<u>EMAIL</u>

TO: President and Director of SALTS, Kelly Hall

FROM: Muhannad Nouri

SUBJECT: Report on SALTS Website Usability

As discussed through our multiple correspondences, websites adhering to good usability standards help your users find information faster and create a more positive experience for your website visitors. You should be able to create a website that helps your users meet their goals, whether it is to find information on donating to your organization, or volunteer.

I have conducted an analysis on the SALTS organization website with regards to its usability standard outlining key areas that require revision in order to improve the website's usability from a user's perspective. Moreover, I have collected and user survey data information to gain an in-depth idea into the thoughts of the website's users.

Attached to the email is my report on my findings, analysis, and my suggested solutions for key areas that require improvement in the SALTS organization website.

REPORT

Introduction

The Interaction Design Foundation states that website usability is the level of difficulty associated with using a website (What Is Usability?, n.d.). In order for a website to be considered "usable", it has to be easy to use and find the information they are searching for from a user's perspective.

My objectives in this report are to explain the important components of website usability, my proposed solutions to improve usability specific to the SALTS website such as avoiding jargon and improving content organization. Finally, an analysis based on the survey data is provided, with their respective proposed solutions.

Key Principles of Website Usability

The first usability element to focus on is the use of images within a website. The image used should fit in with the purpose of the page and its organization. It should be able to enhance the content of the page without distracting from the main information. Moreover, it is crucial to avoid using large images as they can increase page loading time contributing to a negative user experience. As a result, you have to strike a balance between images too small and too large. Images on screen are made of colored squares called pixels. Ideal screen image resolution (detail an image holds) is 72 pixels per inch (Curran, 2017).

In addition, another important element with regards to page content is avoiding the use of any form of jargon. This not only would help serve confuse your users, but it will detract from the message you are attempting to communicate to your users.

Finally, a key element contributing to a website's overall usability is the organization of content. This can include the headers of a page, paragraphs, and the placement of lists and tables when appropriate. Ideally, you want to avoid creating a frustrating experience when it comes to navigating the website and finding information.

For instance, if a table of financial numbers relevant to a company's annual report is on one page, and its explanation on another page, this will frustrate the user who has to switch between both pages to understand the message you are communicating.

The SALTS website features numerous high-resolution images utilized on each of the five main pages of the website, including the home page. For website visitors with high speed Internet connections, they should encounter no problem loading your pages. But, users with slower Internet connections, they will encounter slower download times for your webpage. Overall, this will be a more negative experience for the user. Poor Web site performance leads to poor company image and often compromises users' conceptions of the security of the site (Bouch, Kuchinsky, & Bhatti, 2000).

As can be observed from Figure 1, since the SALTS organization concerns land trust in Alberta, it is reasonable to feature images of the beautiful Foothills that would help enhance your message. Yet, the image shown above is a high-resolution photo that has proven to be an issue on slower Internet connections when attempting to visit the SALTS website.



Figure 1. Screenshot displaying background. From "SALTS "Share" Page Screenshot". Copyright 2018 Southern Alberta Land Trust Society. Reprinted with permission.

Furthermore, another issue that can noticed within the SALTS website is the lack of explanation and actual data for graphics provided. An example worthy of note is within the "Protect" page with respect to the Southern Alberta graphic.

While the graphic displays the increase in density of human land use, I had to learn what it meant by navigating to a completely different page within the website, the "Maps" webpage, in order to find an explanation for the visualization.

As observed in Figure 2, the graphic on the left hand-side does not provide any sort of explanation for what it means or why the website visitor should take a look at it.



Figure 2. Screenshot displaying a visualization and accompanying text. From "SALTS "Protect" Page Screenshot". Copyright 2018 Southern Alberta Land Trust Society. Reprinted with permission.

The user is left up to their own devices to attempt to decipher the message the visualization is communicating. As a result, this reflects poorly on the organization of webpage content and requires a revision.

Written and Visual Communication: Possible Solutions

My proposed solution to issues raised by Figure 1, the SALTS organization website should only be using images of a lower resolution following the 72 pixels per inch guideline as outlined previously in order to find a middle ground and avoid low resolution and poor-quality images, while at the same time avoiding high resolution image increasing page loading times.

With regards to the issues raised in Figure 2, a recommendation is to include actual data within the graphics provided. While the graphic displays the increase in density of human land use, it can be improved by displaying annotations with more information when hovering over certain portions of the graphic giving the user actual numbers. Tailor displayed data to user needs, providing only necessary and immediately usable data for any transaction; do not overload displays with extraneous data (Smith, Mosier, & Mitre Corp, 1986).

