In Pursuit of Web Accessibility

By John Knight & Marie Jefsioutine, User-Lab August 15th 2003

During the summer of 2003 we ran an online questionnaire, conducted interviews and carried out a literature review on Web accessibility. One hundred and seventeen respondents participated and they included designers, information officers and accessibility advocates. This initial set of results are intended to encourage debate on the subject.

Overcoming obstacles

The obstacles faced by developers are less often discussed than their responsibilities. The survey found that eighty-six percent of respondents agreed that 'Developers do not have adequate training' in Web accessibility. Indeed, a 'Lack of expertise' was given as 'the main barrier to developing accessible Web sites'. On a more positive note, forty-eight percent disagreed that 'Most development lifecycles are too short to incorporate accessibility' and that it 'takes too long was the lowest ranking barrier to accessibility. The EC's Diffuse project (www.diffuse.org) presents a balanced perspective on the difficulties faced by accessibility advocates. It states that 'many of the problems and possible solutions (to accessibility) are technically difficult'. The recent debates about Cascading Style Sheets and Tables are testimony to the obstacles faced by developers; neither solution seeming to be optimal. Alan Herrell, on alistapart, describes the situation as 'Browser hell' where 'there are three major visual browsers' 'none of which allows 'you to use the entire range of accessibility tags' As Diffuse suggests this means that 'a technique that avoids a problem in one browser may cause other, perhaps more serious problems on other browsers. Indeed forty-one percent agreed that it is 'It is impractical to design for all assistive technology devices'.

Raising awareness

The survey suggests a lack of awareness of accessibility among managers. This includes unawareness of the importance of the issue and the barriers to improving accessibility. This might suggest that improving accessibility requires facilitating organisational capability as well as high profile campaigning. Thus 'Lack of awareness' and 'Lack of policies/management' shared second place as perceived barriers to Web accessibility. Indeed, sixty-four percent of respondents agreed that 'Management is unaware of the importance of Web accessibility'. Of those who expressed a preference, a majority, Thirty one percent, felt that 'The legal case for accessibility has been well publicised'. Sixty one percent disagreed that 'The case for accessibility would be helped by legal action'. The vast majority of respondents (ninety-four percent) thought that 'Clients ask for their sites to be accessible'. Whether these clients represent the range of organisations with a Web presence is unclear. Cheryl D. Wise, of Wiserways in Houston observed that 'Some clients come to us because they know that they need to comply with Section 508 Accessibility requirements for government contracts. Others have never even thought about accessibility as a web site issue'.

Taking responsibility

The survey suggests that the burden of responsibility to provide solutions falls upon developers to provide solutions. However, sixty-seven percent of respondents agreed that 'Some WAI guidelines are difficult to implement ' and indeed the difficulty of WAI guidelines was placed third in 'barriers to developing accessible web sites' Some argue that other stakeholders including supply and support organisations could take as greater responsibility for improving Web accessibility. Indeed, evaluation tool providers have been criticised in this respect. An Accessibility Testing Officer posted an apocryphal tale…'Previously, when we planned for the cost of accessibility testing software, we planned to purchase one copy of Bobby. when we planned for the Now, Watchfire's new policy meant that we would instead have to buy up to ten copies of Bobby, increasing the cost to us from $299 to $2,999—hardly a trivial increase. Cheryl D. Wise reports that 'Tools are lacking or horribly expensive for AAA compliance'. As worrying is Diffuse's report of 'The phenomenon that many accessibility-promoting pages aren't themselves accessible'. Even the notion of standards is criticised by some 'what good are standards when browsers change so fast by adding new features every month? OR, the needs or demands of the users change with the latest killer app'?

Generating motivation

A major motivation for improving accessibility is the legal case and the 'Lack of legal action' ranked as the fourth barrier 'to developing accessible web sites'. Interestingly, fifty-one percent agreed that 'Web accessibility provides a return on investment' and eighty percent disagreed that 'Accessibility inhibits innovation'. High-level concerns like social responsibility and liability may not be enough to motivate those at the coalface. Nicky Danino of Site Point, sums up many developers concerns, asking Kynn Bartlett 'How would you undertake the enormous task of convincing designers that accessibility IS important, and there is a place for both extraordinary design and a high level of accessibility?' This is not just an issue of keeping designers on board or of avoiding stigmatising users, by giving them desirable products; all members of development teams need to be committed to accessibility, and most importantly management. Nancy Perlman of Synchordia in London, reported, that 'In order for the development team to be actively engaged, the will has to come from above, from the board room; otherwise, no matter how enthusiastic and dedicated the development teams, their efforts will be stifled by account handlers, marketing and etc.

