IBM

Building accessibility into Web design and business strategy

Your responsibilities, the law and the 'total customer experience'

deeper

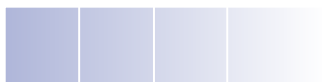*A Point of View paper*

Contents

Key topics

- Accessibility as 'the total customer experience'
- Accessibility law and legal requirements
- Accessibility and Web strategy
- Accessibility solutions
- The future of accessibility.

Executive summary

This IBM Point of View is essential reading for senior IT, Legal, HR, Sales and Marketing executives. In it, IBM defines accessibility in terms of its impact on the whole of your business, from legal responsibilities to revenue potential. It examines the ways in which accessibility affects business strategy and Web strategy in particular. It looks at issues surrounding short and long-term Web accessibility solutions, and finally considers 'the accessible future': accessibility in the emerging era of e-business on demand.

There are several key messages. By 1 October 2004, all UK companies must comply with the accessibility requirements of the Disability Discrimination Act, and that includes making Web sites accessible. Similar legislative activity is taking place across Europe and the USA. Complying with accessibility requirements doesn't automatically mean you have to change the way you do business, but for companies with a complex and/or extensive Web presence, you have to address the issue now.

Another key message is that accessibility is not just a compliance issue for Web developers. Nor is it just about providing access to products and services for people with disabilities. Accessibility concerns the holistic or 'total' customer experience. It's a strategic business issue and it touches many parts of your business – just like the Web itself. Tackling accessibility can help a company increase potential customer revenue, improve customer satisfaction and protect and enhance brand image. Because accessibility impacts so many areas of a business, companies should seriously consider partnering with experts in the field: not just to help meet legal requirements and to resource the changes required, but also to help their accessibility projects drive an overall improvement in the total customer experience.
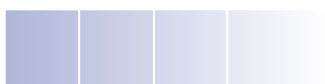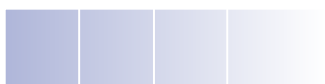
What is accessibility?

Universality is the founding principal of the World Wide Web. The Web was designed as a standard way to make information available to anyone, anywhere, using any platform. In other words, to make it accessible. And yet many companies do not factor accessibility into their Web strategy.

Companies should be as passionate about Web accessibility as they are about profitability, customer service or brand image. If customers can't access a product or service, or can't find the information they need to make a buying decision, they simply can't do business with you.

Common misconceptions

Businesses generally have two main misconceptions about accessibility. The first is that accessibility only concerns people with disabilities. Of course, it's true that people with visual, hearing, motor or cognitive disabilities may need additional support to help them to access products, services and information. Meeting the needs of the disabled market is an important part of the whole accessibility issue. It is not, however, the only part.

Many of us have our abilities impaired from time to time, whether it is an exceptional circumstance such as a broken limb, or an everyday occurrence such as being out of the office and having to view Web information on a hand-held computer. Wherever there is a barrier to easy access, you're looking at an accessibility problem.

The second main misconception is that accessibility is just a Web programming issue, and only really of concern to Web site developers. Again, it's true that better Web accessibility comes in part from better coding and design. But the issue is much more strategic than that. Web site accessibility should be of as great a concern to a company's senior management as it is to the Web team. Here are just a few illustrations:

- e-business revenue – 80 per cent of the UK's wealth in terms of property, pension funds and life assurance policies is owned by people over the age of 50. And yet 90 per cent of marketing spend targets people under 50, according to Senior Agency, a 'grey marketing' specialist. If you develop a Web site that doesn't take the differing access requirements of the older market into account, you could see a direct impact on online revenue – they'll simply look for a more accessible vendor.

- Customer perception – 'your competitors are just a click away' may have become an industry cliché, but it's true nonetheless. Customers are fickle, and something as simple as browser incompatibility or a broken link can, and does, have an impact on their perception of your company. It's never 'just the Web' – your company's Web site is your company's online presence, and accessibility issues do have an impact on repeat business, upselling, peer recommendations and revenue through offline channels.

- Cost – building a Web site can require significant investment, especially for large companies or those especially active in e-commerce. Building a Web site that doesn't meet the accessibility needs of your audience can have serious implications for Web Return On Investment (ROI), which is why any successful Web site is built from the top down – so your business goals, accessibility-related or otherwise, are met as successfully as possible.

