Society for Technical Communication Palm Beaches Chapter's Website Usability Report

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Executive Summary

Five Information Technology students from Florida International University took part in a usability study assessing the Society for Technical Communication's Palm Beaches Chapter's website. All of the participants were asked to complete tasks on the website. Overall, the participants were successful on 60% of the tasks they attempted. This revealed several problems with the website.

- When asked how much the due fee for the Student Membership Package was, four one participant did not successfully complete the task, and three participants did not provide the correct answer. This may be due to the fact that upon searching through the Chapter website and not finding any resources on membership costs and fees, the participants finally arrived at the Society for Technical Communication's national website only to find a poorly organized chart for which the participants had to scroll for a prolonged period of time in order to find an unsure response.

- When asked to provide three benefits of becoming a member of the Society of Technical Communication, all of the participants were able to successfully complete the task. However, three of the participants upon answering simply read headers from the Membership Benefits link on the national website including, but not limited to, "Communities," "Body of Knowledge," "Certification," without actually knowing the benefits in the correct context. In other words, several of the participants simply mentioned the benefits without actually knowing what the benefits were.

- When asked when and where the next chapter event was going to take place, two of the five participants did not successfully complete the task and only one of the participants responded correctly. This participant correctly stated, after visiting the "Events" link on the chapter website, that there was not an upcoming event. That the latest event on the link had already passed.

The Team recommends that the website should concentrate its redesign or reorganization on the following specific questions relevant to its users and potential users. Links to these questions should be created, and be visible and easily accessible from the homepage:

- How much does it cost to become a member?
- What are the benefits of joining?
- When and where are the upcoming events?
- Is there any information on available jobs?

The usability team believes that focusing on the organization of the information on the chapter website and clearly portraying this information in a concise, user-friendly manner would strongly enhance user knowledge of the goal of the Society of Technical Communication's Palm Beaches chapter, and would therefore encourage users to become members.

Background and Testing Topics

The Society of Technical Communication (STC) is the world's largest professional society dedicated to the advancement of theory and practice of technical communication.   The Society of Technical Communication's Palm Beaches Chapter is a unique community of professionals within the South Florida region which includes the counties of Martin, Palm Beach, Broward and Miami-Dade. The Palm Beaches Chapter contacted the Panthers (usability team) at Florida International University in hopes of conducting an effective usability test on their chapter's website. Please note that from this point forward Chapter will be used to reference the Palm Beaches Chapter, and Team will be used to reference the Panthers.

The Team set a date and interviewed two Chapter leaders, Barrie Byron, Membership Manager and Larry Grinnell, Web and Online Communities Manager.

The interview covered many of the concerns regarding the website and its functionality. The Team assessed many of those concerns and understood that the main objective of focus for the Chapter would be to expand and gain more professional members. It was decided that the Team was to perform a usability test to assess the issues members and potential members might encounter while accessing the Chapter website, so as to not discourage website visitors from becoming active members.

The Team narrowed the most important objectives down to the following testing topics:

- Becoming a member of the Chapter
- Learning the benefits of membership
- Knowing about upcoming events

For any increase in quality membership, it is crucial for a user to be able to quickly locate required membership information, the benefits that membership provides, and upcoming events. The Team's usability test focused on these three topics.

Methodology

Approach

The Team implemented a discount usability approach to conduct effective testing of the Chapter's website. The discount usability approach involved five participants who were asked to perform specific tasks. While the participants attempted to complete the specified tasks, members of the Team quickly noted everything the participant was doing and expressing.

Test Scenario and Tasks

A realistic scenario was established to provide the participant comfortable environment. This is a common practice used with usability testing to get participants to be more expressive and provide quality feedback. Furthermore, it was decided that an "icebreaker" was to be done if the participants felt uncomfortable. The "icebreaker" consisted of the moderator stating two facts about himself or herself, and asking the participants to do the same. The Team conducted three pilot tests before reaching the final tasks and scenario. The scenario was explained to all participants before the start of the usability test.

Scenario	You as an Information Technology student have been selected by the Panthers to perform a usability test. Pretend you are a student interested in learning more about the Society of Technical Communication's Palm Beach Chapter and getting involved via membership. You will be given access to navigate the website by yourself and will be asked to complete three different tasks. You are asked and encouraged to express all of your thoughts audibly throughout the entire usability test.
Task 1	How much is the due fee for the Student Membership Package?
Task 2	What are three benefits of being part of the Society of Technical Communication?
Task 3	Where and when will the next Chapter event take place?