Improving technology

Forty percent of respondents felt that it is practical 'to design for all assistive technology devices'. However, a majority (fifty-three percent) disagreed that 'Web accessibility is purely a technical issue'. Some commentators see poor accessibility in terms of bad authoring packages, browsers, evaluators and assistive technology rather than nonchalant developers. To some these

technologies are hindrances. Cynthia D. Waddell's comment still resonate years after they were expressed 'In fact, many current web-authoring tools on the market make it extremely difficult to even design an accessible web page. The scarcity of tools also contributes to the lack of education among programmers and web authors on why and how to code an accessible web page. More recently, Diffuse stated that 'authoring tools…often produce pages that have accessibility problems, especially if they are based on "WYSIWYG" … techniques, since such an approach makes it much more difficult to separate content and structure from presentation'. For some, the dearth of decent technology is frustrating. A WCAG discussion included the contribution that 'I should say if those guys (at) Opera, WebEyes and Webformator merged their products and added MSAA to it the world would have a perfect browser.' In the context of CSS integration, the Decloak website argues that 'It's millions of times cheaper and faster to have a single programmer update a popular screen reader or non-visual browser to look for that ID attribute… instead of having millions of web designers … …redesign (their websites).

Facing contradiction

Forty-nine percent of respondents agreed that 'It is impossible to cater for all users' needs'. The trade-offs in web accessibility are reflected in a majority (fifty-six percent) agreeing that 'There is a conflict between usability and accessibility'. Jenny Craven sums up a common attitude that 'accessibility does not equal usability'. Much of the literature questions the text only advocates and points to the opportunities for enriching user experiences for everyone. Diffuse notes that 'there are situations where different problems may impose *conflicting* requirements on accessibility'. They go on to say that 'Up to now, there has been little open discussion about this' and it would seem that work in raising awareness and checking sites is evolving toward solving the practical problems. These include fundamental issues like what is an accessible site? Joe Clark (author of 'Building Accessible Websites) contends that 'it is impossible to declare a certain Web page "accessible" or "inaccessible" for the simple reason that there are too many provisos involved. Accessible to which groups? Under what conditions? Using which adaptive technology, if any?

Improving understanding

Sixty-six percent of respondents disagreed that 'Text only sites are the most accessible' and a majority (fifty-two percent) disagreed that 'Web accessibility is purely a technical issue' and seventy-two percent disagreed that 'There is a conflict between graphic presentation and accessibility'. However, there is still some way to go, when PC world can discuss the rejection of an ADA lawsuit in November last year with a very narrow understanding of the issue.

'Southwest (Airlines) is "exploring some possibilities" to make "our Web site more user-friendly" for the blind or visually impaired. "We do everything we can, obviously, to make this Web site user-friendly. That's always been our focus for every customer," said Turneabe-Connelly. Problems with Web site

accessibility aren't uncommon, and accessibility is strictly a matter of whether a Web site designer "programmed it for people who are blind," said Access Now President Edward Resnick.'

Such confusion is noted by accessibility advocates. Anthony Quinn (no, not the actor) notes that 'Many organizations genuinely believe that if their site passes the Bobby test and displays the Bobby icon, it is "accessible". At a deeper level, some argue that the focus on Web site accessibility detracts from making technology work for the greater good. James Woudhuysen comments that 'I learn that Tim Berners-Lee and the Royal National Institute for the Blind - sponsored by Standard Life - award logos for accessibility to the right kind of Web sites. I have no quarrel with institutions as august as these. But I wonder whether certificates for corporate social responsibility on the Web distract society from the larger tasks of speech recognition and synthesis'.

Improving communication

Fifty percent of respondents reckoned that 'Clients specify WAI guideline compliance'. Accessibility champions and developers often have a less positive experience of the WAI. Joe Clark, notes that 'Virtually all online accessibility resources are glorified rehashes of the World Wide Web Consortium's Web Accessibility Initiative guidelines, which are opaque, *very* poorly organized, daunting, and in many cases unrealistic'. Commenting on Web accessibility resources, Cheryl D. Wise considers that they are 'Uneven, some are reasonably good but too many have usability issues in finding the information your are looking for. The W3C site is a prime example of a visitor unfriendly site. Finding useful information that can be understood by the average visitor is very difficult'. Diffuse sum's up the situation 'The WAI recommendations are often regarded as difficult to understand and fulfil. Although they are relatively brief, they impose a large number of requirements, and an average author probably has great difficulties in understanding both the "why" and the "how" of the principles. The guidelines are relatively abstract, and they refer to three WCAG techniques documents. There is also a checklist. The organization of the documentation uses hypertext (links between different parts) quite a lot, which is often convenient in reference use but confusing to the uninitiated.

http://www.diffuse.org/accessibility.html

Although the accessibility policies are widely accepted by different authorities, the progress in actual accessibility is slow. Web page authors and their employers often lack the basic understanding of the importance of accessibility, despite various awareness raising campaigns. Moreover, many of the problems and possible solutions are technically difficult.

http://www.alistapart.com/stories/politics/3.html

Welcome to browser hell. There are three major visual browsers, Internet Explorer, Netscape Navigator, and Opera. None of these allow you to use the entire range of accessibility tags. Nor is the support for the usable ones consistent. Platform dependancies create rendering issues. Lynx is a text browser. Limited formatting and no visuals allowed here. Screen readers require a whole new mindset in respect to using tables for presenting content.

