interface.[20] Participants rated the list as best across most usability constructs; however, they rated the map better than the AR interface, even though the AR performed better.[21]

This study focuses on larger interfaces that would be presented on laptop screens or desktops, and its tests focus on the map and list, though they do not include an AR option. Building on Krug's advice to make webpages obvious so that users do not have to think too hard about where to go, this study is designed to investigate where users get confused, and which features on the sites work well to help users find the information that they seek.

BACKGROUND

The Girl Scouts, the ACLU, and Youthbuild sites were all chosen because each one has a national reach, with local branches. Each site handles the challenge of organizing national and local information differently from one another, which draws compelling comparisons.

With over 2.6 million members, the Girl Scouts of America is a leading organization for the development of girls, founded in 1912. Their mission is to instill courage, confidence, and character in girls. Many participants in this study were familiar with the Girl Scouts, as over 59 million women in America today took part in the Girl Scouts during their childhood.

Local affiliations of the Girl Scouts are called "Councils." The Girl Scouts' website includes several paths to end up on a council page. For example, on the main page (Figure 1), users can narrow to the right location by clicking the "Find a Council" link at the top of the page, the "Join" or the "Volunteer" link, which, once clicked, shows a place to input a Zip-code, and a box halfway down the page that says, "Find your local council," beside of a box that enables users to type their zip-code. Additionally, some participants in the test used the search box at the top right corner of the page to type in the keywords "local chapter," and almost immediately found a "find your council" link in the results.

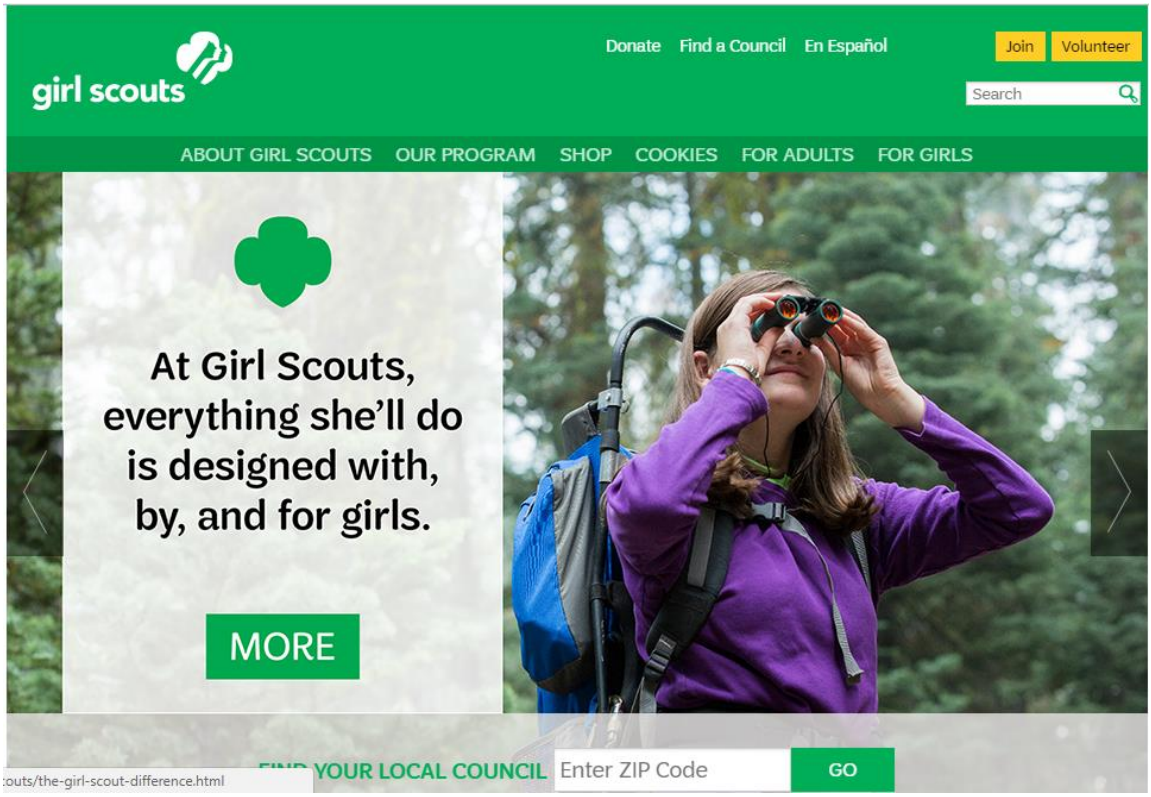

Figure 1: Girl Scouts of American Front Page

If users were to click on the "Find a Council" link, it would take them to a webpage with a map of the United States. Users can then click on a state to narrow the results to see the local councils, input their Zip-code, search by state through a dropdown list, or search for the specific name of the council. After narrowing and choosing the closest council to their geographic location, users can then choose how to use the information. They can visit the local council's website, learn more about volunteering

locally, or email a representative. When they are ready to volunteer, they can click to a link that says, "Volunteer today," which would then take them to a form to fill out.

The American Civil Liberties Union (ACLU) has been around for almost 100 years, and currently has over 2 million members, activists, and supporters. This group works in courts, legislators, and communities to help defend and preserve rights liberties that are declared in the constitutions, and to ensure that everyone in the United States are guarantee for everyone. They focus on establishing privacy protections in the digital age, ending mass incarceration, achieving full equality for LGBT people, and other issues.

The ACLU has options for people with law backgrounds and for people without law backgrounds to volunteer on the local level, and the paths to get to the different volunteer opportunities differ. For people without law backgrounds, they can choose to join the ACLU by giving their contact information and by making a monetary donation. Yet another option is to join ACLU's "People Power" movement, which organizes events locally. To get to the "People's Power" page from the ACLU's homepage, users must click the "get involved" link on the "People's Power" banner at the top of the page (Figure 2). This takes them to a different site that shows a map and a box to fill out information, and they can scroll down to see a map of events around the United States. This map can give a sense of upcoming events based on geographic location.

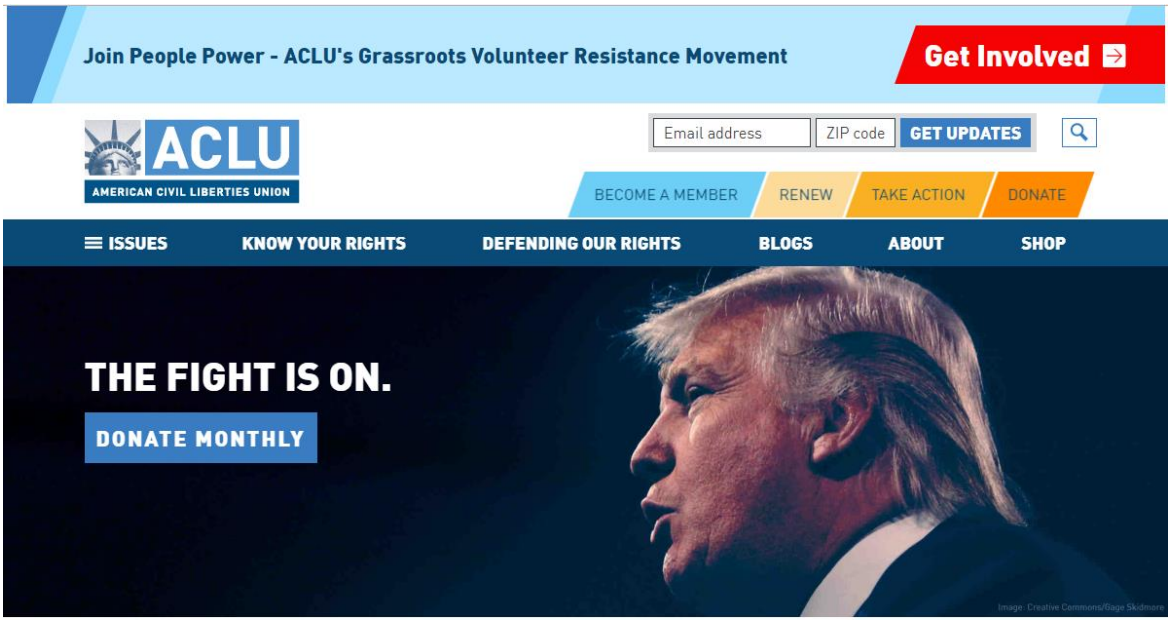

Figure 2: ACLU Front Page

With a network of 260 urban and rural programs in 46 states, Youthbuild is an organization that provides pathways to young people, between the ages of 16 and 24, without high school diplomas to learn construction and leadership skills to help them make a livelihood. This organization builds houses, and helps young people gain skills that they need for future employment. Youthbuild works with established organizations in different communities.