Reasons for Tasks

To put the following paragraph simply, members like to know how much they have to pay, what the benefits of paying are, and if they are getting what they paid for. The three tasks were designed to test the effectiveness of the website with regards of clearly portraying information that pertains to the recruitment of quality members.

The first task was chosen because individuals do not generally become members of an organization without knowing the amount they have to pay toward the membership; and specifically, the Team chose the due fee for the Student Membership Package not only because the target audience of the usability test was Information Technology students, but because the Chapter voiced an interest in increasing student membership.

The second task was chosen because individuals seeking to join an organization usually want to know the benefits members before joining the organization.

The third task was designed with potential active members in mind, it was chosen because members prefer to attend events before becoming members.

Participant Selection
The Team decided to select participants who were students of Florida International University between the age of 18 to 25 years old and currently seeking an Information Technology degree. These participants were ideal candidates because they are knowledgeable users and are trained to build and maintain websites, as well as carry out projects that involve writing documents, manuals, or instructions. This has a direct link with technical communication. That age range was selected because it makes up the majority of Florida International University's student body.

A total of six participants took part in the usability test. All participants agreed to meet with members of the Team at the Engineering and Computer Science Lab at a specific time. The usability test required only five participants but a sixth participant was acquired in the case one of the initial participants chose not to attend.

Testing Procedures
Before the test, participants were given questions (see Appendix A) in order to certify their status as information technology students and obtain background information on their usage of computers. The moderator also read a script (see Appendix B) to each of the participants to introduce them to the test and make them feel comfortable. All of the participants were read a statement asserting that the usability test was based on the Society of Technical Communication's Palm Beaches Chapter's website and not on their ability to successfully complete the tasks. Participants were seated in front of a reserved computer in the Engineering and Computer Science lab, a lab which the participants usually frequent, at Florida International University. This location was chosen because it provided the participants a comfortable, familiar environment in order to carry out the usability test.

During the test, the moderator did not help the participants with anything related to completing the tasks. The moderator also encouraged the participants to voice their thoughts if any of them discontinued doing so, in order to obtain qualitative information important to the usability test. Errors when completing the tests were noted, as well as successful and unsuccessful completions of the tasks. Each tasks for the participants was timed.

After the usability test, each participant was given post-test questions (see Appendix C) in hopes of finding out both quantitative as well as qualitative information with regards to the Chapter and its website. Some of the questions were open-ended. Once the participants completed the post-test questions, the two observers, the timekeeper, and the moderator regrouped in order to reconcile the information.

Heuristics
Based on encouraged participant verbalization and body language when using the Chapter

website, errors and unsuccessful completions of the tasks for each participant were noted. Participants were unsuccessful when either they were unable to complete a task, or when they gave up. Additionally, participant performance was timed in order to have quantitative data available for analysis.

User Profiles

Provided information technology students are well trained in the use and development of websites, the Team argues that if information technology students cannot navigate and find information on a website with ease, the website needs to be reviewed carefully for navigational inconveniences and organization of information.

Background

The Chapter manages a website which is used by its members and potential members in order to find any information regarding the goals of the Society for Technical Communication, upcoming events, resources for technical communicators, as well as other pertinent information.

Context of Use

Presumably, the Chapter website can be accessed from the user's home, university, place of employment, mobile device, or any device that the user can use to access the internet.

Test Participants

Test subject for the pilot testing consisted of two types of students: Information Technology students and Computer Science students. Test participants for the final testing consisted of five students majoring in Informational Technology.

Results

Performing a usability test on the Chapter allowed us to see the inefficiencies and navigational problems of its website. Most of the problems found came directly from the tasks that the Team asked the users to perform.

Quantitative Data

Using a Likert scale ranging from zero to ten in order to assign difficulty levels to the tasks attempted by the participants -- ten being the highest difficulty level, the Chapter website received an average grade of 8.3, with a 6 representing the minimal acceptable usability level. The reason behind this collective score will be explained in the following page.

The following chart shows the average time each user spent on each task. For the usability test, time was a key element to detect several faults on the Chapter website.

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Figure 1

From the above chart alone we can surmise that the users found task two relatively easier than the other tasks because they were able to perform the task much faster than the others -- the third participant being an exception as both task one and task two took the same amount of time.. However, the Team was able to determine the following from the other two tasks:

On the homepage, the participants were able to get a glance of the membership page by looking at the left pane, but it seemed to confuse all of them when, upon clicking the membership link, they were directed to another website -- the Society of Technical Communication's National website. By looking at the new page, the participants found a different theme, color scheme, page layout and other tabs; as a result, this required them to familiarize themselves with the national website instead of the Chapter website, driving them away from the Chapter website.

