Analysis of the Centre Country Transit Authority Website

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Abstract

When we chose what website to analyze, we did not realize how dense the CATA website really was. There were not many things to change about the website. After close inspection, we decided to focus on the colors and organization of certain aspects of the website. The main purpose of this experiment was to test what would happen if CATA would change the color scheme of their page and what would happen if they change the organization of certain pages on their website. We tested our “new” design of the CATA website with a group of students who frequently use the CATA website. Once we completed our test, we were then able to create a finalized model of what we thing the CATA website should look like to optimize the amount of the users are spending on their website.
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1.0.0 Introduction

Nearly every Penn State student takes advantage of the CATA buses that run all throughout the campus. More and more students are using the CATA’s website to determine where and when they can catch a specific bus loop. The CATA website gives its users an insight as to what the different bus loops are and where they go, when the meetings were held and what was discussed, and an insight into the company itself. When the site is first opened, the user is able to see the description of the site, as well as the company, a link to every bus loop, and various links to different announcements from CATA. As regular CATA bus users, we noticed that it is very hard to navigate throughout the website due to the facts that the colors that are on the website make it hard to read the menus. We decided to analyze the website so that we could make it easier for riders to navigate and find specific bus loops without a problem.

We had established a two way communication channel with Jackie Sheader, CATA Marketing Manager. This allowed us to have a look into the “inside information” which would further help us in our analysis. The “inside information” that we received consisted of Google Analytics Data on the website. We used this information to see which parts of the website were accessed the most. From there we looked at the pages that were accessed the most and tried to decipher which parts of it needed a little help.

Throughout this course we were able to analyze the CATA website with a critical lens. We used the Task Analysis Lab to determine what parts of our website were the most difficult to navigate through. We analyzed how long it took each user to navigate from one part of the CATA website to another part and then we asked for feedback on their feelings about the time it took for them to navigate throughout the site. From our findings in this lab, we were about to
The author of the article “The Importance of User-Centered Design: Exploring Findings and Methods”, Rosalie Lack, goes to say that talking and observing the audience is one of the best ways to understand what their needs and goals are. Lack also goes on to say that the best way to make a better website is to create prototypes and try them out on different users. In order to determine what kinds of changes to make, Lack notes that there are many different fields of User-Centered Design. Before someone is able to make changes to the website, they must determine what kind of field their audience is, whether it be cognitive psychology, computer science and engineering, information management, or anthropology. Once the website has been altered, Lack goes to describe that a follow up survey must be completed so that one can ensure all of the needs have been met.

When attempting to alter the CATA website, we deciphered who our target audience was and tried to make the website as user-friendly as possible. We know that our target audience, which would be mostly Penn State students, does not want to spend a whole lot of time trying to find a specific bus loop or meeting minutes from February 2003. We then created our own version of the CATA website to highlight the few changes we made with colors and formatting. Once we tested our audience, we deciphered whether or not our alterations were successful and from there we were able to perfect the CATA website.

Carrie Cousins, author of “Ten Things You Need to Know about Responsive Design”, stated that the best kind of website is one that responds to users. A webpage is supposed to be designed around the user. Cousins goes to explain that there are many guidelines to create a
user-friendly website. If someone were to not follow these guidelines, they would not attract as many users as a website that follows the guidelines does. In a world where everything is on mobile devices, Cousins explains that web pages are not “whole web design”. She states that while everything is on mobile devices, most users are on their desktops or laptop computers. Cousins also explains that every part of a website is flexible, including the pictures and text. If things were not flexible, the whole site design is in danger.

A grid design is crucial when developing a web page. Cousins states that “good responsive design starts with a grid”. Images, text, and drop down boxes should all be placed accordingly on a website. Failure to do so will only create chaos and users will refrain from going to that particular website and they will begin to look for alternative sites. Not following simple designs will ultimately be the demise of a website, and we did not want that to happen to CATA.

2.0.0 Color Scheme Issues

2.1.0 Introduction

When drafting webpages it is often hard to decide between “beautifying” the site or making it less beautiful and more useable. So how does one make a webpage “pretty” without affecting the ability of users to find information on the web page? It is is a fine line but it can be done. To determine this fine line we used two words to define both sides of this line. These two words are readability and accessibility.