Accessibility: more than just the Web

So where does that bring us with our definition of accessibility? Accessibility is an essential part of the whole user experience, online and offline. For companies, that means accessibility has a direct impact on the whole customer experience, which in turn has a direct effect on a whole range of business goals. With the right accessibility strategy, a company can enhance customer satisfaction, improve its brand image, make its products and services available to the widest possible market, and increase revenue potential.

Can you ignore £50 billion?

Companies that ignore accessibility in their Web strategy are ignoring a big revenue opportunity, even if they consider the potential revenue from people with disabilities alone. According to the Disability Rights Commission, there are 8.6 million disabled people in the UK, and it's estimated that they spend a collective £50 billion each year on products and services. (Source: Disability Rights Commission: http://www.drc-gb.org/businesses/)

It's a huge market, and it's getting bigger all the time because ours is an ageing population. According to the 2001 UK census, for the first time there were more people aged over 60 than there were children. There were 10.8 million people in the UK in the oldest age brackets (60 plus for women, 65 plus for men), and overall the proportion population aged over 60 increased to 21 per cent from 16 per cent in 1951.

We may wish for everlasting health, but the chances are that we'll all experience some sort of disability with the onset of old age. That could make it harder for us to access products and services, and at that point, we'll begin to prefer companies that cater for our needs – just like any customer would. Accessibility affects us all.

The ageing trend isn't unique to the UK. The rate of growth in the UK is comparable with many European countries, and the EU average is actually 23 per cent. In the USA, the proportion of elderly people has grown almost 80 per cent since 1951; in Australia, 133 per cent. Census data can reveal many interesting trends. For example, more than two-thirds of single pensioner households in the UK have no access to a car. That's over 2.1 million people; a huge e-commerce opportunity in itself for companies that can meet the accessibility needs of that audience online. (Source: UK National Statistics Online)

It's the law
Your company could also experience the financial impact of accessibility in less pleasing ways. Companies have a legal requirement to make their products and services accessible to people with disabilities. In the UK, that means complying with the Disability Discrimination Act 1995 (DDA), which enforces rights for disabled people in employment, access to goods, facilities and services, and buying or renting land or property.

The employment rights and first rights of access came into force on 2 December 1996; further rights of access came into force on 1 October 1999; and the final rights of access will come into force on 1 October 2004.

Under the Act, since October 1999, suppliers are required to consider making reasonable adjustments to the service, goods or facilities they provide to make them accessible to anyone with 'a physical or mental impairment, which has a substantial and long-term adverse effect on his ability to carry out normal day-to-day activities.' By October 2004, companies will have to comply with the Act in its entirety. For the latest version of the DDA, companies should contact the Disability Rights Commission or visit http://www.disability.gov.uk/.

In essence, the Act makes it unlawful for a service provider to discriminate against a disabled person by refusing to provide any service that it provides to other people. It also makes it unlawful to discriminate in the standard of service provided, the manner in which it's provided, or the terms on which it's provided.
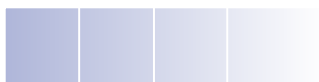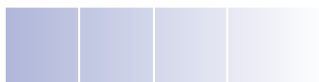
Web sites are covered by Part 3 of the Act along with other points of access to goods, facilities and services. Web sites may also be covered under the employment provisions of the Act, as they may be a means of advertising jobs or accessing vital health, safety and other employee information. The DDA requires your company to make Web sites accessible to everyone, regardless of ability. By not doing so, you are discriminating against people with disabilities, and you could be liable for legal action and subsequent financial penalties.

The Disability Rights Commission (DRC) is committed to upholding the DDA, and supported 105 cases in its first two years. As well as their role in legal compliance, organisations like the DRC encourage members of the public to come forward with claims that the organisation then supports. They also tend to publish regular 'name and shame' lists, such as the DRC's study of accessibility in 1,000 leading Web sites. These activities help them fulfil their remit and put additional pressure on companies to comply.

Growing global pressure
It's a similar story across the European Union and in the USA. In the USA, Section 508 legislation requires Federal agencies' electronic and information technology to be accessible to people with disabilities. In light of Section 508, and the Sarbanes-Oxley Act, it's clear that the US is increasing its focus on corporate responsibility and accountability across the board. In a well-publicised case, the Internet Service Provider, AOL, settled out-of-court in a Web accessibility action brought by the US National Federation of the Blind.

