From Identification to Inclusion

Strategies for Assessing, Remediating, and Sustaining Digital Assets

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Background
My experience

- **Senior Accessibility Analyst** at Siteimprove, since March 2022
- Previously:
  - **Newspaper reporter** turned web developer
  - **Web Designer/Developer** in IT at state university
  - **Senior Web Designer/Developer** in Institutional Marketing at state university

Agenda

Who will benefit from this presentation?

- Accessibility beginners/novices who are tasked with making their website accessible and may not know where to start
- This is applicable to any type of organization, team size, CMS, framework, etc. Topics covered in this presentation are fairly high level and are not dependent on any specific technology or organization type
- Topics:
  - Identifying Digital Properties
  - Accessibility Audit
  - Remediation Strategies
  - Digital Accessibility Policies
  - Education and Training

Background
Office of Civil Rights (OCR) Complaint

- 2017 - OCR complaint filed against our domain
  - Some were automated checks that passed manual verification (i.e. color contrast)
  - Some of the elements identified were legitimate barriers
- Two people on the web team at the time
  - We oversaw all of the CMS sites
  - 50k+ pages, 400+ Site Authors with varying skill levels
  - Where do we even start?
- University Size (at the time)
  - Approximately 12,500 students, 700 Faculty
  - Population around 31,000

Step 1: Identifying Digital Assets

Identification
Site Inventory Audit

- Why perform an Inventory Audit?
  - Identify all digital properties across domain
    - (Pages, PDFs, subdomains, 3rd party systems)
  - Assign responsibility to content owner
  - Can help guide remediation strategies
- The scope of the OCR complaint meant that we were responsible for everything on the domain
  - The web team knew what lived within the CMS, but…
    - We were also aware of other digital properties that lived on the domain
    - What scared us most is what was out there that we didn't know about

Identification
How to Perform Inventory Audit

- Collaborated with IT department
  - Identify sites that had requested server space (outside the CMS)
  - Subdomains
- Site Crawlers
- Google Search Console
- Google Analytics

Identification
Site Inventory Audit

- What we found:
  - Student websites
  - Faculty websites
  - Club/Organization Sites
  - IT Websites
  - Library Websites
  - Athletic Ticketing site
  - PDF Documents (Human and Machine Generated)
  - Third Party applications

Identification
Now what?

- Start assigning an owner to each property
- CMS Cleanup
- Domain cleanup
  - Sites outside of the CMS were given three options:
    - Move into the CMS
    - Move into LMS
    - Remove university branding and move to private hosting
    - There was an exemption process, but started being abused

Step 2: Accessibility Testing

Accessibility Audit

Automated vs. Manual testing

- A comprehensive accessibility strategy includes both automated and manual testing
- Automated testing
  - Great at covering the breadth of your site
  - Great at identifying trends
  - Con:
    - Only 20-30% of WCAG success criterion can be checked automatically
- Manual testing
  - Human performed conformance testing covering all WCAG Success Criterion
  - Performed using multiple testing environments and assistive technology
  - Con:
    - Representative sampling of page templates
    - Some WCAG checks are subjective (may get different results across testers)

Accessibility Audit

Why perform a manual accessibility audit

- Benefits of hiring an external auditor
  - Eliminates bias to get a true sense of existing barriers
    - In both testing and reporting
  - Let someone else be the bearer of bad news
  - Subject matter experts in the nuances of WCAG and user types
  - Access to resources and tools you might not have
    - Screen readers and the training to know how to use them
    - Knowledge on how to test certain techniques

Accessibility Audit
RFP to find accessibility vendor - 2018

- We wrote a Request for Proposal to find a third party accessibility vendor
  - Obtained their automated accessibility checker and reporting tool
  - Vendor performed manual testing on a representative sampling of pages
  - We also purchased a block of support hours which we utilized to help us
    - Develop a Corrective Action Plan
    - Consult on code fixes and re-testing certain modules

Step 3: Role Based Training

Role Based Training

Providing training for users based on the content they create

- Developers will need more code-based accessibility training to develop accessible templates and remediate existing code
  - Template level coding/remediation
  - Developing accessible and reusable components
  - Solid understanding of ARIA roles and attributes
  - Using semantic HTML elements
- Content authors generally need more guidance on content level issues
  - Page structure and formatting content
    - Lists
    - Headings
  - Providing context
    - Writing appropriate alt text
    - Descriptive heading and labels
  - Color contrast

Role Specific Training
What did we do?