Analysis of Website Usability Based on Survey Data

The survey data conducted on the SALTS website usability featured a majority of participants about the average age range being in their early to mid-twenties. Moreover, most respondents answered that they were currently in the process of completing their first post-secondary degree. The survey featured questions regarding personal information such as age, gender, and education level before it asked participants questions regarding their experience using the SALTS website. The survey included a total of 11 questions of which three questions were asking participants for information about themselves.

Question 10 asks survey respondents "The textual information on the homepage is clearly written and is appropriate for the audience". It allows respondents to rate it on a scale of 1 to 5, with 1 being the lowest rating of "Strongly Disagree" and 5 being the best rating of "Strongly Agree". It is an important question with regards to finding out what your users think of your website's usability. This is because if the majority of your users believed that information on the website is not clearly written, and uses language that is confusing, then it means your website usability is low and not very accessible.

The results of the question are displayed in the following visualization, Figure 3:

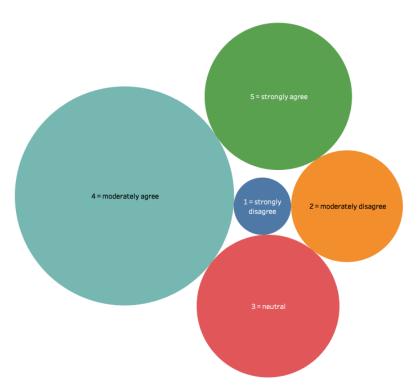


Figure 3. Diagram displaying the different responses obtained through survey data, the size of the bubble directly correlates with the frequency of the response. From "SALTS SurveyData.xls" by T. Smith, 2015. Unpublished raw data.

Figure 3 considers the count for each different response. The results display that the users believed information on the website is written using moderately clear language with room for improvement. Most respondents answered "*Moderately Agree*" or "*Neutral*" for this question. The data source is from the survey regarding the SALTS website, and the visualization is generated using Tableau.

Question 7 asks survey respondents "How easy/difficult was it to find information about volunteering for the society?". It allows respondents to rate it on a scale of 1 to 5, with 1 being the lowest rating of "Couldn't Find It" and 5 being the best possible rating. It is an important question with regards to finding out what your users think of your website's usability with regards to organization. This is because if the majority of your users found it difficult to find information that helps them meet their goals, then it will only serve to create a frustrating experience.

The results of the question are displayed in the following visualization, Figure 4:

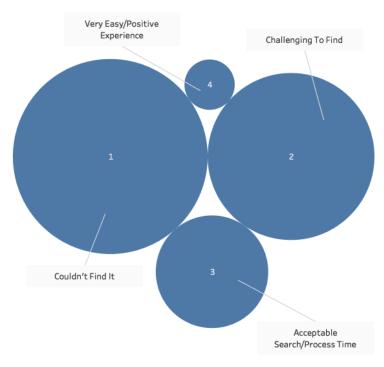


Figure 4. Diagram displaying the different responses obtained through survey data, the size of the bubble directly correlates with the frequency of the response. From "SALTS_SurveyData.xls" by T. Smith, 2015. Unpublished raw data.

The results show that an overwhelming majority of users were not able to find information on volunteering to your organization as most users responded with "Couldn't Find It" or "Challenging To Find". This reflects poorly on the website's usability when your users are not able to find information relevant to organization.

Survey Data: Possible Solutions

My proposed solution to issues raised by Figure 3, the SALTS organization website should revise the language used within website pages in order to remove any technical jargon or terms not understood by the average website visitor. Plain language makes information usable, so people can find the information they need, understand it when they find it, and use it to meet their own goals (Creative Bloq Staff, 2015).

With regards to the issues raised in Figure 4, my recommendation is to revise the organization of website content and prioritize according to user needs. This means determining and creating a hierarchy of the most important needs for the majority of visitors of the SALTS website that fits in with organization's goals. If the organization's goal is focus on bringing in the most volunteers to help with events, then the website's top menu should reflect that with easy access to volunteering information.

Conclusion

In conclusion, the key takeaway from the usability analysis performed on the SALTS website is that there needs to be a revision of website visitor needs and arrange content accordingly. In addition, there should be a removal of technical jargon as that would only serve to confuse the reader. In terms of performance, the organization should adhere to the 72 pixels per inch guideline for images as to avoid increasing page load times.

Finally, the SALTS website requires a revision of the visualizations used in order to include more detail such as the data sources and explanations of visuals used.

List of Resources

Bouch, A., Kuchinsky, A., & Bhatti, N. (2000). Quality is in the eye of the beholder: Meeting users' requirements for Internet quality of service. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 297-304.

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