In Europe, Italy, France, Germany and The Netherlands have all begun making legal provision for compliance with the World Wide Web Consortium's WCAG, which are discussed later in this article. The EuroAccessibility Consortium is another EU initiative and one that could pose new challenges for private and public sectors alike. The Consortium aims to harmonise the way Web accessibility standards are applied throughout the European Union, and new guidelines are expected in 2004. (Visit http://www.euroaccessibility.org/)

Take positive action
What you must do to meet accessibility requirements, and what it might cost, depends to a large extent, on the size and scope of your online activities. The law expects Web sites to be accessible now and it's an issue you must address in terms of Web design, content, tools, technology, external agencies and any part of your business – HR, Sales, Marketing, IT, Legal, Support – where the Web plays a role.
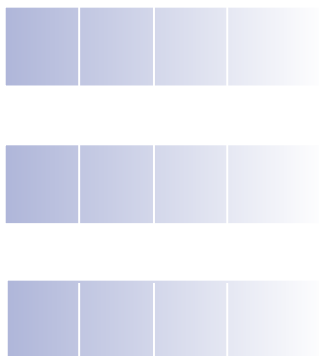
Companies do need to be aware of differing legislative practice in different EU countries. To date there are no established precedents for Web accessibility in UK law – but with the imminent October 2004 deadline, that is likely to change very soon.

Accessibility: the impact on Web strategy

Accessibility is growing in legal, commercial and political significance. It's clear that with so many developments taking place, it's only a matter of time before pressure from an increasingly well-informed marketplace results in tangible commercial impact for companies that ignore their responsibilities. So how does that impact your Web strategy? How does it affect your Web site itself?

Dispelling concerns

At this point, the most common responses given by companies are 'accessibility would disrupt my Web site/ intranet' and 'it will detract from the online brand experience', or 'what must I do?' and 'what will it cost?'. Now is not the time to panic.

Making sure your market can access your products, services and supporting information is such a fundamental part of doing business that accessibility should naturally feature high in your business priorities. It needs a change of mindset to incorporate accessibility into your online activities – so your Web presence is accessible to everyone, regardless of ability; and products, services and information are available to the widest possible audience.

In terms of Web design, accessibility is related to the practice of usability design that many companies are already familiar with. However, accessibility expands the scope of user-centred design methods to encompass a much more inclusive and holistic approach to relationships with people on the Web.

By changing your Web design process, you can not only help meet legal requirements for Web site accessibility, you can make a dramatic impact on the whole of your company. Complying with Web accessibility guidelines may require some additional investment, but the potential returns can ultimately improve your company's bottom line.

Real-world scenarios

This is demonstrated when you consider that there are many accessibility projects that bring benefits to disabled and non-disabled people alike. This is particularly true on the Web, and sometimes even a minor adaptation can produce tangible results.
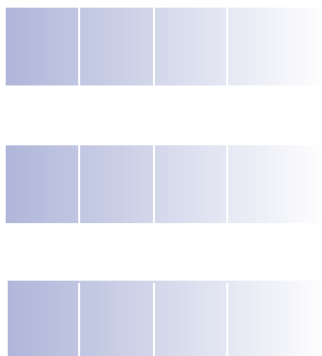
Saint Mary's University in Nova Scotia and California State University, Northridge couldn't have imagined the popularity of an accessibility solution designed to help disabled people get as much value out of multimedia lectures as other students. Using voice recognition technology, lectures were automatically recorded and made available, along with accompanying visual material, on the university intranet.

Of course, the benefit wasn't just to disabled students: suddenly, all students had access to a hugely valuable archive of information to support their studies, and lecturers suddenly had a much more efficient way to organise and update their ideas. Imagine the effect on productivity if a company took a similar approach with project meetings in its sales, marketing, support or HR departments.
(Source: IBM http://www.ibm.com/able/case_studies/stmarys.html)

Here's an even simpler example: many Web sites ignore guidelines for the coding of online forms. Most users expect to be able to use the Tab key to move from field to field, but when companies use a graphical 'Submit' button and don't allow you to tab across to it, you have to move your hands off the keyboard to use the mouse to click it instead. That's annoying for a typist without sight or mobility impairments; it's a real barrier to access if you're blind or have restricted limb movement. An accessible approach can result in a better experience for all users.