Figure 2 demonstrates how successful the participants were in completing each task. The table below shows that six of the fifteen attempts at completing the tasks were unsuccessful. In other words, the participants were successful 60% of the time when attempting to complete a task. This table reveals the areas on the website that need to be changed or reorganized in order to promote more successful completion of important tasks key to building membership for the Chapter.

Tasks Completed	Task 1	Task 2	Task 3
Participant 1	No	Yes	No
Participant 2	No	Yes	No

Participant 3	Yes	Yes	No
Participant 4	No	Yes	No
Participant 5	No	Yes	No

Figure 2

During the test the Team asked the participants to continue giving feedback audibly. This feedback helped the Team classify the type of problems found during the time the participants attempted the tasks. The classifications are as follows:

- Confusion: Not being able to understand the material or tools provided.

- Failure: Not completing the task.

- Frustration: Voicing or behaviorally expressing frustration while performing the task.

- Navigational Issues: Hesitating or moving the cursor randomly without direction or purpose for an extended period of time.

Figure 3

Qualitative Data

The following are quotes from the participants regarding each particular task. For the first task regarding finding the due fee for the Student Membership Package, the participants stated:

"It took me a while to get to it."

"It's easy to find the registration; [for] the fees [I] had to take my time."

The Team believes that if the fees and costs of membership were on the Chapter website or at least linked to from a relevant and visible location, visitors to the website would have an easier time becoming members. This, of course, ties into the following task that was asked the participants to performed.

For the second task which comprised of finding the benefits of becoming a member of the Chapter the quotes are as follows:

"Nowhere did it say benefits on the tabs, you didn't expect the [national website's] *navigation tools to have expanded menus. Benefits where in-context."*

"Once I clicked on the [national website's] *link, it said benefits and listed everything there."*

It is important to notice that the preceding two statements pertained not to the Chapter, but the national website. The team believes that if the information regarding the benefits of membership where clearly displayed on the Chapter website, first-time users would be more inclined to join the Society for Technical Communication.

For the third task which dealt with finding upcoming Chapter events, the members of the Team themselves were confused. After navigating to and from the Chapter website many of the participants provided incorrect answers because they were unable to find upcoming Chapter events and instead answered with National upcoming events. One of the participants stated the following:

"Very difficult to find."

When asked if he would be interested in joining the Society for Technical Communication, and for any suggestions regarding bettering the Chapter website, one of the participants said the following:

"It doesn't draw my attention; it's nice that they have a video on the national site, if they kept the designs consistent […]. The national page seems more inviting; ***the local chapter site is a wall of text.*** *It needs to be modernized"*

Recommendations

The results of the usability test clearly indicate that the participants were not able to effectively navigate the Chapter website in order to find the basic information that the tasks given to them asked them to find – such as the fees and benefits of membership, as well as the upcoming events. Since every user of the website should be able to find this information, the Team believes that the website should be redesigned or the information should be reorganized and reworded in order to accommodate the needs of its users.

Given several participants voiced that the website was "cluttered," the Team recommends that the website should concentrate its redesign or reorganization on the following specific questions relevant to its users and potential users. Links to these questions should be created, and be visible and easily accessible from the homepage:

- How much does it cost to become a member?
- What are the benefits of joining?
- When and where are the upcoming events?
- Is there any information on available jobs?

	Recommendation	Reasoning
1.	Add tabs labeled "Membership" and "Benefits of Joining STC" on the homepage. This will help answer the questions "How much is the due fee for the Student Membership Package?" and "What are the benefits of being part of the Society of Technical Communication Palm Beaches Chapter?"	For **task 1** it took an average of close to 3 minutes for participants to find this information. While the information is still present on the website itself, it would be better if the information was noticeable. **Task 2** also ties in with the first task, as that would fall under the membership category.
2.	Include an additional tab labeled "Events" with past and future events on the homepage that will help current and prospective members find out about upcoming events as well as past events in the Chapter. If there are no future events, add a "More events coming soon" label on that page.	Users failed to complete **task 3** where they were asked to find the next upcoming event. Some users deemed this task difficult because it was difficult to find upcoming events. Users were also discouraged by the fact that there were no future events, but rather a past event.
3.	Keep key information new users might want to know localized to the Chapter website.	Some users were misguided due to the fact that some links led them to an entirely different website. Users,

		especially new users, might get confused if they get familiar to the Chapter website, and are redirected to a completely new website. The Chapter should let the users know beforehand if they will be redirected to a different website. Information such as benefits, membership, events, and other information that is exclusive to the Chapter, should remain on the website.
4.	Add an "About Us" tab on the homepage as well as pictures of individuals who work in technical communication.	As stated by some of the participants, the website was "cluttered" with information. New users might be overwhelmed with too much text on the homepage. This could be alleviated by adding an "About Us" tab to the homepage.