To find organizations affiliated with Youthbuild, the user must go to the "Program Directory" link on the left navigational menu of the page. Once on the "Program Directory" page, users must scroll below the fold, and use the map to either type in location information to find local programs, or zoom in to sections on the map and browse the blue pins (Figure 3).

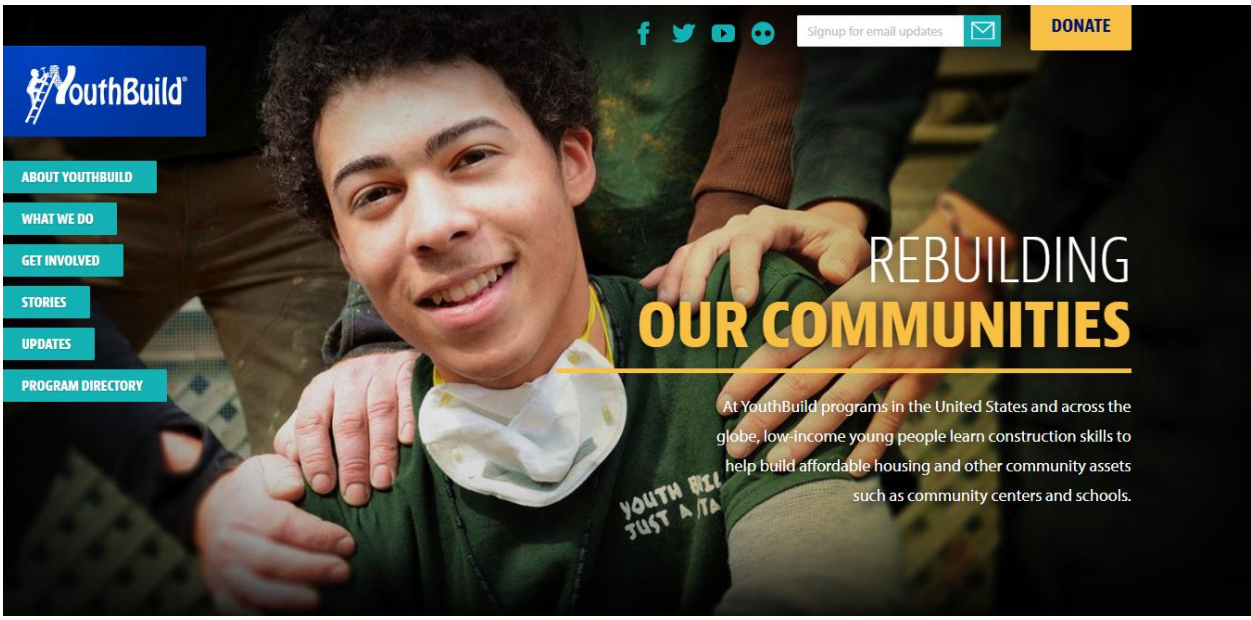

Figure 3: Youthbuild's Front Page

METHODS

Each NPO communicates that information in a different way, using language, keywords, and images to lead the user to the appropriate place. In addition, each NPO visualizes the information differently. Though all use maps to show the locations, they use maps in different ways. Though the process of retrieving information on the local affiliations of the larger organizations appears straightforward, this study hypothesizes that the user's journey is more complicated. In order to assess how participants engage with each website, the researcher designed a sequence of usability tests that asked the users to find a specific piece of information on the local chapter of each organization. The task of the usability test was based on finding information in that geographic location, so all three organizations offer that information within the website.

Usability tests gather data by asking participants to perform tasks using a web interface, or product, or system. This technique evaluates products by asking for feedback from the users.[22] These tests can be mediated or unmediated, but this test will be mediated, and the tester and the volunteer will sit at the same table, while the user talks through the test. The test conductor evaluates the steps that the patron took to perform the task, which then helps him or her make recommendations on future design decisions.

A usability test was determined to be a better option compared to alternative data collection methods, like transaction log analysis, for a few different reasons. A transaction log analysis is an unobtrusive method of data collection in which a researcher collects an electronic record of interactions that have happened between a user and a system.[23] Some forms of this method include web log analysis, blog analysis, and search log analysis.[24] Though a transaction log analysis is a great way to collect large amounts of user data, it is not a feasible option for this study. First, the researcher would need to work with the three different organizations to access the backend of their sites to run the tests. Since the researcher does not have contacts in the three NPOs, this option is not feasible. Secondly, the researcher wanted to collect qualitative data in addition to quantitative data to learn more about the users' experiences. User interviews are a way to learn more about the user's thought processes when interacting with data.[25] The transaction analysis would show the researcher what the user does on the site; however, the unobtrusive method does not enable the user to investigate "why" the user makes certain decisions.

A "guerilla" usability test method happens in informal environments, like coffee shops, or lounges, and are effective for gathering a large amount of data in a short amount of time.[26] The guerilla method is also helpful in that the researcher is in a realistic user environment, compared to in a lab, and the user is more likely to feel comfortable in that context.[27] One drawback of the guerrilla method is that it could be difficult to find participants for the study. The researcher has to rely on the "goodwill" of the participant, who could choose to leave during the middle of the test if they wish.[28]

In this study, participants were asked to "think aloud" as they complete the tasks so that the researcher to understand their thought process. This technique enabled users to articulate their thoughts as they navigated the web interface, and revealed important clues on how users think about the product they are using.[29] The researcher took notes on what the participants verbalized, and paid special attention to places when the participants seemed confused, or hesitated before acting. When the participant forgot to think aloud, the researcher prompted the user to say more about their process.

During especially confusing portions of the test, participants asked the researcher questions about the interface. Instead of answering, the researcher used the "boomerang" method, and repeated the question back to the participant.[30] The test was semi-formal, meaning that the researcher asked questions primarily from a test script, but also strategically asked questions off-script when an opportunity presented itself in order to learn more on a particular part of the test.

The interaction between the users and the web interface was noted by the researcher, who jotted notes on the user's spoken thought process and the path that they took to find information during the test. This study was conducted at Durham Public Library. The researcher set up a table in a public space with a sign that said, "Free Starbucks Gift Card." When participants volunteered, the researcher briefly introduced the study, and then gave the volunteer time to complete the printed consent form. Participants performed the tasks on the researcher's computer screen. Between eighteen and twenty-one participants were recruited for the study. The researcher used a convenience recruitment sampling, since the users would all have to be in Durham at the time of the test. The researcher made no assumption that the users would be familiar

with the websites tested. The only eligibility requirement was that the participant must be at least 18 years old at the time of the test.

The test was composed of four sections. In the introductory section, the researcher started a conversational rapport with the volunteer, and got a sense of the user's familiarity with non-profit websites. In the second and third sections, the participant performed two similar tasks to find information about a local chapter of a larger NPO using two of the websites. In the final section, the researcher asked the user to compare their experience on both sites. The test lasted for approximately 30 minutes. For the entire test script, see Appendix I.

