



## USABILITY

# Usable or accessible?

Accessibility, the ease with which disabled or impaired people can use a website, is an important issue, but some Web 2.0 technologies leave them behind. By Martin Croft

Usability and accessibility are two different, albeit related, topics. Usability is often taken to mean how well a site can be used by an "average" person, although some experts argue that it should focus on how well a site can be used by its target audience (not necessarily the same as an "average" visitor). Accessibility should focus on how well a site can be used by people with impairments, and whether a site is compliant with legislation, such as the Disability Discrimination Act 2005, other regulations and "best practice" (see box).

A few years back, it seemed that the two disciplines, which had for a long time been seen as two sides of the same coin, were moving even closer together. Unfortunately, Web 2.0 came along and threw a spanner in the works, while Web 3.0, when and if it arrives, could look highly likely to dump the whole tool box in as well.

Indeed, attempts to produce a current set of accessibility guidelines for websites have been hampered by the rapid online technology evolution. Furthermore, the software and hardware products that have been developed to help people with disabilities use the Web have been hard pressed to keep up. For example, screen readers (which read on-screen text out loud for people with visual impairments) cannot cope with dynamically updated content. As Catriona Campbell, a director of usability and accessibility company Foviance, observes, "Anything with JavaScript – that's more than half of Web 2.0 sites – buggers up screen readers."

But, with so many Web 2.0 and social-media sites using techniques such as Ajax (Asynchronous JavaScript and XML), increasingly large areas of the Web are in danger of becoming off limits for the hard of sight. Web developers are hardly likely to abandon Ajax, as it radically improves page responsiveness, interactivity and, ironically, usability. It is able to do this because, rather than updating a page by reloading all



**Java:** Technology that lets parts of pages update independently; Screen readers often can't keep up

the data, the data that goes into sections of the page are reloaded constantly. Screen readers, however, do not have the facility to jump back to an already-read part of the page where content has updated.

Trenton Moss, director of usability and accessibility consultancy Webcredible, believes we are seeing a fundamental split between accessibility and usability: "Some usable, interactive interfaces ►



## “Anything with JavaScript – more than half of Web 2.0 sites – buggers up screen readers”

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Foviance

are utterly appalling for accessibility. A lot of Web 2.0 applications don't have accessibility built in – and can't have. For example, Ajax technology is incredibly user friendly, but for screen readers, it literally doesn't work.”

Webcredible cites research which indicates that there are 8.6 million people with impairments of working age in the UK, with an estimated combined spending power of up to £80bn. Furthermore, the research indicates that users with impairments under 65 use the Web as frequently as non-impaired users, while those under 45 use it more frequently.

### Search Engine Optimisation and the bottom line

Paul Walsh is founder and chief executive of Segala, which specialises in helping clients and agencies develop Websites that comply with Web standards and certification systems. Segala is also closely involved in the development of the WCAG guidelines (see box). Walsh points out that accessibility is about more than making sites that better serve the needs and abilities of disabled users, it is also of fundamental importance in Search Engine Optimisation: “The more accessible a site is, the higher it will rank on search engines. Accessibility is the most important factor in search engine rankings, except for the actual copy.”

Paul Dawson, head of interactive media at digital consultancy Conchango, says that clients, such as retailers or financial services providers, who use their website as a primary marketing channel, tend to recognise the value of getting more people through a checkout process or an application form, “because it directly translates to money on the bottom line – and it is usability and ergonomics that gets them through it. We are seeing usability being considered much more as something that simply has to be done,” he adds. “Much of that comes from feedback and seeing the complaints and frustration that comes from customers who cannot understand why things can't be more usable.”

Not all clients are the same, though. Sarah Vick, strategy director of digital agency Reading Room, admits: “There is a feeling within some clients that they need to do things quickly – to put lots of video or audio on their sites – because otherwise they'll get left behind. They may not be thinking about how to make it accessible.” Clients, she argues, need “to make content available to the people who want to consume it, in the way they want to consume it. That's not playing the accessibility card – that's just good business sense.”

Kath Moonan, senior Web consultant with accessibility charity AbilityNet, says: “As more and more Web applications are developed, usability testing (with diverse users) is key to ensuring that new forms of interaction are easy to use. Testing doesn't have to be prohibitively expensive – testing with a small amount of users who have a range of different impairments will uncover most of the issues. If a user is struggling with a task, no technical knowledge of accessibility is needed to understand the issues they are facing – the frustration is self evident.”

The biggest problem facing the usability and accessibility professions, though, is the pace of technological change and its impact on how sites are constructed, how information is displayed and on how end users actually access information and what they do with it. But technological advances have their good side. As Catriona Campbell points out, there

### Accessibility

Accessibility is not actually an option for Web design: it is, strictly speaking, a legal imperative under the terms of the Disability Discrimination Act (DDA) in the UK. However, while people think the DDA defines what constitutes accessibility, there are no such rules. What the DDA does say is that reasonable efforts must be made to provide the disabled with access.

UK government advice for the public sector is that sites should aim for AA status under the Web Content Accessibility Guidelines 1.0 (WCAG 1.0). These Guidelines were developed by the Web Accessibility Initiative (WAI), part of the World Wide Web Consortium (W3C), which oversees Web-based standards and technologies. They set three levels of accessibility: A, AA and AAA, with AAA indicating the best.

WCAG 2.0 is in development. The latest draft was published on April 30 and attempts to address many of the accessibility issues raised by Web 2.0 techniques, such as dynamically-updated content.

Any accessibility guidelines will also have to address the issue of content management systems, which companies are increasingly using to update their websites. Websites that initially conform to accessibility standards can stop doing so over time, as staff fail to conform to guidelines when updating.

There are tools that can assess how websites conform to guidelines. Accessibility consultancy Segala offers an accreditation scheme, while the Royal National Institute for the Blind (RNIB) and technology charity AbilityNet have a scheme called “See it Right: UseAbility.” In March 2006, the British Standards Institute launched “PAS 78: Guide to good practice in commissioning accessible websites”, after a collaboration with the Disability Rights Commission, RNIB, BBC, IBM, W3C and others.

PAS 78 is advice on how accessibility should be considered from the very start of any project.

In March of this year, the BSI announced it had established a technical committee tasked with developing a British Standard on Web accessibility. The intention is to create a standard that will enable organisations and individuals to commission and maintain websites which are accessible to all their potential audiences.

The BSI says the new standard will build on PAS 78, and will take into account developments in technology and Web use since the publication of PAS 78, such as an increase in user-generated content, and will consider the accessibility of tools used by Web designers.

The committee consists of senior figures from the BBC, IBM and Lloyds TSB. It is chaired by Julie Howell, director of accessibility for usability and accessibility consultancy Fortune Cookie, who says one aim is to establish a benchmark which could be used in court to determine whether a website conforms to accessibility legislation or not. A number of cases have been started, she says, but none have made it to court – at least, in part, due to of the difficulty in establishing what makes a website accessible.

are considerable numbers of people with impairments who are using the latest Web 2.0-enabled sites, and who are benefiting enormously from them – even if they cannot use all of the tools that those sites provide.

Social media has opened up new worlds of interaction for many people with impairments, Campbell observes. Many of these users would rather have a site like Facebook, with the networking possibilities it offers them, even though they may not be able to make full use of all its facilities, than a specially-designed, perfectly accessible ghetto. She says that many impaired Web surfers are saying, “Don't give us specially-designed sites, give us a site we can use – even though we may not be able to use it to its fullest extent.” ●

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