Usability Study of the Willamette MBA Website

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Abstract- Website navigability is one of the core factors to increase website's traffic. For education institutions, having an easy to navigate website is very important to increase the admissions funnel and prospective students' interests. The research seeks to evaluate the efficiency and effectiveness of navigating to various inquiry forms and applications on the graduate website, particularly the MBA website with the aim of identifying current site's navigation strengths and weaknesses, proposing design recommendations to the navigation design of the future website. Structured usability tests were conducted with undergraduate students or graduates who might be interested in graduate education. The findings show several pain points and suggestions made by participants. However, the overall site was said to be quite well structured.

I. INTRODUCTION

The Willamette website serves as a primary place for prospective students to gather information, make inquiries, and apply for various graduate programs. As plans to redesign the website are underway, understanding the current site's strengths and weaknesses in terms of navigation is critical. We seek to evaluate the efficiency and effectiveness of navigating to various inquiry forms and applications on the graduate website, particularly the MBA website (willamette.edu/mba) with the aim of informing the navigation design of the future website.

We evaluated the navigation of the website using user tests with 5 anonymous participants. First, these participants took a Pre-Survey to evaluate their experience with the site. Next, in the Usability Test, they were assigned a series of tasks designed to evaluate the ease of accessing specific points in the website. This evaluation consisted of data about verbal feedback, time, and number of clicks. Finally, the participants took a Post-Survey where they expressed their thoughts with each task that was assigned to them.

We now analyze that data in order to assess possible weak points of the MBA website, places where improvement is possible, and create a list of design recommendations. The purpose of this paper is to report these findings and design recommendations for the Willamette MBA site.

II. RELATED WORK

This section presents an overview of related studies that conduct a review of university websites. [3] conducted usability studies with only questionnaires that focus on gauging current students' experience on their website, while [1] and [2] conducted thorough usability tests for their websites to study overall usability, which includes: navigation, design, and content.

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[1] conducted usability tests on all aspects of their university website, where the main design pain points found were that the website was "boring", "unattractive", and "inconsistent". Some participants on [1] also expressed concerns about how the website "has too many words" and suggested the website provide more images. [2] studied several education institutions' websites and mentioned the common weaknesses on websites studied were inconsistent designs and design elements, such as: colors, font, etc. On the website's navigation, [1] claimed that their website forced participants to go through a series of links to find information they need. resulting in a less navigable site. Overall, [1] discovered that there are details of their website that needed updating and changing, in terms of site's navigation, such as reducing text content on the home page, making some resources and information easier to find, and creating more visible links on their pages.

III. METHODS

The methods to explore our hypothesis and questions consisted of Pre-Survey, Usability Test, and a Post-Survey, which all aimed to better understand the MBA Willamette site. Our initial process was to develop all materials required in our methodology, such as: Questionnaires (Pre-Survey and Post-Survey), Usability Test Guide for Examiners, and Usability Testing Tasks. We recruited 5 participants who are current students, recent graduates, or affiliates, where most of the participants are familiar with Willamette University. All participants were asked to complete all processes individually with assistance from an observer from our research team.

A. Pre-Survey

The Pre-Survey was given to the participants as the first step in the research process. The purpose of the Pre-Survey is to gauge participant's previous knowledge and familiarity with the Willamette MBA website, as well as understanding the participants' educational background.

Questions asked in the Pre-Survey include:

- Year in School
- Intent on attending/applying to MBA program at Willamette University
- Familiarity with the Willamette MBA website from scale 1 to 4
- General expectations for "easy to navigate website"

B. Usability Test

The usability tests were conducted online or in-person through Zoom in order to allow recording of the participant's screen. During the usability test, participants were asked to navigate the Willamette MBA site to complete a set of tasks.

The usability test aims to find:

- How well does the informations provided on the website (links, buttons, title of pages) aid in helping users to access certain sections of the website
- Navigational barriers or challenges users face on the current Willamette MBA site
- Website design components that could impact the user's experience in navigating the website

During the usability test, participants were given 3 tasks. For consistency, all user tasks began on the Willamette MBA site's home page.

Tasks administered during the Usability Test include:

- 1. Finding a Request for Information form for MBA programs
- 2. Finding the Willamette Graduate Schools application portal
- Finding the Required Courses Description page for an MBA program

C. Post-Survey

Post-Survey was administered immediately after the usability test in order for participants to reflect on their usability test experience with the most accuracy possible. The Post-Survey aims to gauge participants' concerns and struggle points encountered on the Willamette MBA site during the task's completion.

Questions asked in the Post-Survey include:

- Difficulties encountered while executing each task
- Features in the Willamette MBA website that participants find helpful to complete each task
- Participants' recommendations on the Willamette MBA site's navigation on each tasks
- Participants' suggestions on the usability test experience
- Participants' suggestions on the website's navigation and designs
- Whether participants would still be interested in the Willamette MBA program after exploring the website

D. Data Analysis

Our data analysis consists of the analysis of 2 separate types of data.

- 1. Quantitative data, such as time to complete a task
- 2. Qualitative data, such as the sentiment of each participant after the task

Quantitative data is slightly easier to analyze. We organize the data by participant, and look at the time each task took. We also count the number of clicks taken to complete the task. This allows us to assess how mechanically easy it is to navigate the website, and observe specifically where struggle points occurred. Did one task have an abnormally high click count? What part of the site design caused this? To this we go to qualitative analysis.