The researcher conducted sets of tests in three sessions, with five participants in each set. The study is limited to three sets of five users for a few reasons. First, studies support that no more than five users are needed to reach a point of saturation for a usability study. Jakob Nielson writes, "With five users, you almost always get close to user testing's maximum benefit-cost ratio."[31] The researcher chose to aim for over five users because she wanted to make sure that she had enough data to reach a point of saturation. Similarities and trends emerged to highlight the pain-points of the three websites, which then enabled the researcher to generalize the data in order to offer suggestions beyond the three websites tested.

The researcher asked users to compare two of the three websites. In the first set, 5 participants looked at the Girl Scouts' and the ACLU's websites, in the second set, 5 participants looked at ACLU's and Youthbuild's websites, and in the third set of 5 participants looked at the Girl Scouts' users and Youthbuild's websites. Though some participants finished the tasks in a timely manner, other participants abandoned the task.

Each site was tested by 10 different participants. The final section was a post-test interview, in which the researcher asked the user to summarize their experience navigating both websites. In addition, the researcher asked their opinions on their preferences, and how they think the site could improve. Upon completion, each participant received a gift card for $5, and a card with information on where to contact the researcher if they had any follow-up questions about the study.

KEY FINDINGS

The data from the usability tests supported the hypothesis, and revealed areas of confusion when people navigate the interface of each website to find information about the local chapter of national non-profit organizations. This section examines a few hurdles that multiple participants faced during the usability test. First, all 15 participants meandered through at least one of the websites that they tested to identify the appropriate path for the desired information or content. Six of the 15 (40%) voiced annoyance about intrusive requests to provide personal information. Six of the 15 (40%) participants commented on the different map visualizations. Finally, 4 of the 15 participants (26.7%) stated irritation about frequent requests for monetary donations on the sites.

Attitudinal data collected from the interview portion of the usability test offered more insight into the preferences that participants had to each website, and enabled the participants to talk through some things that they noticed on the site after completing the task. There was no overwhelming consensus on which site people liked best, though Girl Scouts took the lead with 5 of the 15 participants (33%) liking it the best. Four of the 15 participants (26.7%) liked neither site they visited, 4 of the 15 (26.7%) preferred the ACLU's site, and 2 of the 15 (13%) liked Youthbuild's site.

Participants liked different websites for different reasons, which were not necessarily connected to the task of finding information on a local branch of a national

non-profit. For example, one participant preferred the ACLU site because she has personal connections to the organization. Another person liked the Youthbuild site over the Girl Scouts site because he liked the simplicity of the navigation menu at the left side of the webpage. Yet another person disliked both the ACLU and the Girl Scouts site because neither site gave him the information that he wanted to appropriately answer the question in the task. One participant disliked the ACLU and the Youthbuild for similar reasons; he wanted more information on local events, yet he found himself on pages that offered contact numbers for the local affiliations. The section below will go deeper into points of confusion that the participants addressed during both the task portion of the usability test, and the interview.

Path from National to Local

All 15 of the participants meandered through at least one of the websites in this study. When searching for a path, they used a guess-and-check method to find the information that they were seeking. Participants would frequently browse the menu, and make an educated guess on where to go, browse the page they landed on, and decide their next step when they could not find the information. Though each participant followed a different path to find information on the local chapter of the three NPO's selected, trends emerged in the common ways participants used the different sites.

When looking for information about the local chapter on the Youthbuild website, 6 of the 10 participants who saw the site were drawn to the "About" link before they clicked the "Program Directory" section, and 2 of the 10 participants scrolled down the page to find information about local chapters. This is significant because clicking "Program Directory" would have been a more direct path to meet the goal of the

task. Additionally, the participants might have thought that the "About" section would have given information about local chapters, which it did not. One user vocalized that when navigating the site and looking for other chapters in the area, he would prefer to see a box to search for a "ZIP code," or way to locate local chapters, similar to commercial businesses, like Best Buy's "Store Locator" link (Figure 4).

One participant vocalized that that he clicked on the "About" link instead of "Program Directory," because the term "Program Directory" was not descriptive enough. He suggested altering the wording to "Local Directory," "Local Program," or "Local Affiliations" to clarify the page to visitors and potential volunteers -- apparently to this participant, the word 'local' signified a precursor to more detailed information about the organization.

In contrast, this usability test found that four participants went straight for the Girl Scouts' "Find a Council" link upon loading of the page (Figure 5) with the mouse. As before, with Best Buy's commercial store locator, the Girl Scouts' website features a "Find a Council" link at the top of the page. Although the needs of different NPOs will differ greatly across commercial enterprises, the designers are able to look at the common trends in commercial websites to establish where certain features should be presented. Mimicking industry standards could help users quickly understand the layout of any NPO's website, even if it is their first time using the NPO's website. It is possible that because the "Find a Council" link appears in a similar spot to many commercial site's "Store Locator" links, the participants in this test recognized the link on the Girl Scouts' page. The similarities between the Girl Scouts' page and Best Buy's page could possibly

work to the Girl Scouts advantage, because users could feel familiar with the page's layout, even if it is their first time seeing the page.

