

FINAL REPORT

TITLE: Competitive Analysis for the MHI Website

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PROBLEM

University of Michigan (UofM) School of Information's website was recently revamped. It was made quite well but our client felt it was a good time to get feedback on the website. This report will only focus on the Master's of Health Informatics (MHI) page.

The MHI program at the UofM is a joint program between the School of Information and School of Public Health. There is thus a lot of information to present to users. This has to be done in a way to avoid confusion and provide a clear message.

METHODS AND RESOURCES

We as a team of four utilized Jira and Kanban to divide our work and work efficiently. We created 25 stories in total. Each containing a summary for tasks of action that we need to complete in a week's time.

- One major task was to understand how well the website compared to other top-ranked MHI websites in the country.

>>To select top-ranking school's we used the College Choice website to determine which website to review. However, because we as a group recently applied to graduate school, we realized we needed to include the University of Washington as it is ranked the best or second-best program in Health Informatics by other metrics. Thus, we had a list of six schools to review and there are as followed:

1. University of Michigan
2. University of Washington
3. UC Davis
4. University of North Carolina
5. University of North Carolina - Charlotte
6. John Hopkins

>>We ended up using three approaches to review the websites. The three approaches were **UX/UI's perspective, cognitive walkthrough, and cellphone review.**

>>For the UX/UI, we took inspiration from Amy Isaman who is a website designer and website coach as a way to review the website.

>>One of the other methods that were used to compare the user perspective of the different schools of information websites is called a **cognitive walkthrough.**

Cognitive walkthrough (CW) ‘ evaluates the degree of difficulty to accomplish tasks using a system to determine the actions and goals needed to accomplish each task. The use of the CW allows for the analysis of the different websites from a user perspective. For the analysis, the CW was done in the perspective of a prospective student. The CW was used to rank the websites viewed on the ease of access, viewability of the programs available in the School of Information, lack of pop-ups that would distract the user from the information they are looking for and the last was the ability to view the thoughts from alumni or current students. With this information, a scale of 1 to 5 was formed and points appointed to each school as seen in the attached spreadsheet.

- Our second major task was to understand how well the mobile website of each University compared to other top-ranked MHI websites in the country.

>>For the cell phone review, our group had to modify our rubric as somethings were not applicable and/or redundant. The main focus of this review was to assess how much the mobile experience was similar to the desktop experience. Additionally, since the users will presumably use the website on the go while on the phone navigation played a bigger role in our assessment.

- A third major task was to create the scorecard to convert the textual information into qualitative ranks, to better evaluate where each website stands

>> Basically to create this, we divided ourselves into two sub-teams. One team did the cognitive overview and website review as mentioned above. The second team analyzed the textual bulk of evaluative data that the first team created and created categorical bins. For example, Aesthetics, MHI content, Usability, etc. After creating these bins, we ranked each category for each of the 6 websites. For example, UNC Charlotte ranked 5 in Aesthetics and 3 in Navigation. After ranking each university, the ranks were added up for final comparison.

RESEARCH AND ANALYSIS

For the analysis part, we will focus on the University of Michigan only as the objective is to see how we can improve the website. For a detailed analysis of other websites, we will suggest reading the scorecard where there are numerical ranking and qualitative information. The **scorecard** will show you how each University fared with regard to each category. There is a total rank and an explanation of what was missing and could be better.

Here is a link for reference

<https://docs.google.com/spreadsheets/d/1DzUTFaPvixQi7aV-gT6LKghoe8ELjmLjH7yJZ-0kWb4/edit#gid=0>

>>The Good:

In general, the UofM does a great job in standing out from the other programs. First, the visuals establish a clean modern look that helps users appreciate the website and perhaps give a good impression of being up to date. Secondly, the use of pictures and videos does add life to the program as other websites did not include much than just text. Additionally, in the course curriculum, there are links to the course syllabus. This helps prospective students to take good mental pictures of the program. On the desktop review, navigation through the website flows seamlessly and content is organized in a practical manner. Probably what distinguishes this program's website from other websites is describing its unique competitive edge. In other words, the website does a good job explaining MHI's value.

>>Area for Improvements:

Although, the UofM's website is top tier from their competitors, there are ways to improve the website.

>We noticed that for other websites, social media links directly to the program. In the case of UofM, it links to the School of Information which may lose the message of where MHI falls as it is also linked to the School of Information.

> As mentioned previously, the MHI program is a joint program with the School of Public Health. However, much of the content is School of Information heavy. Adding or redesigning the

part of the MHI page can really drive the message home of the unique combination of this joint program.

>>Ways to Distinguish from Competitors:

> Another way UofM's website can improve is to have a stronger current MHI staff and faculty. A big reason why students graduate school is because of Research. Thus, if prospective students are able to see some of the research of the faculty this may increase the likelihood to consider applying. Additionally, a direct message from the director of the MHI program to prospective and/or current students. We believe providing a stronger faculty/staff presence on the website can help to understand the program better.