By making these small changes and addressing these usability problems users of the website will spend less time navigating the website and will be able to find information quickly. Moreover, these users may also prove to be more active participants in the Chapter, and first-time visitors may be inclined to become members.

References

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Appendix A: Pre-Test Questions

Please make sure to answer every single question.

Question	Answer		
Are you between the ages of 18 – 25?	Yes		No
Are you seeking a degree in Information Technology?	Yes		No
Are you familiar with Technical Communication?	Yes		No
How would you qualify your ability with personal computers?	Non Expert	Intermediate	Expert
How often do you use the internet?	Daily	Weekly	Monthly

Please return your questionnaire to the moderator when complete.

Appendix B: Moderator Script

Introduction
Hello, my name is Miguel and I will be your moderator today. First, I would like to thank you for agreeing to participate and we truly appreciate your time. I want to assure you that your identity will be kept confidential and from now on you will only be referred to as "Participant".

Before we start could you please answer the following questions:

(Hand participant Pre-Test Questions)

The goal of this session is to obtain your feedback (positive and negative) and to get your ideas on the Society for Technical Communication's Palm Beach Chapter's website. The valuable comments and suggestions you provide today will shed light on future development and improvements to the website.

(If participant seems uncomfortable or shy use the icebreaker, if not skip it)

Icebreaker
In an attempt to help you feel comfortable, I will state two facts about myself. I would like for you to state two facts about yourself as well.

The Test
For the next 15-30 minutes, pretend you are a student interested in learning more about the Society for Technical Communication's Palm Beach Chapter and getting involved via membership.

I will shortly be asking you to try to complete three different tasks. You will be given access to navigate the current Chapter website by yourself while you to attempt to complete the tasks. If at any point you feel the need to stop for whatever reason you can just say the word "stop" out loud. If you feel you cannot complete the task and want to move on to another task simply say "next task" out loud.

I remind and assure you that your identity will be kept confidential and you will only be referred to as a "Participant". You are asked and encouraged to express all your thoughts out loud throughout the entire usability test. Please tell us everything you are doing, thinking and feeling throughout each task. Keep in mind that we are not testing your abilities or you, we are testing the usability of the website.

(Ask participant if they have any questions or concerns, if not continue)

Let us start.

- Task 1: How much is the due fee for the Student Membership Package?
- Task 2: What are three benefits of being part of the Society of Technical Communication's Palm Beaches Chapter?
- Task 3: Where and when will the next will the next Chapter event take place?

Reminder:

Remind participants to give feedback out loud and make sure to take notes of all events. If you see a participant taking too long, talk to him and ask what they are thinking. Talk to the participant but do **not** show them how to complete the tasks.

Closing Statement
There are no more tasks to be completed and I would like to thank you again for participating in our usability test. Your feedback is valuable and we greatly appreciate it. Again, your identity will be kept confidential.

Before you leave could you please answer the following questions:

(Hand participant Post-Test Questions)

Thank You!

Appendix C: Post-Test Questions

All of the following questions do not have a wrong or right answer. Please answer all the questions to the best of your ability. If you do not know, write "I do not know". Again, this is not to test you personally but to test the usability of the Society for Technical Communication's Palm Beaches Chapter website.

1. What is the Society for Technical Communication's Palm Beaches Chapter about?
2. What is the goal of the Chapter?
3. What type of user do you think the Chapter website is targeting?
4. Would you be interested in joining the Chapter? Why?

5. How would you improve this website?

6. Do you have any questions or suggestions?

7. How would you rate the level of difficulty for every task?

Task 1

Easy   Difficult   Very Difficult
   1   2   3   4   5   6   7   8   9   10

Task 2

Easy   Difficult   Very Difficult
   1   2   3   4   5   6   7   8   9   10

Task 3

Easy   Difficult   Very Difficult

   1   2   3   4   5   6   7   8   9   10

Please return your questionnaire to the moderator when complete.

Appendix D: Sign In Sheet

Please sign in as "Participant" followed by the number you were given. Log in the date and time. Write which is your preferred internet browser.

Participant Name	Date	Time	Browser

Appendix F: Observer Log

Date:
Participant number:
Observer:

Task	Time	Notes