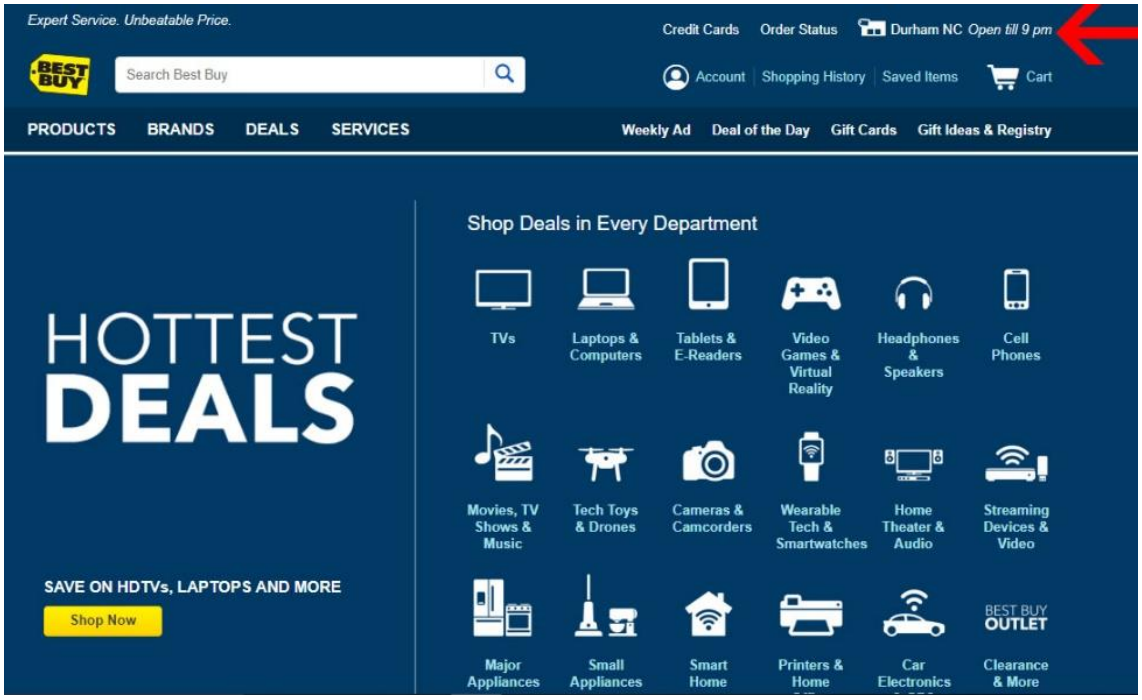

Figure 4: Best Buy's "Store Locator" at the top of the site

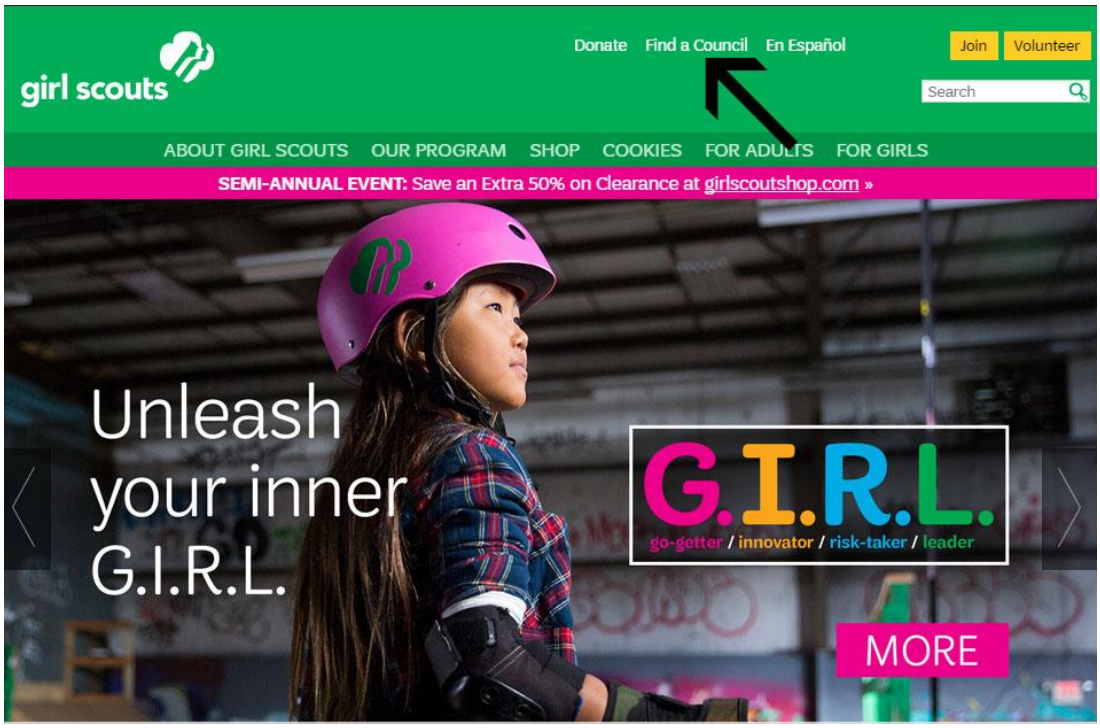

Figure 5: Girl Scouts' "Find a Council" link at the top of the page

On the other hand, identifying trends used by commercial sites could help NPOs figure out what not to do when showing information. Only 2 of 10 participants (20%) found the link to ACLU's "People Power" page located in a large rectangular box in the header of the page, for example (Figure 6). The other 8 of 10 (80%) did not click on the link, even though it had information that they needed to complete the task. During one interview, after the participant completed the task, the interviewer pointed out the link to the "People Power" page that the participant missed. That participant stated that she "missed that section entirely" because she associated the large rectangular shape in the header as an advertisement based on the way she has navigated other commercial websites, citing Amazon.com (Figure 7). Despite locating the "People Power" link in prime real estate, meaning to top of the front page, this specific participant remembered experiences on commercial websites, which informed the way she used ACLU's page. Her memory guided her approach to the way she navigated the site, leading her to ignore the box.

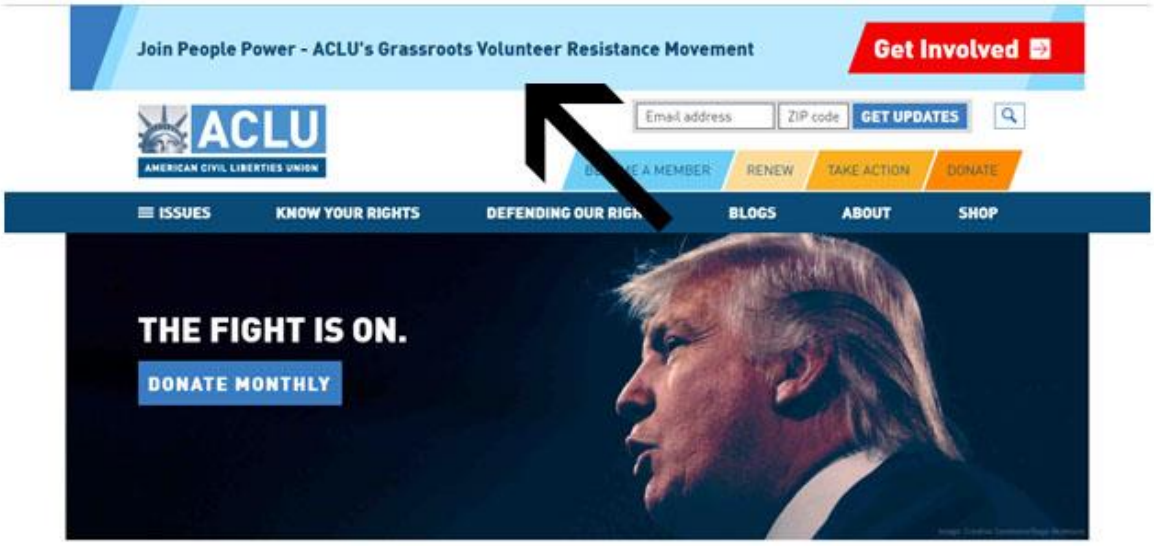

Figure 6: People Power link in the header of the ACLU

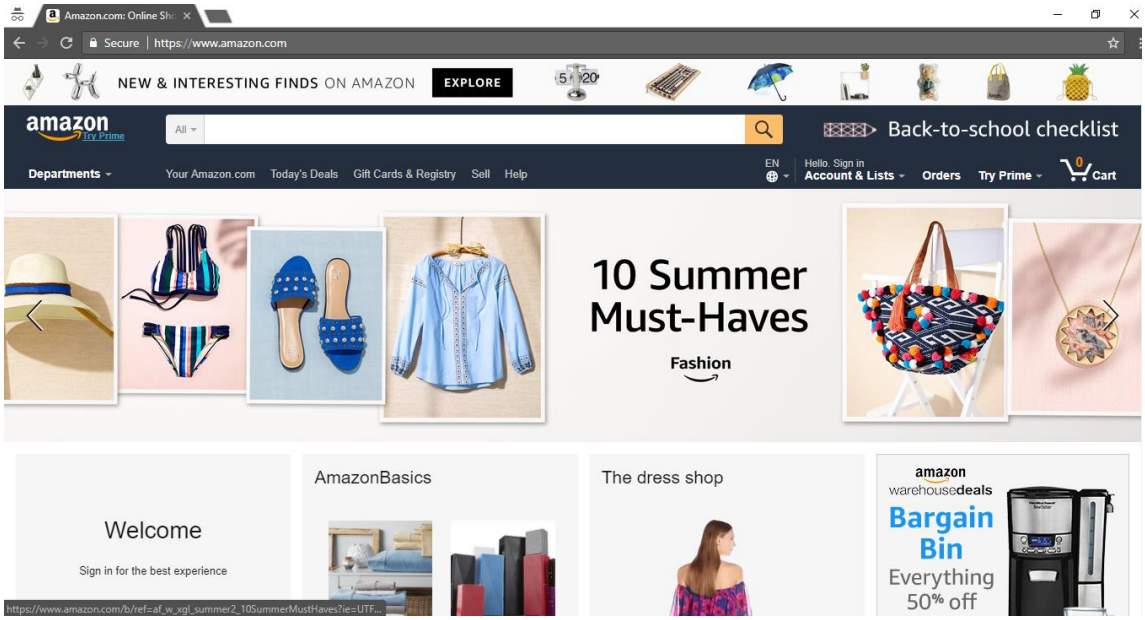

Figure 7: Amazon uses the header for an advertisement

One participant was deterred from thinking that he could volunteer, even though the information that he needed was on the "People Power" page. Instead of clicking the box on the front page, his path took him to a volunteer form on the North Carolina ACLU affiliate page. He had noticed that the form requested volunteers with legal expertise, which he did not have. He wanted to participate by attending local marches and events, and these were more likely to be featured on the "People Power" webpage. However, the page that he arrived on did not give him the information that he needed. Since he found one volunteer page associated with the local branch of the ACLU, he chose to not look further. Information about the People Power campaign would have helped this specific user find information on ways that he could volunteer in the organization on a local level. On the other hand, if people who were skilled in the field of law, and are willing to

donate their time, the “People Power” page could misdirect them. Both the “People Power” page and the “Local Affiliation” page encourage people to volunteer, yet the needs of the potential volunteers are different.