SUGGESTIONS

To have a well-working website, it needs to be created with the user in mind and to address the user/ stakeholder needs. With this, our recommendation includes:

- 1) Conduct ongoing and extensive user testing: User testing with all groups that use the website during any future redesigns, utilizing surveys and questionnaires to determine the specific needs of all users, and using the Rapid Iterative Testing and Evaluation (RITE) to efficiently incorporate changes while user testing is occurring. One way to do user testing is the use of survey questions from the users, an example of this is attached to this report. The survey has questions with answers in the 5 points Likert scale format as well as questions that are open-ended and allow the user to give their opinion in their own words. Benefits of the survey include but are not limited to ability to identify trends that appear from analysis of the survey questions. The questions could identify a problem area that the users have that may not be apparent to the website designers. Another benefit is that it opens communication between the users and the website developers, allowing for growth in the right area and customer satisfaction.

- 2) Adding user interactive widgets: Tools such as a chatbot to aid the prospective students and the current students to answer their queries and help them out with their issues that are not listed in the frequently asked questions. A chatbot option is more like an automated system that imitates a robot-like program and interacts with the user via messages and connects to a real staff member when it reaches a point where it cannot answer the user. Hence we suggest an on-spot interactive user tool so that the website is more user-friendly.

>>Some of the detailed suggestions with regard to a chatbot are:

- It is important to clearly identify the personas expected to engage with the chatbot. This helps mainly to craft relatable content and fine-tune the terminology and tone used.
- Start small and try to avoid solving each and every problem immediately. Let the chatbot learn what people are asking for and make the recommendations on content.
- Define what success looks like for your chatbot – understand what the chatbot is supposed to achieve so you know whether it is working or not. Is it reducing service calls? Has it increased sales leads?
- Feed your chatbot with information your students don't have.
- Let it answer all the "What do I do now?" questions. Eg "What do I do if I miss the date to de-enroll for a course?"
- Turn the chatbot into a campus guide. They'll instantly get the information they need, and staff won't need to answer redundant questions.
- Let it take care of paperwork Eg "*I want to apply for the summer apprenticeship program.*" The chatbot can take the relevant details from the student, and give them a link to the form.

>>We came up with a framework on how the chatbot should conduct itself.

Primarily the chatbot will ask you to choose a top category and then give you a choice of a subcategory. The following is an example:

Choose one of the three categories

A) Are you a current Student?

Choose one of the categories :

- 1> Academics Eg Exams, enrollment dates, classes
- 2> Events Eg timings, locations,
- 3>Facilities and Buildings Eg Hours, location, eligibility
- 4>Student services and benefits Eg Fees , salaries, jobs, scholarships
- 5>Forms and documents Eg Eligibility forms, application forms

B) Are you a Prospective Student?

Choose one of the categories :

- 1> Admission Eg forms, administrative processes
- 2>Fees Eg website links, processes, requirements
- 3>Mentor Application Eg Mentor form, communication contact
- 4>Buildings and facilities Eg Hours, communication contact
- 5> Student services and benefits Eg jobs, salary, scholarships

C) Are you an Alumni?

Choose one of the categories:

- 1> Documents Eg Transcripts, exit forms,
- 2> Student services Eg graduation,

>>Here are some sample questions the chatbot might have to be competent in answering:

- a), What is the deadline for registration? What should I do if I miss the deadline? How do I withdraw from classes?
- b) What are the hours of the Sweetland Writing Center?

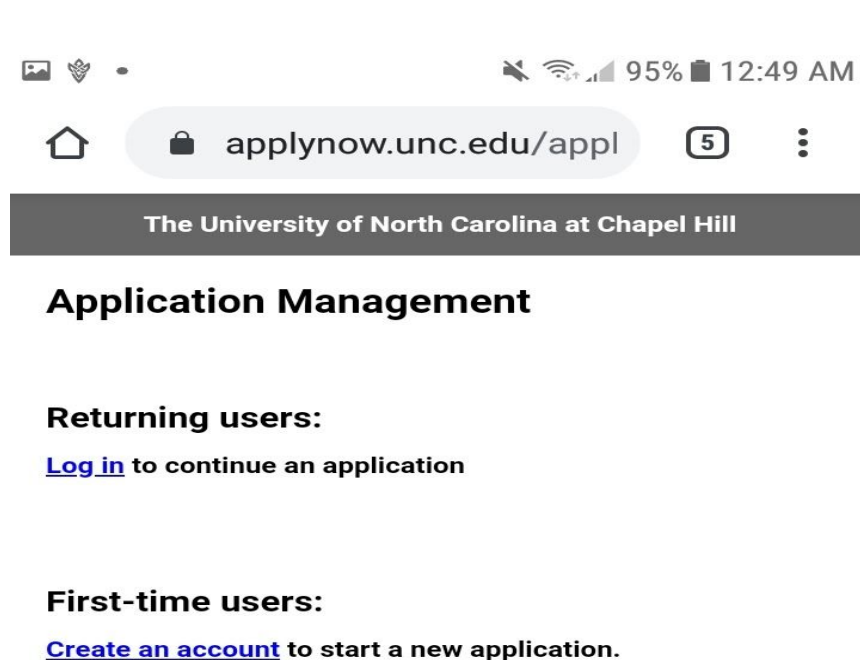
- c). Where do I find the form for the summer scholarship?
- d). What process do I follow to make the payment of my fees?
- e). Where are part-time jobs posted?