Firstly, readability. Merriam-Webster defines readability as “able to read easily” (Readable). This meaning it is also enjoyable to read and there is a clear distinction between
what is text and everything else on the page. To us this means simple blacks on soft-grays. The current website has gray on white for body text which some of test-subjects noted as sometimes looking “blurry”. This simple statement is why we chose simple blacks on soft-grays. The lightness, or “the measure on the black-white dimension of how close to white the color is” (Ritter et al., 2013, p.95), of the two colors were too close together. To increase readability of the site, the difference between lightness needs to be increased.

Secondly, accessibility. Merriam-Webster defines accessibility as “able to be reached or approached” (Accessible). This means that the website should not be intimidating to the user when first viewing it. The information on the home page should be information that a first time user would need most. This makes the site more welcoming to them and they will be more likely to explore the site further. The harsh colors that the user is greeted with when current accessing the webpage is not ideal.

Using color theory we can further narrow down which colors we wanted to use on the website to best make the website seem approachable. Color theory is a guideline to follow describing the visual effects of color combinations with three primary colors that “assumes three psychologically primary colors” (Three-color Theory, Merriam-Webser.com). For body text it is best to use subtractive color mixing. Using subtractive color mixing, the color black is achieved. The “color” of black does not exist because black is the absence of color. Making body text the absence of color and the background have the blending off all colors (Morton), better known as white, allows for easy readability and a distinct definition of words on a page.

Combined with our first definition, readability, it can be said the goal of the website is to make it both readable and accessible, or concatenating definitions, able to be reached and read
easily.

2.2.0 Deficiencies

The current deficiencies on the websites based on color theory are as followed:

1. Grey text “blurs” with white body background
2. Page background makes focusing on content difficult
3. Drop-down menu hover-in and -out colors making focusing difficult

*Figure 2.1: Current CATA website color scheme
(screenshot taken 16 Dec. 2013)*

2.2.1 Foreground and Background Blurring

Test subjects verbally noted to use when viewing the current CATA website “that it took more work to focus” on the current grey-on-white text-body scheme. Because the text color (#666666) is not the darkest color on the page, it does not stand out the most making it harder to focus on.
The reason for this is that when light hits the page, light is being reflected off the text and “scattering” into each other creating that blurring effect (“When to use,”). To rid of this blurring effect, it is beset to use a darker font color on a brighter background. The darker font color will absorb the light thus not scattering the text.

2.2.2 Page Background

The website as is currently has a background color of #999. The web-safe color #999 is not a particularly dark shade of grey but when put up against a white (#FFF) background it appears much darker than it really is. Due to this fact, the background of the page seems darker than the current body text color even though the body text color is darker than the background.

Because #666 and #999 are similar colors the #666 seemingly seems darker than #999 when in reality it is not. This causes focusing issues with the eyes creating the pulsating effect that our test subjects noted when viewing the two websites.

2.2.1 Drop-Down Menus

The current color scheme on the drop-down menus cause the text to seem blurred into each other making it hard to read the text. The reason for this is the same as discussed above in *Foreground and Background Blurring*. Light is being reflected off the white text and “scattering” into each other creating a blurring effect (“When to use,”).

The on hover color scheme of the drop down is stark but it is not as difficult to read as the non-hovering scheme. The problem does not lie with the red-on-black color scheme but with the switching between the white-on-black colors to the red-on-black colors. This quick color change from seemingly blurred text to non-blurred text caused, as our test subjects noted, strain on the eye.
2.3.0 Action Plan

Having noticed some stark contrast in certain aspects of the CATA website including the drop down menus and the border areas we felt it necessary to make cosmetic changes in this area. Due to the fact that these ideas were solely based on our own observations we needed to conduct an empirical study to test if whether or not our assumptions were correct. Using information on color theory we were able to create alternative designs to the areas of the website that we found to be in most need of assistance. Now that we had a modified design choice to the existing site layout we were able to create a side by side comparison for testing purposes to gather real data.

