Is the Accessibility Audit Dead?

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Abstract. The Accessibility Audit has long been a staple of the usability professional and web accessibility specialists' toolkit. An audit is where problematic issues that limit the accessibility of a web site or application can be highlighted in a granular fashion, solutions outlined and statements of conformance to accessibility guidelines, like WCAG, teased out. However, in practice is the accessibility audit really the right tool for the job? As a methodology does it efficiently help to advance the cause of improving the accessibility of web sites and applications? Or effectively raise awareness of inclusive design amongst developers? Or is it merely an inert rubber-stamping exercise that could be replaced or enhanced by more progressive methods? [1]

Keywords: (e)Accessibility and Usability, eGovernment, eInclusion, Policies and Legislation, User Centered Design and User Involvement.

1 Methodology

The paper aims to critically assess the effectiveness of the auditing process and ask if other methods are needed to replace the accessibility audit or to compliment the process, thereby improving the quality of outputs for both the auditor and the client. It is based on the authors experience as an accessibility auditor.

1.1 Introduction

The birth of the accessibility audit came about after the development of the Web Accessibility Initiative's (WAI) first iteration of the web content accessibility guidelines. This established a methodology by which accessibility conformance could be assessed. [2]

These kinds of metrics were sorely needed. At the time there were other evaluation guidelines in the software world, and user interface/ergonomics realms, but advocating for quality design on the web was often entirely down to one or two lone voices that were champions of what would later become known as the 'user experience'.

Even for the user groups who could be considered to occupy the imagined 'normal' part of the curve, advocating for the needs of the regular user was in itself an uphill struggle. Never mind when we come to the 'outliers' such as blind, vision-impaired users and other user groups. The general mood was that these groups do not represent a significant target market and can be comfortably ignored. So what changed? In

tandem with the ashes of the browser wars and the adoption of CSS by major browsers vendors, came improved understanding of the importance of semantic markup – for both SEO and Assistive Technologies (AT). All of which has had a positive impact on the digital lives of people with disabilities. This synergy of the Web Standards movement, the increasing impact of the WAI, the writings of Zeldman, Clark and the birth of the WCAG 1.0 - finally changed the landscape for good. The age of choice has also had a huge impact on the need to take the quality of the user experience far more seriously. [3] [4] [5] [6]

2 The Accessibility Audit – A New Way

Many organisations, sensing a sea change, quickly adopted a stance that they needed to accommodate the needs of people with disabilities so the accessibility audit soon became an established part of the new paradigm. To successfully be able to undertake an audit requires a diverse and complex set of skills. The auditor needs to have (non-canonical):

- 1) A good grasp of the technical fundamentals of HTML, CSS, JavaScript, as well as an understanding of dynamic web application development.
- 2) A strong visual design sense and aesthetic.
- 3) Good problem solving skills.
- 4) Ideally "real world" experience of the needs of people with disabilities.
- A grasp of the esoteric WCAG guidelines themselves and an awareness of where they work and where they should not be taken as absolute.
- 6) The ability to be supportive whilst being critical to be able to be the bearer of bad news about the reality of a web site's quality (or lack of) and still leave the meeting on good terms.
- 7) To be able to recognise when designers and developers know what they are doing, and when they don't and how to impart the necessary knowledge either way.
- 8) Understand how various kinds of AT works: from complex screen reader functionality, the Off Screen Model, buffer inconsistencies, DOM updates to single switch access and all in between. [7] [8]

There is also the need to keep informed of emerging trends and how they related to the guidelines. For example, understanding Web 2.0 and AJAX and how they related to WCAG 1.0 was a challenge. Also, the emergence of JavaScript as a useful part of the toolkit (from the shadows as a pariah), to the dawn of WAI-ARIA and HTML 5. As an accessibility practitioner there is a lot to understand and then be able to effectively translate, and provide best practice advise for others. [9] [10] [11]

2.1 The Right Tool for the Right Job?

The audit is of itself a static, dull report. It is often very technical, long, verbose – full of code, screenshots and narrative opinion outlining how to 'fix' things. Personally, I have been doing audits for government agencies, public bodies and private companies

for 6 years. Myself and my colleague, Mark Magennis, put a lot work and thought into designing an effective auditing service that:

- 1) Would meet the needs of our clients.
- 2) Illuminated the main problems, provided solutions and engaged them in the process of inclusive design.
- 3) Was not scary, intimidating and/or useless.