The task portion of the usability test in this study asked participants to find the local chapter of an NPO with a national presence. The purpose was to see how quickly the user would find information on the local chapter. Designing a website to facilitate this need would be important for NPOs who intend to build relationships with local communities. Building the local community around an NPO can both affirm the purpose that the organization represents, and offer a way for individuals to meet, befriend, and network with other people who are passionate about the NPO’s purpose. Additionally, in-person events could serve as a means for the organization to raise funds for specific projects. By making strategic adjustments to websites addressed by the findings in this study, designers of the websites of NPOs could help users locate a path to the local chapter.

Requesting Contact Information

One barrier that frequently disrupted the path, or information seeking process, on the ACLU site and the Girl Scouts’ page was the fact that the sites requested users to give contact and other personal information including full name, email, phone number, address, etc. Test results showed that 6 of the 15 participants (40%) interviewed had a negative reaction to the request for this information.

The front page of the ACLU’s site (Figure 8) features boxes at the top of the page asking for a user’s email address and a ZIP code subscribe to the ACLU’s

newsletter. Four participants typed in their ZIP code expecting to see if they could find information about the local ACLU chapter. All four overlooked the subscription box that requested for their email address. Because of that, they landed on a page that prompted them to give the ACLU their email address (Figure 9). All of the participants who saw this specific page voiced that they would not want to give their email address at this stage of their investigation. When asked "why," two participants did not want to be placed on the ACLU's email list to receive updates about the organization, simply because they did not want to clutter their email inbox. One participant said that she needed to learn more about the ACLU before giving them her contact information, and that if she ultimately agreed with the organization, she would *then* give them her email address. Still, another participant said that she had subscribed to the ACLU's email list prior to the test. The interviewer asked this particular participant if information about local events is ever circulated through email list, the participant said that she rarely opens those emails, so she was not sure.

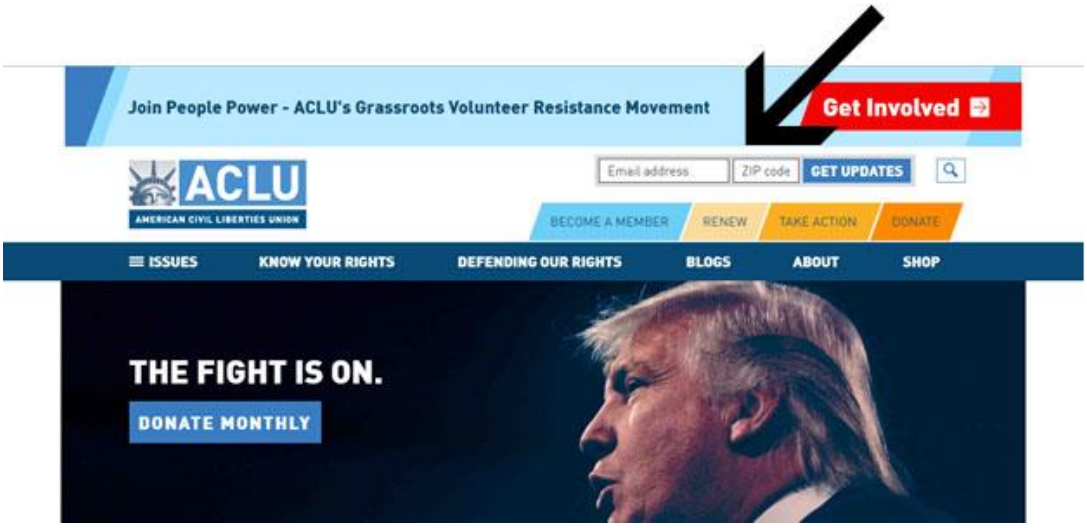

Figure 8: Field to insert Email address & ZIP Code on the ACLU's homepage

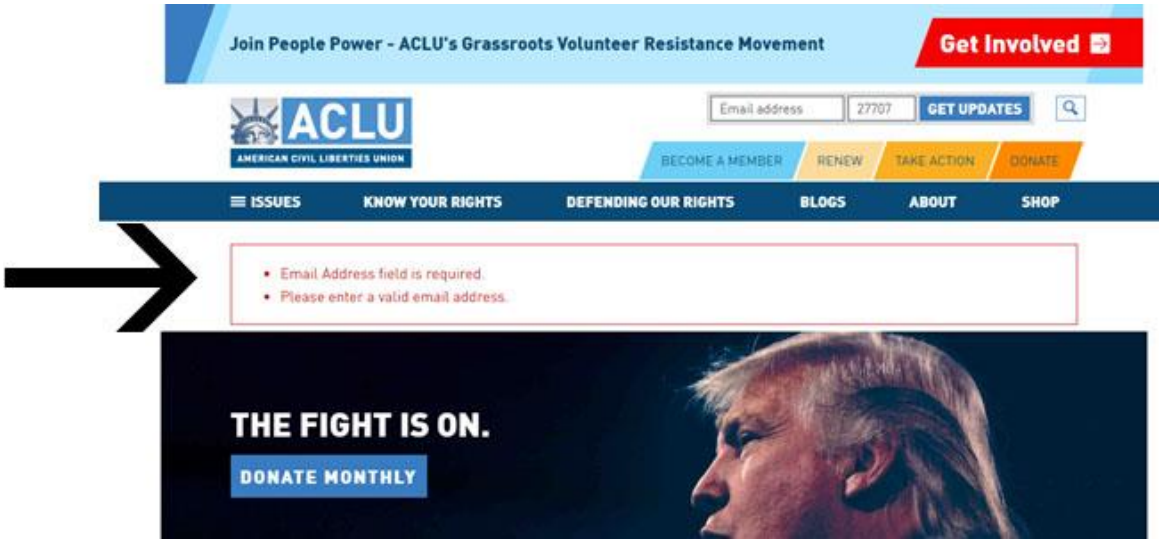

Figure 9: Screen that reminds participants to type in their email address

Participants faced a similar issue while trying to find information on local Girl Scouts' chapters. Five out of ten participants who tested the Girl Scouts' page ended up on a site that had a form to fill out where they could give their information to "volunteer," or "join" (Figure 10). Two of these participants that ended up on this page were hesitant to offer their personal information early into the test, and this result was repeated with participants who looked at the ACLU webpage. Before divulging their personal contact information to the Girl Scouts, two participants had prerequisite questions. One wanted to know if there were any meetings within a 15 minutes driving from his house, showing a clear sign of hesitation to travel much further. The second participant wanted to know who they could instead contact to get information. Instead of offering their information for someone to contact them, they expected to initiate contact. Ultimately, the former participant opted to find the phone number of the council and to make a call to them instead of filling out the form.