3) Having a regularly current students/alumni column: Having a webpage that is regularly updated with reviews and experiences from the current and alumni students.

We hope that our suggestions would allow the School of Information to look into some of the crucial user-based potential features and recommendations while the website is still being updated and before its implementation. “The usability engineer and team must define a target population for testing, schedule participants to come into the lab, decide on how the user’s behaviors will be measured, construct a test script and have participants engage in a verbal protocol”.

APPENDIX

Seen below are some examples of the mobile view of some of the competing school of informatics programs and our reviews on them.



University of North Carolina.

This is an example of a poor design seen on research, after clicking on a few links the user is directed to the page as seen above that is titled ‘Application Management’ but caters to user login



University of California, Davis

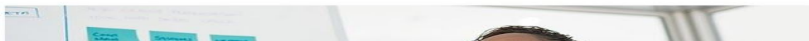
Seen here is an example of a poor design where the aesthetics are off as seen with the line that runs through the emails.

step into leadership and technology roles in the development and management of enterprise-level health information systems. Our program offers a unique curriculum that combines leadership development with in-depth training in the rapidly changing field of health IT.



Alumni describe the Master of Health Informatics & Health Information Management curriculum and how the program helped them prepare for careers in healthcare.

The University of Washington, on the other hand, has a website that is viewable on both the mobile and the webpage site. The youtube video allows a first-time website visitor to immediately see what the alumni think of the program



PROGRAMS

- Why study information?
- Bachelor of Science in Information
- Master of Science in Information
- Master of Health Informatics**
 - How do I apply?
 - Curriculum
 - Internships
 - Career development resources
 - Engaged learning
 - Tuition and funding
 - Career outcomes
 - Connect with us
- Master of Applied Data Science - Online
- PhD in Information
- Courses

Master of Health Informatics



The U.S. National Library of Medicine defines health informatics as the interdisciplinary study of the design, development, adoption and application of IT-based innovations in health care services delivery, management and planning.

The health informatics field

The Master of Health Informatics at the University of Michigan is a joined degree, featuring courses and faculty from the School of Information, School of Public Health and the School of Medicine Department of Learning Health Sciences.

WHAT IS HEALTH INFORMATICS? >

University of Michigan:Great home page!

Johns Hopkins School of Medicine

Division of Health Sciences Informatics

[ABOUT DHSI](#)
[GRAND ROUNDS](#)
[ACADEMIC PROGRAMS](#)
[DHSI COURSES](#)
[PEOPLE](#)

[Academic Programs](#) / Master of Science in Applied Health Sciences Informatics-Campus Program

MASTER OF SCIENCE IN APPLIED HEALTH SCIENCES INFORMATICS-CAMPUS PROGRAM

This program **does not** qualify for F-1 or J-1 student sponsorship. Legal Permanent Residents and non-immigrants who are otherwise physically present in the U.S. **and** in a status that allows for full or part-time study, may pursue this program.

CAHIIM Degree Accreditation Pending

Applications for the 2020-2021 academic year will be accepted from September 1, 2019 through March 15, 2020. (The application is made available through the Johns Hopkins School of Medicine [here](#).)

If you are interested in taking individual courses offered by our Division under special student status, please contact Kersti Winny at kwinny@jhmi.edu or 410-502-3768.

About the Program

John Hopkins University-The first line of this page goes straight-talking about legal resident issues and not about the program. Additionally, the contact information does not look inviting or appreciable Lastly, the visuals look outdated.

Meet Our Student Ambassadors

Student ambassadors are here to help prospective students learn about at the University of Washington. They have a wide variety of experience interested in connecting with a student ambassador, please email our development specialist, Emily Batlan, at batlae@uw.edu.

Barb Tisi

Student Ambassador — 1st year UW MHIHIM student



I was born and raised in Nairobi, Kenya and moved to Minneapolis, Minnesota where I spent most of my childhood. I completed my undergraduate degree at the University of North Dakota, Grand Forks where I majored in nursing science. I started my professional career in nursing at Mayo Clinic before moving to Washington at the University of Washington Medical Center. I wanted to make a career change. I had su

University of Washington: Interesting concept of having a student ambassador.

REFERENCES

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2. <https://www.virtualspirits.com/chatbot-success-stories-cqu-university-chatbot.aspx>
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