2.4.0 Method

By downloading the source code for the CATA website we were able to change any given visual aspect to our liking, and this is how we were able change the color scheme to a more widely accepted value. The way the first part of the test worked was through a survey simply asking the participant which version of the site they found most visually appealing after viewing a side by side comparison of the original website and the mock-up of our proposed alternative color scheme. The layout of the survey form had a screen shot of the original website on the left and a screen shot of our version on the right. The mock version made red text black, and it also made the borders a light gray as well as the drop down menu background color. We focused in on warmer colors as they tend to be softer on the eyes.
2.4.1 Color Suggestions Table

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Suggested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body Text</td>
<td>#666666</td>
<td>#000000</td>
</tr>
<tr>
<td>Body Background</td>
<td>#FFFFFF</td>
<td>#FFFFFF</td>
</tr>
<tr>
<td>Page Background</td>
<td>#999999</td>
<td>#F0F0F0</td>
</tr>
<tr>
<td>Drop-down Text</td>
<td>#FFFFFF</td>
<td>#000000</td>
</tr>
<tr>
<td>Drop-down Background</td>
<td>#333333</td>
<td>#F0F0F0</td>
</tr>
<tr>
<td>Drop-down Text (on hover)</td>
<td>#000000</td>
<td>#000000</td>
</tr>
<tr>
<td>Drop-down Background (on hover)</td>
<td>#ED3323</td>
<td>#D2D2D2</td>
</tr>
</tbody>
</table>

The Color Suggestions table above (Table 2.1) lists all of the current hexadecimal colors on the CATA website and where they are located as well as what we advise they be changed to under the “Suggested” column.

To carry out the study we recruited a total of twenty volunteers which broke down into each member in our group finding five testers. All of the participants involved are students at The Pennsylvania State University, and all of them have had some prior experience with the CATA website. This fact helps to ensure that we were pursuing the best possible demographic with the survey because of the frequency in which these students use the local bus services. The majority of the volunteers were room mates of our group members, and the remaining volunteers were friends from elsewhere.

In order to keep consistency within our study we made sure that the conditions for each trial were done the same way for each participant. The volunteers were all working in environments of equal noise level, and everyone had as much time as they needed to make their decision. Each person was sat down at a desk, and they were presented with both options set side by side on the desk front of them. The instructions were clearly stated that when they had
made their decision they were to put a check mark in the box that corresponded to the image that they preferred.

2.4.2 Survey Questions

After coming to a decision each participant was asked to fill out three survey questions in order to provide further insight in regards to how their decision was made. These questions were printed on a separate page which were given to each person after the first survey.

The questions were as follows:

1. How easy is the existing website to read?

2. What other changes could be made to improve usability?

3. Are you completely satisfied with either of the choices?

2.5.0 Results

The end results were highly in favor of the revised color scheme. The end tally had sixteen people who were in favor of changing the existing website and only four who found the current model to be superior.

<table>
<thead>
<tr>
<th>Table 2.2: Results from survey 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
</tr>
<tr>
<td>Suggested Version</td>
</tr>
<tr>
<td>Original Version</td>
</tr>
</tbody>
</table>
2.6.0 Discussion and Analysis

We now have quantitative and qualitative data to back up our theory that the general public would benefit from a color scheme overhaul. Another important fact worth mentioning is that during Frank Ritter's IST 331 9:45 AM section a poll was conducted to compare the two sites, and the results were nearly identical to our first trials. This is the second instance of empirical data we gathered which helped us back up what we originally proposed.

The comments section of the initial survey supported our suspicions strongly as well. A large portion of the feedback stated that our color scheme changes fixed any issues they had with the display, and they were satisfied with our revised version. A few individuals said that they were not fully satisfied with either options, but if they were to choose an option they would opt for ours.
2.7.0 Recommendations

After conducting surveys and analyzing the results it is recommended that the following changes should be made to make the website more readable and accessible:

1. **Body Text** on all pages changed from #666666 to #000000

2. **Page background** changed from #999999 to #F0F0F0

3. **Drop-down Text** changed from #FFFFFF to #000000

4. **Drop-down background** changed from #333333 to #F0F0F0

5. **Drop-down background (on hover)** changed from #ED3323 to #D2D2D2

*Figure 2.2: Markup of the recommended color scheme*

Alone with these minor color changes we suggest that a simple drop shadow is added to the content wrapper of the page and to each drop-down popup to add depth to the page. A drop
shadow “provides cues about the relative position of objects” (Ritter et al., 2013, p.103) allowing the user to better notice what is currently active on the page. The shadow on the content wrapper makes a distinct barrier between the background and the content, what is white and what is grey.

All of these changes create a more appealing and welcoming website following the guidelines of readability and accessibility we created when deciding on what colors to choose.