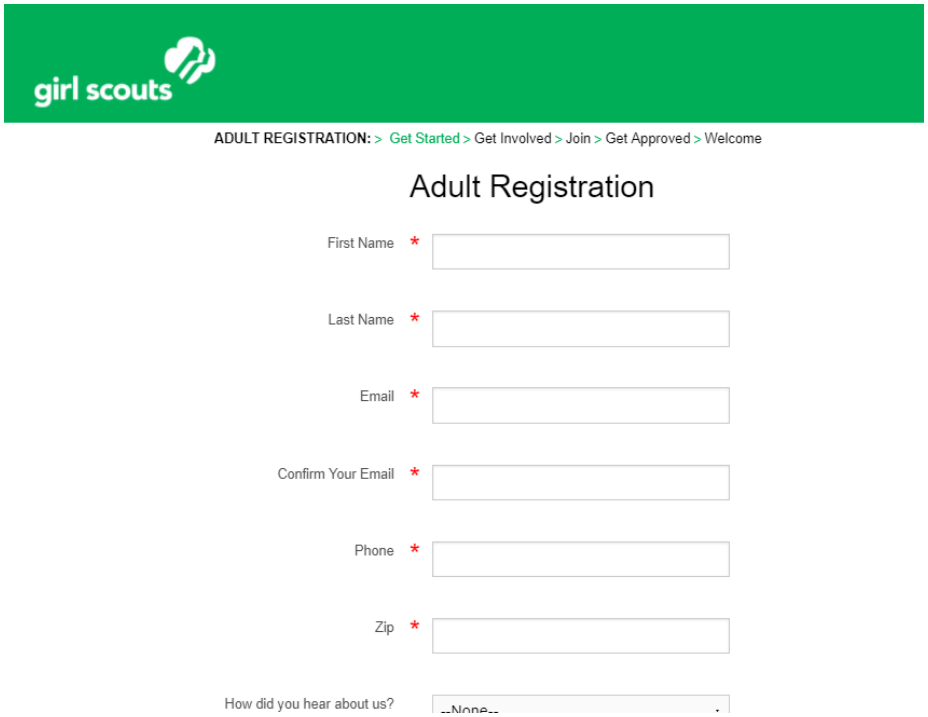

Figure 10: Girl Scouts Form to volunteer or join

All 10 participants who tested the Girl Scouts page were already familiar with the Girl Scouts program, and so they knew that many different troops gathered in throughout the Raleigh/Durham/Chapel Hill areas. One of which was aware of a troop that regularly met at his local church. He wanted to see that and the other local chapters on a map, because that would help him in determining which troop would be the best fit for him and his family. After navigating the website, he voiced an interest in the website offering more logistical information at least location and time. Yet another volunteer vocalized the same need, she too knew that there were other troops located in Durham. However,

she suspected that scheduling information like location and time is private due for security issues.

Through the examples of the ACLU and Girl Scouts, it appears that NPO's who request too much personal information can repulse users from finding more about the organization. These responses were both instantaneous, like when the participant ended up on the page during the test, and delayed, like when one participant mentioned the frequent requests for money in her interview after the task portion of the test. During the study, it had an explicitly adverse effect on two participants' overall experience rating. Participants wanted to reach out to the organizations, rather than having the organizations contact them. Before doing more extensive research, six of the ten participants in all the studies were reluctant to give their email address to any of the organizations. Using heavy a handed approach to gather email addresses and other information may in fact do more harm than good for NPOs that want to establish a positive first impression.

Requesting Monetary Donations

At different steps in the information seeking process, volunteers who used the ACLU's site would be routed make monetary donations towards ACLU's betterment. When looking for information, 4 of 10 participants who tested the ACLU's website commented with negativity on having arrived at a monetary donation page. Two of those participants had a compounded negative reaction due to the frequent reminders to donate money. This is because the participants understood the task as encouraging

them to donate their time, not their money. In contrast, far less participants noticed requests for money on Youthbuild and the Girl Scouts pages. Only one of ten users noticed the requests for monetary donations while using the Youthbuild webpage. Another participant noticed the prominence of the Girl Scout Cookies shop on the Girl Scouts page. This is significant because frequent requests to ask for money can irritate users.

While monetary donations are important in enabling an NPO to pursue its goals, fostering a sense of community around issues might ultimately be the greater help and support for their cause. For example, if an organization fosters a spirit of community, any particular user may simply prefer to donate money *after* attending a local fundraising event. These opportunities would promote people with similar interests to network, and to volunteer with their local and state governments, which then could lead to support for a cause that the non-profit is pursuing. Additionally, sites that join volunteers to local events and chapters can foster a sense of belonging in the community, this would result in people donating their time and certainly increase the chance of a monetary donation. Although many non-profit organizations, like the ACLU, try to make it easy for people to donate money, using a heavy-handed approach could deter volunteers who prefer to donate their time and skills rather than making monetary contributions.

Map Visualizations

Youthbuild, Girl Scouts, and the ACLU, all visualize information about their local chapters, councils, and affiliations using a diagram with the map of the United States as a base image. However, since only two of the 10 participants found the ACLU's map

feature this section will primarily focus on the Youthbuild and Girl Scouts webpages. Both the Girl Scouts and Youthbuild websites use the map visualization to reach the same goals, which are to sift through the different chapters to find the council, and affiliate closest to the user's location.

Though the maps served similar purposes, participants navigated the mapping tools differently. On Youthbuild's site, their map feature (Figure 11) utilizes an interactive map of the United States, and then enables the user to see the locations with blue push pins. Some pins, especially on the east coast, are grouped in tight clusters. Three participants commented that the tight clusters were hard to decipher. Participants needed to zoom in and out to better see the pin's locations on the map. They then clicked on the pins of the affiliations closest to their location. Participants also tried to navigate by typing in search terms in the search box located, as typical by industry standard, at the top of the page. In this case, the map interactive map then narrowed their search by city name, ZIP code, and state.

The Girl Scouts' static map, on the other hand, delineates the United States into separate states (Figure 12). The participants in one test clicked on one state, which then took them to a webpage with a list of the Girl Scouts councils within the state. Below the map were three different bars for inputting ZIP code information, state location, and local council rosters.

Throughout the usability tests, it turned out to be the Youthbuild's map which caused participants the most confusion and frustration. Primarily it was that the map was located below the fold of the Program Directory webpage. This meant that participants would have to scroll down, away from where most would consider the maximum effect

area, to see the map. Three of 10 users did not realize they needed to scroll down further to see them map, and indirectly missed the map entirely. One of the two grew very frustrated by arriving at this webpage, because he thought it would show a local directory of chapters, but instead he arrived at statistics on the organization. The other of the two users navigated off the "Program Directory" webpage, to another page, and then back onto the "Program Directory" page, twice, and never used the map feature. He only felt the need to scroll down slightly, long enough to come across the input box for state location. One way to resolve the problem that 30% of users of users faced is to move the map above the fold. This simple adjustment could help some users instantly see the information that the need on the page.

