Web Content Audits: A Powerful Tool for Complex Website Design
SCC1 2021 Presentation Script
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Slide #1 - Title slide (Sonia)

We are part of a project funded by the National Academies of Sciences, Engineering and Medicine's Gulf Research Program to help people make smarter housing decisions based on natural hazard risks and mitigation of those risks. Our focus is on the Gulf of Mexico states: Texas, Louisiana, Mississippi, Alabama, and Florida. Today, we're going to talk about how website content audits helped inform our research.

Slide #2 - Project Overview (Sonia)

Our project team is led by UCF. The team is large and multi-institutional, with engineers, affordable housing coordinators, biologists, public administration researchers, and community outreach coordinators represented. Our goal is to give renters, homeowners, and homebuyers a more complete picture of potential natural hazards–such as hurricanes, flooding, and tornadoes–and what it would take to protect a property against those risks. While there is a wide array of hazard and risk information in the U.S., finding it can be time consuming for the average person. The project team is gathering hazard information, analyzing it, and creating a rating system or "HazardScore" for every residential parcel in the Gulf region.

One of the main ways that the project team will be sharing this information is through a website portal called "HawardAware." The website will provide information on the past hazard history and potential future hazard changes for each individual home building within the study area. Website users will be able to look at their property, see their overall HazardScore, look at how different hazards contribute to their score (e.g., wind risk or flood risk), and then see what their options are in terms of costs and benefits for mitigating hazards. For example, a homebuyer could compare the potential future hazard-related losses from two different homes, and weigh that along with the home prices when they are making a decision. For homeowners, the website will provide cost-benefit information about different types of mitigation options they have for their existing home. For town planners and others who make decisions about hazard mitigation at the community level, the website will provide additional information and tools to help them make decisions about neighborhood-level hazard mitigation options and resilience.

Slide #3 - Project Overview continued (Sonia)

In order to build the website, we have had to make decisions about how to represent different types of data, including past natural disaster history, local building codes, and future changes to flooding due to sea level rise. This graphic shows the overall design process from the perspective of our communication strategy. I should note that it leaves out a lot of the technical and back-end server components that require decision-making as well.

We have different members of the project team working on different parts of this project, and as you can see there are a lot of moving parts. Amanda and I are working on the three components highlighted in yellow: the comparable website content audits (which we'll be talking about today), formative interviews with target users for the website (which we're conducting now), and usability testing once the website is complete.

Slide #4 - What is a content audit? (Amanda)

- For those of you who are not familiar with a content audit, we would like to give you some background on what a content audit is.
- A content audit is also referred to as a content analysis
- Content audits are useful because they offer a few benefits. Using a content audit:
    - Results in a clear, tangible description of your content.
    - Provides the foundation for comparing existing content with either user needs or competitor content, letting you identify potential gaps and opportunities.

Slide #5 - How is a content audit used? (Amanda)

- You can use a content audit to collect data on several categories of website features and functionality including:
    - What kind of content?
    - What's the balance in images and words?
    - What about colors and interactive features?

Slide #6 - Methods (Amanda)

- As the scientific and technical communication resources for this project, the content audit served as our primary method to simplify the complexities of the HazardAware website design.
- For this method, we created an Excel workbook that contained a worksheet with websites that we divided into two genres: realtor and flooding risk.
- For each genre, we documented website content (e.g. images, words, colors and interactive features) on both the community individual home levels.
- The images on the right-side of the slide list the individual data sources for each genre.

Slide #7 - Example Data Sources (Amanda)

- This slide provides a website screenshot of two different data sources.
- The image on the left-side is from the realty website, Zillow. It shows an example of how they depict individual home details.
- The image on the right-side is from the flooding website, FloodFactor. It shows an example of how they depict flood risk for a specific property address.

Slide #8 - Example: Realtor genre (Amanda)

- Here we have an example of how we designed the realtor genre sheet for content audit.
- As a visual queue, we color coded our sheets by feature category.
- In this example, the orange area represents navigation features, yellow represents community features, and purple represents individual home details.
- After completing our audit, we used spreadsheet data to develop a website design recommendation report that we shared with the project team.

Slide #9 - Results: Informing Interface Design (Amanda)

- Next, we'd like to share how the results of the content audit are already actively informing the interface design of the HazardAware project.
- First, we used our results to help develop wireframes that were designed from a user-centered design lens.
- Secondly, we review various sites that used various calculations to depict proprietary mitigation risks and scores. This was useful to us in considering how to design our custom tool that we call the Mitigation Calculator.
- Finally, the recommendations we shared based on the audit helped the web developers implement a preliminary website design, which is shown on the right here as a screenshot of the draft design of the HazardAware website.

Slide #10 - Results: Data Visualization & Structure (Amanda)

- Another couple of areas that were impacted by the content audit results were the information visualization and structure of the HazardAware website.
- The audits helped us understand how we could visualize risk because we were able to study how other sources visualized risk using their own Risk Score designs and data mapping tools.
- They also had a significant impact on the information architecture of the website in terms of helping us make decisions on how to prioritize the types of natural hazards that we would include and the kinds of educational content that we should make available to users.
- In addition, it also helped us identify uniquely specific features that we wanted to include. For example, we are currently working on including the ability for users to view and download a custom PDF report that they can choose to generate based on the address that they search on the website.
- Now that we have covered the details of the content audit as well as our methods and results, Sonia will conclude our presentation and lead us into our discussion.

Slide #11 - Conclusion: Content Audits Simplify Complexity (Sonia)

We'd like to conclude by summarizing a few ways that content audits helped us simplify complexity.

- First, they helped us communicate about what we identified as key website features and functionality to the broader project team.
- Second, they helped us articulate several issues related to website features and data limitations. For example, one discussion we're having after the audits is whether users should be able to create accounts and adjust the information about their house in the website's database.
- Third, we used them as a mechanism for systematically reporting results, which helped us streamline collaboration with the project team.

Slide #12 - Discussion (Sonia)

Thanks so much for listening to our presentation. If you'd like to contact us, our information is on this slide.

We've prepared two possible discussion questions:

- What are your questions about using web content audits to inform complex or interdisciplinary website content?
- What methods have PTCs used to bridge disciplinary and/or methodological divides within interdisciplinary project teams?