- Web team was approved to attend WebAIM's In-Person Accessibility training
- Weekly CMS Office Hours
- Collaborated with our IT Trainer to start incorporating accessibility best practices into CMS training classes
  - This eventually led to the creation of a Web Accessibility training course that was required to gain access to the CMS (more about this later)
  - We tried to have at least one person from the web team attend these monthly trainings to answer CMS and accessibility related questions

Step 4: Digital Accessibility Policies

Digital Accessibility Policies
Policies

- Policies:
  - Reduce legal risk by defining which standards and conformance level you are adhering to
  - Set expectations for internal and external audiences
  - Can narrow the scope of work
  - Streamline future development by setting clear guidelines
  - Strengthen your commitment to inclusive access
  - Lay out the repercussions if the policy is not met
- Take the time to ensure that it is thorough, concise, and **enforceable**

Digital Accessibility Policies

What should be in your policy? (My opinion)

- Define your WCAG version and level that your organization agrees to adhering to
  - For most organizations, that will be WCAG 2.1 Level AA
- Existing content
  - Set a cutoff date and archive any content that hasn't been updated since that date.
    - News articles, blog posts, pages, documents
    - Archive or remove old content
    - This will reduce the amount of content that needs to be remediated
  - Timeline for remediating existing content
- New Content
  - Should meet or exceed the standard defined in your policy
  - Workflows that ensure new content is being developed and checked for compliance
    - Role specific training
    - Monthly automated checks
    - Randomly selected pages for manual testing

Digital Accessibility Policies

Communication Strategy

- Begin communicating the importance of inclusive access
  - For internal audiences
    - Why accessibility matters
    - Communicate expectations of having a website and timelines
  - External audiences
    - User feedback surveys
    - Is there a method provided for users to report barriers and request alternative formats? (Do they know about it?)
- Highlight wins, even the small ones!

Digital Accessibility Policies

Our policy

- Mandated all CMS site authors take a Website Accessibility training course that was developed by our IT Trainer and Web Team
  - Online, Self-paced training in our LMS
  - If site authors failed to complete the training by the deadline, their CMS access was removed
- New site authors were required to complete the standard CMS training course and website accessibility training
- We started adding accessibility tips and tricks to our monthly CMS newsletters
  - Began communicating our goals, timelines, and expectations of our site authors

Step 5: Remediation Strategies

Remediation

What to do after you get your results

- You've done your domain cleanup, put in place your accessibility policies, developed role specific trainings, and now you've received your manual testing results. It's time to get to work!

- There is no wrong way to prioritize your remediation. Your remediation efforts are going to depend on your resources, platform, third party integrations, and site structure.

- Establish priority levels that make sense for your organization
  - There is no universal standard for priority levels, but that's a good thing!
  - Can be based off of conformance level, effort to remediate, total number of issues, number of pages affected by issue, or any combination of metrics.

Remediation
Priority Examples

- High - Level A
- Medium - Level AA
- Low - Level AAA

- Severe - Content blocking, Interactive elements cannot be reached
- Medium - Missing accessible names, but can be determined through context
- Low - Inaccurate alternative text

- High - Combination of large user impact, frequently visited page, and/or high difficulty to fix
- Medium - Combination of medium user impact, semi-frequently visited page, and/or moderate difficulty to fix
- Low - Combination of low user impact, rarely visited page, and/or low difficulty to fix

Remediation
Template vs Content level issues

- Template level
  - Example: Global elements (Headers/Footers/Sidebars/Cookie Banners/CSS)
  - Reusable components
  - Allows for fixing the issue in a single location and having it fixed sitewide
  - Requires less effort to have a big impact
- Content level
  - Example: Page structure, alt text
  - Each issue is unique and will need to be addressed individually
  - Responsibility of site authors

Remediation

Other ways to prioritize

- Combination of Automated and Manual Testing results
  - One doesn't take priority over the other
- Issue Severity
  - Remediate content blocking barriers first
- Analytics
  - Fix high traffic pages first
  - Page with significant barriers, but little traffic might have lower priority
- Low hanging fruit
  - Issues that require little effort to fix

Step 6: Moving Forward

Moving Forward

New content and ongoing maintenance

- Ensure new content is being created with accessibility in mind
- Accessibility requires continual effort, education, and resources
- Accessibility is everyone's responsibility
  - Admissions - Ensuring application process is accessible
  - HR - Hiring people with disabilities
  - Developers
  - Content Authors
  - Marketing
  - Faculty

Moving Forward
Shifting Left

- Accessibility shouldn't be an afterthought
- Integrate accessibility practices earlier and more frequently into the development/content lifecycle
  - Move away from build first, remediate later
    - More expensive to remediate content than to build it accessible from the start
    - Takes resources from other projects or remediation efforts
- Shift to internal training that is specific to your internal tools, roles, branding, and marketing guidelines
- In-house SME's are now trained and have the tools to perform manual verification

Moving Forward
Ongoing reports and accessibility checks

- After selecting and launching our accessibility tool, we generated an accessibility report for all known sites

- Going forward we would send these reports out on a quarterly basis

- One thing we quickly discovered was the automated checker was flagging global elements that the site authors had no access to change

  - This resulted in a lot of frustration

  - To resolve this, we created work-study positions that would generate these reports for departments and pull out the issues content authors couldn't fix on their own

- After 2+ years of hard work, we were able to resolve our OCR complaint, but the work continued!

Questions?

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