Qualitative data gives us important information about the state of the participant – specifics about which portion of the

site the user perceives as causing the problems. Using this data we can formulate the actual point and cause of struggle when navigating the site.

IV. RESULTS

A. Ouantitative Results

In Table #1 we list the participants, the time (in minutes:seconds) each task took, and the clicks each participant used to complete the task.

P# represents the participant

T# represents the task number

C# represents the number of clicks.

	T1	C1	T2	C2	Т3	C3
P1	2:54	13	0:09	3	0:55	4
P2	0:11	1	0:24	3	1:27	6
Р3	0:15	1	0:16	3	0:34	4
P4	0:50	1	1:00	5	0:25	4
P5	0:15	1	0:32	3	0:37	5

In this we can clearly see most tasks were completed in a timely manner. Importantly, there are a couple exceptions. Overall, this means the site based on our limited research, while having some issues, is generally navigable.

In P1:T1, the time got greatly increased by accidentally navigating out of the MBA site and onto the Willamette site unknowingly. The reason for this is the "Request Information" button didn't correlate exactly with what the user believed would take them to the desired page. This resulted in getting lost on the Willamette website before returning to the MBA home page and finding the correct form.

In T3 we see a medium sized range of times. In general, most students were able to navigate to the page, however, the "Go" label for the curriculum made many people skip over an essential step to finding the correct information.

B. Qualitative Results

Qualitative data presented were gathered from participants' survey answers and researchers' observations.

In the first task, which is navigating to the Request Information form, participants generally found it easy. The only observation, from one participant, was that having a "Request Information" button to go to a form where you input your personal information was mildly confusing. Importantly, those with prior knowledge of the Willamette website design found this the easiest task.

In the second task, essentially nobody struggled. The "Apply" button was front and center of the main page, and most users found this almost immediately. One participant noted that the menu at the top was helpful as well. Regardless of the path taken, no users struggled with this.

In the third and last task, some participants struggled. For some participants the "Required Course" button was said to be missable, albeit obvious once noticed. Another participant navigated to a list of courses, but not the descriptions. The only other recommendations were about the "Curriculums" tab which had the clickable "Go" button, which according to the participant misdirected them about the nature of the button, and believed it would navigate them somewhere unhelpful.

Participants gave their overall experience in the Post-Survey. One participant noted that the main page could be less cluttered. Otherwise, the consensus seems to include a general feeling of satisfaction, and all participants wouldn't give up on the program from the experience.

V. DESIGN RECOMMENDATIONS

Based on results found above, the design recommendation for the Willamette MBA website are below:

- Avoid using inconsistent terms: for example, avoid alternatively using "curriculum" and "requirements".
 This seemed to confuse participants when they intended to find the required course information.
- Adding more color contrast to the website's design: a
 participant mentioned that "everything seems to
 blend together" in regards to the overall white
 background in the website.
- Adding a "dropdown" menu over the links on the website's header to shorten user's time to access information they need.

VI. LIMITATIONS

Overall, based on our study, the Willamette MBA website seemed to be easy to navigate. However, there are few limitations to our research. We conducted the study with 5 participants, which might limit our findings. Our participants' demographics are mostly limited to students and graduates that are mostly familiar with the Willamette website, which we predicted that it might impact our results and design recommendations. Our research also failed to include participants with visual impairment, which resulted in accessibility being left out in our design recommendations.

VII. DISCUSSIONS

With the outliers, every single one occurred from some kind of misdirection off the most direct path. This misdirection occurred because of these reasons:

- The required button did not seem like the correct answer
- b) Another button was clicked which took the participant in an alternative direction.

The longer the participant remained in this incorrect branch directly related to how large of an outlier it was. This shows that while often the correct button is the most obvious, not everyone will correctly identify it, and may get misdirected. Overall, we do not believe this occurred frequently enough or severely enough that it is a problem, especially when the main

outlier was described in the Post-Survey by the participant to be because of confusing wording by the task, and that had they been a prospective student looking for the same thing, they likely would not have made the same error.

Similarly to results for [1] and [2], the main concerns and pain points on the websites being reviewed are inconsistent content or design, and the lack of design elements that attract or entertain users to spend time exploring the sites. This could be caused by the fact that these websites are for education institutions where they are most likely to be informational and dense. We also recognize that the lack of color in the website design might be impacted by the color restriction of the institutions or the accessibility aspect of the site.

One aspect of navigation that the Willamette MBA website has successfully executed was that it requires users to explore fewer links when they are trying to find specific information, which was one of the concerns of [1].

VIII. CONCLUSIONS

The Willamette MBA site is overall easy to navigate, and what few recommendations we have were outlined clearly. Since our findings and study have limitations, we recognize that there are possible future works that will expand our findings.

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REFERENCES

- Basher, H. T., Gacus, D. M. K. C., Mingo, R. P., & Ambe, A. M. H. (2014). A user-centered evaluation of a university website. Journal of Industrial and Intelligent Information, 2(3).
- [2] Hasan, L. (2014). Evaluating the Usability of Educational Websites Based on Students' Preferences of Design Characteristics. Int. Arab. J. e Technol., 3(3), 179-193.
- [3] Manzoor, M., Hussain, W., Ahmed, A., & Iqbal, M. J. (2012). The importance of higher education website and its usability. International Journal of Basic and Applied Sciences, 1(2), 150-163.