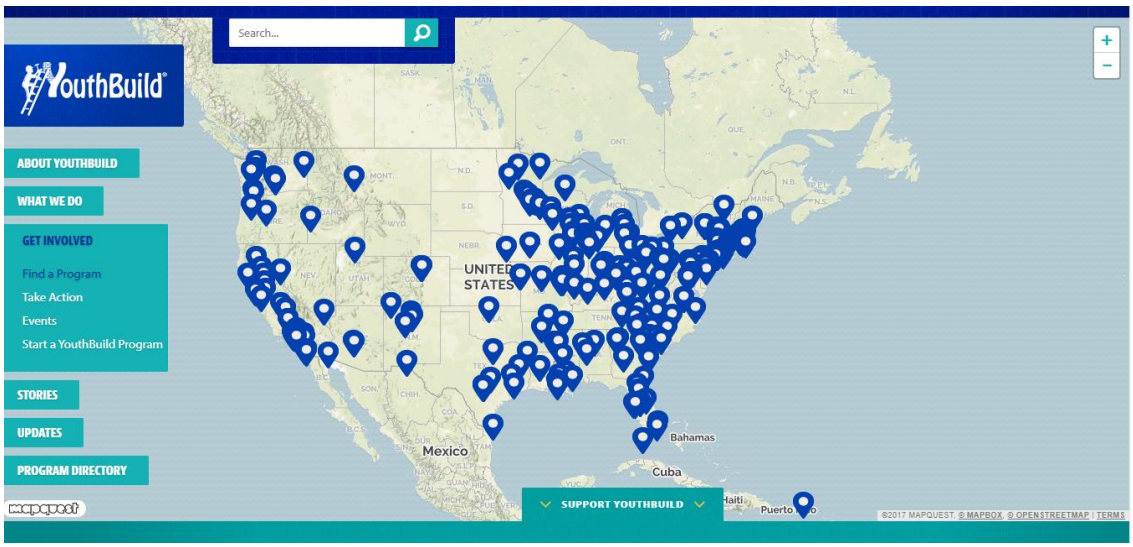

Figure 11: Youthbuild's interactive map feature

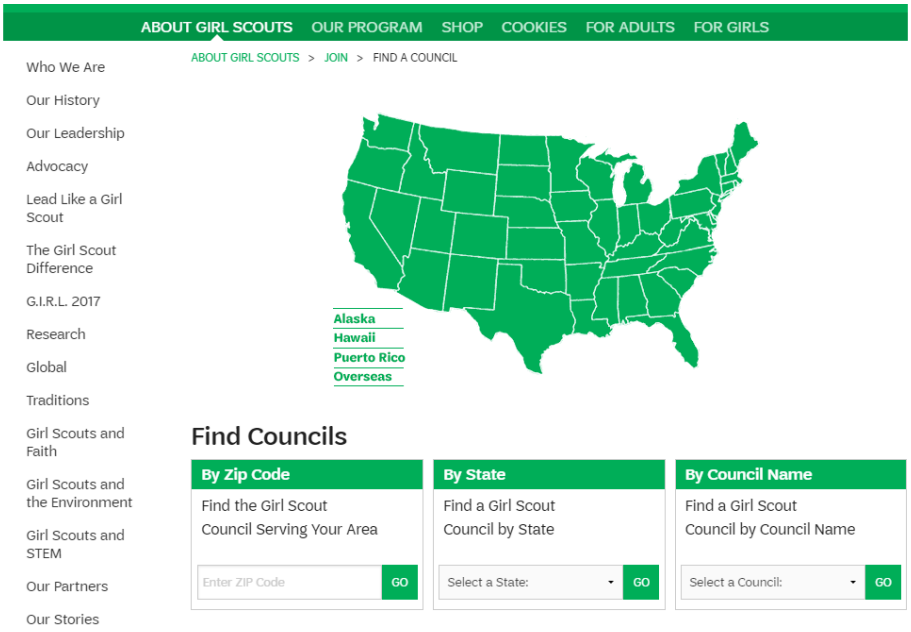

Figure 12: Girl Scouts' map feature

Another cause of confusion while navigating the Youthbuild's website was the search box feature on the map. The search box enables users to search the directory using city name, state name, and ZIP code filters. To give a sense of the terms that people typed into the search box, one user typed his ZIP code, another user typed their City's name, another "Local Chapters," and 3 other users typed in "North Carolina." The variety of types of information put into the box shows that there is a range of interpretations to how the box can be used.

Only certain keywords worked in this specific box, though the limitations of the search box were not obvious to participants. For example, the participants who typed their ZIP code, and the participant who typed the word "Durham" both retrieved the results that they expected from the search box and the map (Figure 13). The map zoomed them in to the area that they specified. However, the term "North Carolina" did not work, and confused the participants. In this case, the map zoomed users in to a lake

beside of the town of Apex, North Carolina (Figure 14). No blue pin could be found, and it took users moments to figure out a different way to use the map to retrieve the information that they needed. All three users would then zoom out and see the blue pin in Raleigh. The participant who typed "local chapters" thought that the box was a regular search box that would retrieve results based on his keywords. However, the box needed specific site-related information, like ZIP code, a city name, or a specific address. One way to make the interface friendlier to users is to encourage them to use keywords that work. Instead of the word "search" in the box, which is vague, the search-box could say "ZIP code." This small adjustment could save users time and frustration while using the interface.

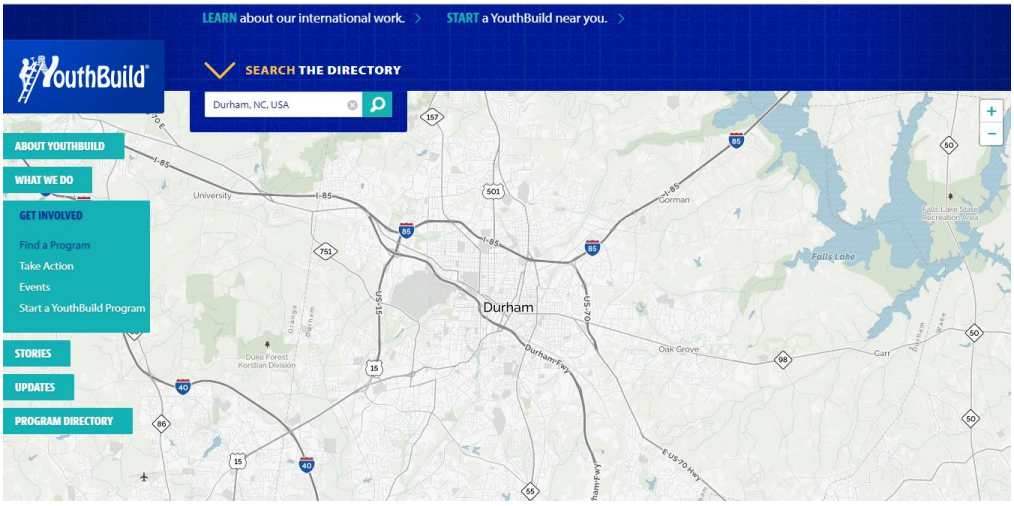

Figure 13: Youthbuild's map zoomed in, using keywords "Durham, NC"

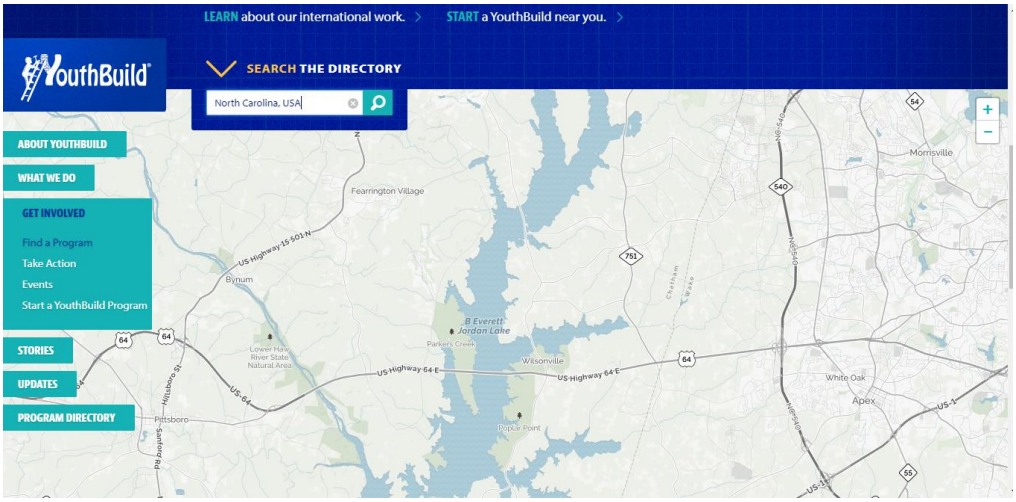

Figure 14: Youthbuild's map zoomed in, using keywords "North Carolina, USA"

When participants landed on the map on the Girl Scouts' site, they had a very easy time using it. Instead of using the map, two participants used the ZIP code feature. In contrast, four participants chose to specify the results by clicking the state. All the participants who used this page quickly and easily figured out how to navigate it, and retrieved the results that they were seeking. Each state shape was a link that participants could click to go to a list of councils in that state, so it narrowed the results easily. Participants immediately knew what information to place in the "ZIP code" search box because the designers put the words "ZIP code" in the box (Figure 15), instead of a more general term like "Search" used on Youthbuild's program directory page (Figure 16). Making the specifications of the search-box clearer could help users immediately understand what information to input on Youthbuild's page. Though both Youthbuild and the Girl Scouts visualize information using a map, the way the Girl Scouts showed the information was more intuitive for users. Youthbuild can do a few easy changes to make their map easier to use.