### 3.0.0 Information Organization

#### 3.1.0 Introduction

The organization of information on CATABus.com was another key consideration in our interface analysis. This is because the way in which content is presented on a website has a real and tangible impact on the user experience. One of the ways in which HCI professionals can evaluate the effectiveness of a content organization scheme is to perform a task analysis on the website or interface in question. According to Ritter et al. (2013), “task analysis is a useful tool for describing and understanding how people perform particular tasks.” Ritter and his colleagues also argue that one of the benefits of task analysis is its ability to predict how much time users with varying levels of experience will take to learn and complete tasks. For the purposes of this analysis, we are making the (perhaps slightly oversimplified) assumption that the average completion time of a task is directly related to its complexity. The implication, then, is that task analysis can also be used to assess whether or not the layout of content on a website contributes to or hinders the user’s ability to locate information effectively and efficiently.
3.2.0 Deficiencies

We approached the issue of design complexity on the CATA website by surveying the site in its entirety and identifying the specific pages and resources whose layouts are, based on our collective opinion, more difficult than others to navigate.

Though we did not use a quantitative scale for this assessment, it quickly became clear that there are only a select few pages on the site wherein the organization of content poses an efficiency problem for users. Of these few pages we identified, one in particular stood out as being easily improvable: the “CATA Board Meeting Minutes” page, located at http://catabus.com/AboutCATA/Board/Meetings/minutes/index.html. Currently, the meeting minutes page contains 156 hyperlinks to downloadable versions of the minutes from CATA board meetings dating back to August 2000. Figure 3.1 above shows the meeting minutes page in its current form, as of December 16th, 2013.

As the figure above shows, the meeting minutes page on CATABus.com is extremely
dense; in other words, it contains a large amount of text (specifically in the form of hyperlinks) without any visual breaks or defined subcategories. We immediately saw opportunity for improvement on this page and decided to make it the focus of the “information organization” section of our report. (Note: as we will discuss in Section 3.5.0, our choice of the meeting minutes page as a major theme of this report does not imply that we feel it is more important than any other page on the site; in fact, it is our belief that from a purely cost-benefit perspective, this would be one of the lowest-priority items for CATA with regard to its website improvement efforts.)

3.3.0 Proposed Remedies

Based on what we learned about information seeking behaviors this semester, we determined that breaking up the meeting minute hyperlinks into subcategories based on some sensible criterion (which turned out to be their publication year), and then labeling the subcategories accordingly, would improve the user experience by making specific meeting records easier to find. As Penn State’s own accessibility and usability team so poignantly states, “headings and subheadings are important usability and accessibility strategies [for helping] readers both determine the overall outline of the document and navigate to specific information that may need more of [his or her] attention” (“Headings and subheadings”). Given that the frequency with which CATA’s meeting minutes were published over the last decade or so has remained constant (with one document being uploaded to the website each month), we decided that organizing the hyperlinks by their publication year would create evenly-sized content groups that would be more conducive to efficient visual scanning by users. Figure 3.2 is a mock-up of our proposed changes to the meeting minutes page.
3.4.0 Assessing Effectiveness

While we feel that our subjective assessment of the meeting minutes page and our recommendations for how to improve it are well-developed, we cannot definitively argue in favor of a design change that is intended is to reduce task complexity (and thus task completion time) without collecting quantitative data to confirm our assumptions. To strengthen our argument, we conducted pre- and post-assessments of task completion times in the form of keystroke-level task analyses. According to Ritter and his colleagues, the Keystroke Level Model (or KLM) is a “fast and approximate way to compute how long users will take to perform a unit task,” which is a “small cognitively manageable task” (Ritter et al., 2013). In this implementation of the KLM, the unit task is defined as the user searching for and opening the HTML file containing the meeting minutes from CATA's February 24th, 2003 board meeting. The next several sections discuss the specifics of how we implemented the KLM to evaluate the CATA site.
3.4.1 Method

For our KLM analysis, we gathered four participants (due to time and resource limitations, all four of these individuals were classmates from IST 331). Each of the four participants completed two brief exercises, one of which was finding and opening the February 24th, 2003 meeting minutes document on the live CATA site, and the other was finding and opening the same resource using the “improved” version of the meeting minutes page we mocked up for this experiment. For both exercises, each participant was asked to sit in front of a computer on which a browser window had been opened to the “CATA Board Meeting Minutes” page of CATA Bus.com (accessible via the link provided earlier). He or she was then instructed to navigate to the above named resource and allowed to do so after a member of our team activated a keystroke logger capture session which ran in the background while the participant was performing the experimental task. We used a free application called “Recording User Input” (RUI), which we downloaded from the Applied Cognitive Science Lab at Penn State’s College of Information Sciences and Technology. We proceeded to analyze the data collected in RUI using the basic four-operator manifestation of KLM, as defined by Card, Moran, and Newell (1983) and summarized by Ritter et al. (Note: only three of the operators were applicable to our experiment, and they are described below.)