The business value of accessibility
Concerns about the negative impact of accessibility on brand experience are generally unfounded. In general it is always more worthwhile to favour accessible content over less accessible content, whether it's by making information easy to find or making content easy to read. It's usually possible to offer an alternative form of presentation to meet accessibility requirements, too – by providing subtitles on a video, for instance. Brand loyalty is about consistently meeting or exceeding the expectations of customers, and the benefits of promoting accessibility in your Web projects can result in a knock-on effect in the way all your customers perceive your company.

That's because accessibility extends your company's reach to new users, locations and devices. It's about the total customer experience, and accessibility can drive innovation in products, services and processes, as the Saint Mary's and California State Universities discovered. The real question your company should ask is not 'will accessibility detract from our online brand experience' but 'can building accessibility into my business allow us to offer an even more compelling brand experience online?'
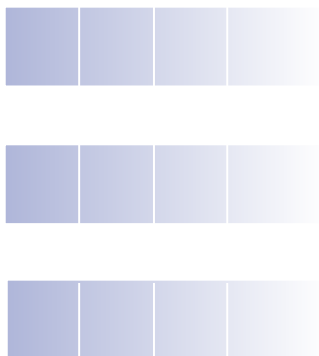
For example, a company sells a range of household furnishings through a small number of exclusive outlets in London and other major UK cities – and increasingly through its Web site. This retailer's brand is perceived as stylish and luxurious, but there are negative aspects too: customers complain that the Web site makes it difficult to find the products they need, and with only a small number of stores across the country, there's a growing perception that the company is somewhat elitist and difficult to do business with.

In fact, the retailer would love to win more business from customers in remote locations and, while it does differentiate on quality and price, it never intended to restrict its market to this extent. At the same time, it has been brought to the company's attention that its Web site fails to meet basic accessibility requirements. The irony is that most of the company's products have been designed to be accessible to as many disabled and non-disabled people as possible. It even offers some products, such as orthopaedic chairs, that are specifically designed for people with certain kinds of disabilities.

As a result, the company embarks on an accessibility project that drives an evolution of its Web site as well as its overall brand. The new look and feel is promoted in the company's marketing activities, and a specific effort is made to promote the newly-accessible Web site to the people with disabilities. Many organisations that support disabled people are keen to take up the story and promote the company's new approach, and a good deal of positive press coverage is generated.

- From a purely commercial perspective, the company has increased revenue potential from people with disabilities who can now use the Web site to buy products.
- By making accessibility a key part of marketing strategy, the company isn't perceived as trying to make 'a quick buck' from less able customers: the new approach is universal, and benefits everyone.
- Ethical perceptions of the company improve as a result.
- By meeting accessibility requirements, the company has also made its products more accessible to the whole market, and nullified the legal threat.
- The result is improved brand perception across the board.

WCAG guidelines for compliance
The World Wide Web Consortium's Web Content Accessibility Guidelines (WCAG) provide a number of checkpoints and best practices that companies should follow to create accessible Web sites. Each checkpoint has a priority level based on the impact it has on accessibility, and meeting these priorities enables companies to claim WCAG 'A', 'Double-A' or 'Triple-A' compliance.

UK government Web sites currently have to comply with the WCAG 'Double-A' standard. Other European countries are moving towards 'Double-A' and 'Triple-A' compliance. IBM is a founding sponsor of the World Wide Web Consortium's Web Accessibility Initiative (WAI) and plays a key role in the continuing development of WCAG. For more information, visit http://www.w3.org.

Public sector accessibility efforts provide many valuable lessons for the private sector. Government sites tend to be large and content-heavy, running into hundreds or often thousands of pages. They may not have the brand image requirements of private sector Web sites, but they are certainly concerned with customer experience in terms of trust, reliability, credibility and openness. And, just like the private sector, the public sector has suffered from confusion about what is required from them from a legal and technical standpoint – as well as what the potential benefits can be. As the public domain moves forward with accessibility projects, it sets a standard that the private sector will have to live up to, or exceed.

Developments in Local Authority Web sites

IBM accessibility and usability expertise is vital to the UK Government's Local Authority Web sites (LAWs) project. LAWs is an initiative designed to ensure all UK Local Authorities provide citizens with an option to access their full range of services online in 2004, and is part of the Government's overall £80 million agenda for operational 'e-Change' by 2005. IBM provides strategic usability and accessibility services to the project, helping make a diverse range of services accessible to an even more diverse and demanding audience – the British public.