http://www.jasonlefkowitz.net/blog1archive/000292.html

I'm the accessibility testing officer for a Web development and strategy consultancy. As such, I've relied on Bobby for many years to help identify and resolve accessibility problems with sites. Bobby is a tool that was originally developed by the Center for Applied Special Technology (CAST), a non-profit dedicated to expanding opportunities for people with disabilities. However, last August CAST sold Bobby to Watchfire, a for-profit company, with promises that Watchfire's greater resources would allow them to improve Bobby more than CAST could. CAST had offered two versions of Bobby, a Web-based version for a quick check of one page, and a desktop Java app that could check an entire site in one pass. Naturally, for serious use, the desktop app was the way to go, and I happily used CAST's Desktop Bobby up through the last version, 4.0.1. When Watchfire sent us an e-mail this month announcing the release of a new, supposedly much-improved Desktop Bobby 5.0, I upgraded right away. (Early upgraders, like me, only paid $99; the list price of the software is $299.)

http://www.sitepoint.com/article/694/2

 SP: How would you undertake the enormous task of convincing designers that accessibility IS important, and there is a place for both extraordinary design and a high level of accessibility?

http://www.decloak.com/Products/Dreamweaver%20/NestedTemplates/TablesOrLayers.aspx

OFF-TOPIC: What about W3C Standards and all the other stuff?
W3C standards are totally useless.
What good are standards when browsers change so fast by adding new features every month? OR, the needs or demands of the users change with the latest killer app?

http://www.diffuse.org/accessibility.html

The phenomenon that many accessibility-promoting pages aren't themselves accessible is often caused by the *site design* of the organization that hosts the accessibility activity.

http://www.aasa.dshs.wa.gov/access/waddell.htm

In fact, many current web-authoring tools on the market make it extremely difficult to even design an accessible web page. The scarcity of tools also contributes to the lack of education among programmers and web authors on why and how to code an accessible web page.
http://www.diffuse.org/accessibility.html

Authoring tools, i.e. Web page creation software, often produce pages that have accessibility problems, especially if they are based on "WYSIWYG" ("What You See Is What You Get") techniques, since such an approach makes it much more difficult to separate content and structure from presentation.

http://lists.w3.org/Archives/Public/w3c-wai-er-ig/2002Apr/0035.html

I should say if those guys of Opera, WebEyes and Webformator merged their
products and add MSAA to it the world had a perfect browser for people with
vision loss, including the growing group of elderly people.Problems are scrollbars, information
that hide, bad color contrast, text images.Opera is a "better" browser for low vision people
than Internet Explorer, but because it does not include support for MSAA it is impossible to
read aloud pages in Opera.by disabling tables in Opera it is possible to use a large font
without scrollbars and also images magnify in Opera.But on some pages this also results in
nasty formatted pages with a lot of blanks and loss of information.Web Eyes never shows
scrollbars, but has no color setting support and no image magnification.A filtering tool should
be able to:

http://lists.w3.org/Archives/Public/w3c-wai-ua/2002JanMar/0082.html

"It's a very positive step in the right direction," Kirkpatrick says. "In a perfect world, a solution
would come up that works with all the screen readers and is easy for developers. But
unfortunately, we're not in that world."

http://www.decloak.com/Products/Dreamweaver%20/NestedTemplates/TablesOrLayers.aspx

It's millions of times cheaper and faster to have a single programmer update a popular screen
reader or non-visual browser to look for that ID attribute in the <td> tag instead of having
millions of web designers in the entire world do a complete redesign the entire web site.

http://216.239.51.104/search?q=cache:3vqRLhCcQlQJ:www.ukoln.ac.uk/web-
focus/events/conferences/www2003/jc-
slides.ppt+An+accessible+Web+site+is+not+necessarily+usable%E2%80%99&hl=en&ie=UT
F-8

Accessibility does not equal usability.

http://www.joeclark.org/access/webaccess/JVoluntAdmin.html

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http://pcworld.shopping.yahoo.com/yahoo/article/0,aid,106742,00.asp

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whether a Web site designer "programmed it for people who are blind," said Access Now
President Edward Resnick.
Many companies rush to create Web sites without considering accessibility and may later balk
at spending money to retrofit their sites. As a rule, building in accessibility during a Web site's
design costs only a quarter of the amount needed to retrofit a site later, said Jennifer Vollmer,
a research analyst at Meta Group in Stamford, Connecticut.

http://tc.eserver.org/19039.html

Many organizations genuinely believe that if their site passes the Bobby test and displays the
Bobby icon, it is 'accessible.' In many ways, this is an understandable outlook. The "Bobby
Approved" icon represents an achievable standard and a tangible, recognisable endorsement
of efforts made towards web accessibility. However, it should be remembered that the Bobby
test does not ensure true 'accessibility.'

http://www.itweek.co.uk/Analysis/1133183

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http://www.joeclark.org/accessiblog/ab-specs.html

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