- Keystrokes (K): unit time based on typing speeds (up to 1.2 seconds per keystroke or mouse click)
- Pointing (P): Moving mouse to target (1.1 seconds)
- Homing (H): Moving hand to/from mouse and keyboard (0.4 seconds)

Operating under the assumption that interfaces with higher content density are more
difficult to scan through visually, we expected that the differentiating factor between CATA’s existing meeting minutes page and our revised version of it (at least in terms of usability) would be the amount of time users spend in “pointing” mode. In other words, we assumed that users would spend less time moving the mouse around the page searching for the specified hyperlink when interacting with our mock-up interface than they would on the live CATA site. We knew that if our assumptions proved accurate, we would have empirical evidence with which to argue for design changes to the CATA site based on our recommendations.

We will assume a basic understanding of how to properly execute a KLM analysis, and therefore will not go into detail about the implementation process – except to note that we made one minor modification to the model in order to meet the demands of our experiment. Instead of using the predefined average time value for pointing (‘P’), we used actual elapsed time values from the RUI logs we generated. The 1.1 seconds estimation provided in the literature that accompanies the KLM model is generally accurate for single-focus tasks that involve the user interacting with targets on an interface whose locations are known to the user in advance; however, given that our task involved visually scanning the interface to locate the target (i.e. the February 24th, 2003 meeting minutes), we wanted to take an accurate measurement of the actual amount of time taken by each participant to perform the task. In a simplified sense, this means that we were essentially able to determine by what factor the completion time for the “pointing” aspect of our task, when performed under different conditions, exceeded the completion time value defined for the pointing operator in the most basic form of the KLM model.

In keeping with the format of a KLM instance description that is defined in Ritter et al., our “unit-task” can be defined as requiring the following two steps:
1. Find the meeting minutes for February 24, 2003. (H) (P)

2. Click on the corresponding hyperlink to open the correct meeting minutes. (K)

The combined action sequence in symbol form, therefore, is as follows: (H) (P) (K). In the next section, we discuss the results of our KLM analysis and analyze their significance.

### 3.4.2 Results

Below are two tables which summarize the results of our KLM analysis. A total of eight trials were performed; two per participant. Table 3.1 contains the results of the trials conducted using the live CATA site, and Table 3.2 contains the results of the trials conducted using our own mocked up version of the webpage. Please make note of the modification we made to the model, which is discussed in the previous section – understanding it is key to accurately interpreting our results.

**Table 3.1: results of KLM analysis on live CATA site**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Homing (H)</th>
<th>Pointing (P)</th>
<th>Keystrokes (K)</th>
<th>Total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>0.4</td>
<td>7.840</td>
<td>1.2</td>
<td>9.44</td>
</tr>
<tr>
<td>Participant 2</td>
<td>0.4</td>
<td>9.021</td>
<td>1.2</td>
<td>10.621</td>
</tr>
<tr>
<td>Participant 3</td>
<td>0.4</td>
<td>10.141</td>
<td>1.2</td>
<td>11.741</td>
</tr>
<tr>
<td>Participant 4</td>
<td>0.4</td>
<td>9.837</td>
<td>1.2</td>
<td>11.473</td>
</tr>
</tbody>
</table>

**Table 3.2: results of KLM analysis on mock-up interface**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Homing (H)</th>
<th>Pointing (P)</th>
<th>Keystrokes (K)</th>
<th>Total time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant 1</td>
<td>0.4</td>
<td>3.727</td>
<td>1.2</td>
<td>5.327</td>
</tr>
<tr>
<td>Participant 2</td>
<td>0.4</td>
<td>4.971</td>
<td>1.2</td>
<td>6.571</td>
</tr>
<tr>
<td>Participant 3</td>
<td>0.4</td>
<td>3.050</td>
<td>1.2</td>
<td>4.65</td>
</tr>
<tr>
<td>Participant 4</td>
<td>0.4</td>
<td>3.683</td>
<td>1.2</td>
<td>5.283</td>
</tr>
</tbody>
</table>