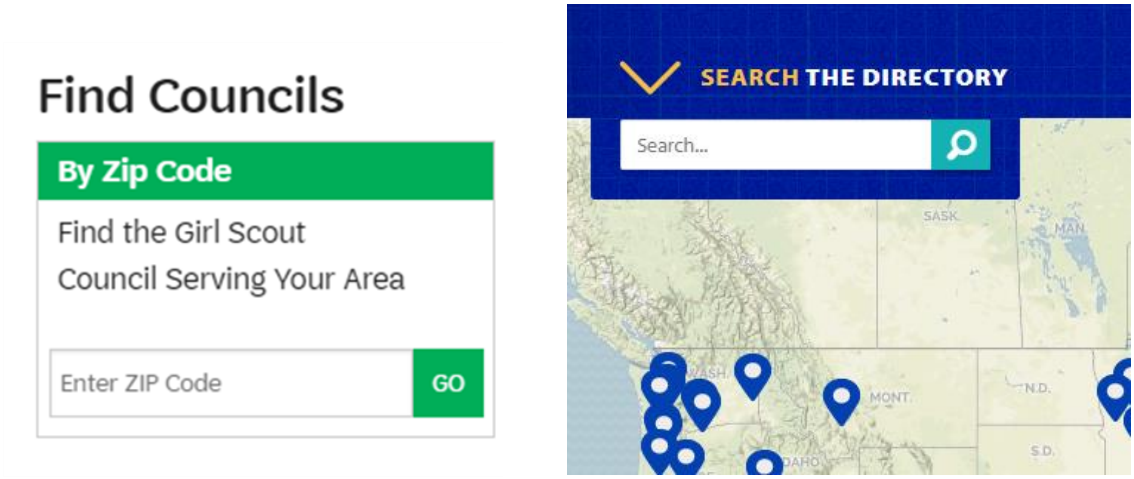

Figure 15: Girl Scouts' Zip Code Search, and Figure 16: Youthbuild's search box on the Program Directory page

"Word of Mouth" Information on NPOs

In the introductory portion of the usability test, the researcher asked the participants if they were involved in non-profits, or if they ever volunteered in their communities. Of the participants interviewed, 80% had volunteered in their communities, and of those volunteers, 75% recalled finding information about causes and NPOs through word of mouth, and 33% found information about causes online (one person noted that she found information both online and through word of mouth).

Knowing more about the information that people exchange through "word of mouth" encounters can be relevant to the people who design the sites of non-profit organizations. Analyzing word of mouth transactions could help designers fill in information gaps on websites, and design the structure the website to pace and prioritizes information. Exploring how people talk about causes and NPOs could enable designers to learn more about the information needs of potential volunteers. A few questions that

might be relevant are “what about the conversation enticed you to join the organization,” or “what kind of information did you figure out through a conversation, that you might not have found online?” Though this study only touched on this issue, bridging the gap between information transferred through word of mouth and online is worth pursuing for future studies.

Limitations

There were limitations of this study. First, this study might not be generalizable because it focused on only three specific websites. Though these websites each have a national and a local presence, other websites might have different layouts, and different ways of organizing information. Secondly, participants for this study were recruited at a public library in the suburbs of Durham, North Carolina, meaning that the people who took part in this study might not be representative of a larger population. Third, a few of the participants were familiar with some of the sites tested. Their prior knowledge of the organization, and their affiliations with those organizations, could bias their responses to prefer one site to another.

CONCLUSION

This study collected responses from 15 participants, recruited through a convenience method, who each performed a task on two websites associated with NPOs. The researcher designed a sequence of usability tests that asked the users to perform a task to find a specific piece of information on the local chapter for the following organizations: Girl Scouts of America, Youthbuild, and the American Civil Liberties Union (ACLU). The data gathered supported the hypothesis that the user's journey is to find information about the local affiliations of larger national NPOs can be complicated. The feedback gathered from participants during a test like this could inform decisions made by an NPO's web design team, which could help some users find the information that they seek. This study uncovered a several pain-points with the three organizations.

Looking at trends used by popular commercial websites could help designers place important information on different parts of the webpage, so that users feel like they know how to use the website, even if it is their first time engaging with it. In this study, participants easily found the "Find a Council" link at the top right of the Girl Scouts' website, which is in a similar location to where commercial businesses like Best Buy place their "location finder" tool. In contrast, the "People Power" header on the ACLU's website was largely ignored, since some people assumed advertisements go on the header of a webpage. In addition, working within industry-standards could help designers in choose words to clarify the navigation of the site. One way to find out how to make the

site more human centered would be to find out how people talk about NPOs with one another in “word of mouth” encounters. This information could help designers find the needs of potential volunteers, and then build a website that anticipates the needs of a community.

This usability test uncovered annoyances that participants felt when interacting on the three websites. Requiring potential volunteers to give an NPO their contact information before offering details about the local group (like dates, location, and types of events) could deter users from finding the information that they seek. Offering more logistical information about the local branch of the NPO could help some volunteers figure out if they want to participate in the group. Another frustration some users faced on the ACLU’s site was that they were frequently asked to make monetary donations. Clarifying opportunities for other types of ways to volunteer could have large positive impacts on the organization. Finally, a map visualization could be a useful tool on a NPOs site. Strategically designing the visualization in an intuitive way would lead users to local affiliations of the NPO could help orient users on the webpage, and find what they need.

Websites can serve as powerful tools for NPOs to rally people behind causes that the NPO support. A community focused NPO with a well design website has the potential to make a big impact by providing clarification on local organizing and events. This study found that finding information about the local chapter of a national NPO can be difficult for users, but that assessing the strengths and weaknesses of different sites could enable designers to create human centered websites.

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APPENDIX

Usability Test Script:

(Based on a Usability Script by Melissa Eggleston & Julie Grundy)

Thanks again for taking the time to talk to me. I'll start by asking you a couple of questions, and then I'll have you try out a few tasks on a website.

Before we get started with that, let me just ask, have you ever volunteered with a non-profit organization?

What kinds of causes are you interested in?

How do you find information on those groups?

Are you comfortable using a PC? (If participant says "no," I will let them exit the test.

Great, thanks.

[Question] Now I'll ask you to complete a task on a website. There are no right or wrong answers for this – we want to hear what you really think. It is very helpful if you would share your thoughts and observations as you go, so try to think aloud as much as you can. During the task, I won't be able to answer questions about the site, but if there's anything you do want to know, we can come back to it afterward.

{open / pass computer; One of these three sites should be up in browser:

A. http://www.girlscouts.org/
B. https://www.aclu.org/

C. https://www.youthbuild.org/}

[Task 1] Okay, so let's say you have heard about this non-profit organization from a friend, and you are interested in finding information about the groups located in Durham. How would you go about finding this information?

[Task 2] Great, thanks. Now let's say you want to do the same thing on this website (pull up a different site of the following options):

A. http://www.girlscouts.org/

B. https://www.aclu.org/

C. https://www.youthbuild.org/

How would you find information on the local Durham group? Show me what you'd do.

[Final Questions]

Can you tell me a little bit about your experience on these sites?

Did you prefer one site over the other?

(If the person does prefer one)—If so, why? If not, why?

Did you find anything confusing about either site? If so, what was confusing? Use the computer and show me.

If patron says no, ask: What worked especially well on the sites? What elements of the site made the information clear? Use the computer to show me.

Excellent. Thank you so much for your time today. Here is a gift card to Starbucks!