2.2 Après Audit

Following this stage there may be some user testing. We always recommend that the audit results are implemented first and then the user testing that follows (with 8-12 users that represent various user groups) shows us any improvement in the quality of the user experience. User testing is certainly a fantastic way of assessing how well the accessibility auditing process has improved the user experience. It is very effective as a part of an iterative design process. In short, for the results of the audit to be in any way qualitatively assessed there must be a follow on user test and/or some method of assessing the audits effectiveness.

2.3 No User Test, No Point?

A user test is a very different experience for many designers and developers. They may never have had any experience being around people with disabilities. There is often an epiphany, and they can leave a user test 'changed' – this is a very positive and useful experience.

So my question is, without the user test or other assessment methodology does the audit have any value? If so, how? Without some method of evaluation that can provide data outlining the differences between 'before' and 'after'? How can you be sure that an audit is worth it? Are there better ways to achieve improved accessible interfaces and do we need frameworks to establish metrics where we can be sure the results of our endeavours are actually implemented? Audits are often just abandoned to gather dust on a shelf. Over time organisational politics, communication breakdowns between departments, loss of motivation or a sense of urgency etc erode any potency it may have had. Many undertake audits as a rubber-stamping exercise of 'compliance' regardless of the outcome – they are seen to act. Can we effectively counter this attitude and improve the accessibility of the application and raise awareness via other methods?

2.4 Summary

Auditing can often be a time consuming process and I suggest more work is needed to help us critically evaluate the effectiveness of the auditing process and to help give us a greater understanding of complementary or alternative methods that will make the best use of our energies. Some research has shown that the accessibility audit is of benefit. However, I feel it is important to get a clearer idea of exactly what its role is today and ask are there other complimentary methods that could be adopted or replace the audit altogether? [12]

References

- Web Content Accessibility Guidelines (WCAG), http://www.w3.org/WAI/intro/wcag.php
- 2. Web Accessibility Initiative, http://www.w3.org/WAI/
- Microsoft and the Browser Wares, http://heinonline.org/HOL/ LandingPage?collection=journals&handle=hein.journals/ conlr31&div=45&id=&page
- 4. Lessons from the Browser Wars,

http://dialnet.unirioja.es/servlet/articulo?codigo=2310150

- 5. Building Accessible Websites by Joe Clark,
 - http://portal.acm.org/citation.cfm?id=975095
- 6. Designing with Web Standards by Jeffery Zeldman, http://portal.acm.org/citation.cfm?id=1177309&coll=GUIDE&dl= GUIDE&CFID=88258503CFTOKEN=64965267
- Non-visual presentation of graphical user interfaces: contrasting two approaches (Mynatt, Weber) Conference on Human Factors in Computing Systems archive. Proceedings of the SIGCHI conference on Human factors in computing systems: celebrating interdependence table of contents, Boston, Massachusetts, United States, pp. 166–172 (1994) ISBN:0-89791-650-6
- Lemon, G., Connor, J.O.: Managing Multiple Updates in Dynamically Driven Web Applications. In: Proceedings of the 2nd International Conference on Automated Production of Cross Media Content for Multi-channel Distribution, University Leeds. Firenze University Press (2006) ISBN 88-8453-526-3
- HTML5 A vocabulary and associated APIs for HTML and XHTML, http://www.w3.org/TR/html5/
- 10. WAI-ARIA, http://www.w3.org/WAI/intro/aria.php
- Dynamic Accessible Web Content Roadmap, http://www.w3.org/WAI/PF/roadmap/DHTMLRoadmap040506.html
- 12. The Effectiveness of the Web Accessibility Audit as a Motivational and Educational Tool in Inclusive Web Design by David Sloan,

http://www.computing.dundee.ac.uk/staff/dsloan/phd.htm