According to our results from the KLM experiment, the average amount of time users took to find the February 23rd, 2004 meeting minutes on the live CATA site was 10.819 seconds, while the average amount of time they took on our mocked up version of the meeting minutes
page was only 5.458 seconds. Clearly, the use of publication year subheaders made a difference in how long users spent trying to locate the target resource (in fact, the average time required to complete the task was cut almost exactly in half!). This is an indication to us that, were CATA to implement our suggested design change and add subheaders to the meeting minutes page on their live site, they would almost certainly be helping users to locate meeting minutes more efficiently.

3.5.0 The Economics of Design, and Why It's Okay that CATA's Meeting Minutes Page isn't Perfect

As mentioned in section 3.2.0, the meeting minutes page on CATA’s website (though a perfect illustration of how the organization of content on an interface can be improved to better serve the needs of users), is a low-priority issue for CATA when considered from a cost-benefit standpoint. Based on analytics data we obtained from CATA’s marketing manager Jackie Sheader, we were able to compare visitor traffic on specific pages of the CATA site to determine that the meeting minutes page is, unsurprisingly, not very popular among users. In fact, it did not even make the “top 25” list of pages on the CATA site with the most visitor traffic per capture period in 2013. With this in mind, it is simply impractical for us to suggest that significant amounts of time and resources be devoted to the improvement of the meeting minutes page. As is suggested in Ritter et al., HCI professionals are constantly forced to make design tradeoffs based on specific criteria, and these criteria can change from situation to situation. When we acknowledge that not all components of an interface are necessarily equally important, we can begin to practice better allocation of resources to serve the majority interest. It’s simple economics - when the payoffs are high, the creators of interfaces have more incentive to pursue excellence in design. When the payoffs are low, it’s just not a priority. If anything, we feel CATA
deserves to be complimented for its design decisions. Though it is under the same financial constraints as any other typical organization, it has still managed to achieve efficiency and effectiveness in the areas where it matters most. We commend CATA for what is, overall, a fantastic website design!

4.0.0 Conclusion

When we decided to analyze the CATA bus website, we did not realize that it was such a dense website that barely needed anything changed. We had a tough time trying to figure out what aspects of the website needed to be changed. We had first looked at the overall design, it did seem a little cluttered, but it was not anything that needed a huge improvement. We then looked at how many links there were to all the different pages on the website. We were looking to try and condense some of the links but we found it was unnecessary. Overall, the CATA website looked presentable, but like all websites, there is always room for some improvement.

When we figured out what we wanted to change, the main question was “How do we change it so that it is user-friendly?” We had decided to change the color scheme and the overall appearance of the “Meeting Minutes” page. We found that the color scheme could have been a lot better due to the fact the drop down menus were very hard to read. We also found that the way that the information was organized on low traffic pages was done very poorly. It was very difficult for a user to navigate through the list of dates to find specific meeting minutes. We changed the colors on the main page and then changed the way the meeting minutes are organized on the low traffic site and then we tested our “new site” with a group of people. Our design, of changing the original color scheme to a black and white color, ended up being a
success with a majority of the people saying they liked our design better than the original.

We also used the Keystroke Level Model (KLM) to decipher how long it would take a user to navigate to a specific point in the website. We found, in one of our experiments, that the time it took a user to find a specific meeting was significantly longer than we had expected. Using the KLM, we were able to figure out a way to minimize the time it takes a user to find a specific meeting minutes page.

In conclusion, we found that changing the color scheme and the layout of information on low traffic pages greatly impacts the amount of users CATA will get. After making all the changes, we found that the amount of money and time put into the site will decrease. The amount of money and time CATA spends on the website now is more than it should be. Decreasing the amount of money and the amount of time spent on the website will ultimately help CATA. With this new design, they will be able to focus more of their time on trying to make the website user-friendly. More users will be using the website due to the fact that the “new” website is much easier on a person’s eyes. The pages that were considered “low traffic pages” will ultimately become “high traffic pages” and will generate more users and revenue for the CATA bus company. Through this experiment, we were able to make a few changes to the original CATA website, test our findings, and complete our “final” model of the website.
Works Cited


*When to use white text on a dark background.* (April 2011). Retrieved from http://uxmovement.com/content/when-to-use-white-text-on-a-dark-background/