Web accessibility: what to do now

For companies with an extensive Web presence (internally and externally), and those especially active in e-business, meeting accessibility requirements can present a serious challenge. No company wants to risk disruption to its business and if you do business online, you can't afford disruption to your Web site as a result of litigation.

Web accessibility solutions must be found for all Web sites: public-facing corporate sites, online stores, intranets, Web-based business-to-business (B2B) trading exchanges – everything. As a result, many companies find they are better served by the accessibility skills and expertise of an external partner to help ensure compliance is as valuable and painless as possible. In the experience of IBM, accessibility encompasses such a wide range of disciplines, from hardware to software, from the IT department to the HR department, that few companies can afford to divert the necessary resources away from their core business.
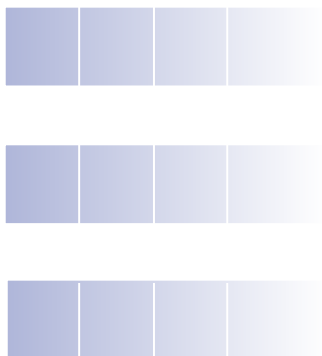
The accessibility solutions often considered by companies and their agencies tend to depend on software tools. Tools exist to help developers create accessible Web sites and test current sites against accessibility guidelines. There are also tools to automate the process of converting Web sites to text formats that are easy to understand for software applications like IBM Home Page Reader (an audio Web browser for personal computers), as well as other accessibility devices such as Braille keyboards. Software tools are no 'silver bullet' solution, however. They play a part, but companies need to address accessibility in terms of the whole business, and business processes, not just the way their Web site is coded.
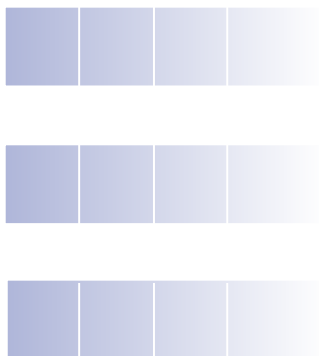
IBM accessibility solutions
IBM has decades of experience developing standards, strategies and solutions for accessibility, and takes its responsibilities as an employer and supplier very seriously. IBM has experienced and dedicated Accessibility Specialists within its Business Consulting Services organisation. IBM runs dedicated Accessibility Centres in the US and Europe and numerous Usability Centres around the world, including one in the UK. Constant development has produced a wide range of accessibility best practices, products and services for users, developers and testers alike. The right accessibility solution for your company involves, at the highest level, a two-stage process:

Accessibility Review
- How accessible is your company today? As the Web pervades more and more business processes, understanding your current levels of capability and compliance can present a major challenge in itself. The broad range of IBM expertise helps you overcome that challenge and understand the benefits that can be realised from accessibility solutions.

- Gap analysis: what are the exposures, missed opportunities and risks for your business? IBM considers a broad range of issues, from legal compliance to business goals and requirements.

- What are your options? IBM provides a series of recommendations for change.

- How will you address the issues? IBM helps you plan the implementation of your accessibility project, considering the role of internal and external resources.

Accessibility Solutions
- IBM offers services to design and implement the 'total user experience' for your Web applications using an innovative user-centred design method. This places the user experience at the heart of the Web development process and plays a leading role in creative concept design, information architecture, site development and content and integration strategies.

- IBM accessibility solutions include strategies, architectures and processes for embedding accessibility into the on-going management of Web and other business strategies.

- This is backed up by a wide range of technology options from IBM and its partners, including an innovative solution for automatic accessibility compliance checking and remediation of content before it is published, through integration with your enterprise content management system.

- Finally, IBM can assist in the long-term governance of your Web site to help you meet accessibility requirements into the future.

The accessible future

What does the future hold for accessibility? As the October 2004 deadline approaches you can expect the legal and social pressures to mount. Many company Web sites are in breach of accessibility guidelines now, and that makes them unlawful. You have to act now to control the legal risk and ensure the guidelines are followed in the most sensible way for your business, rather than having to react quickly to a surprise legal case at some point in the near future.

What about the accessible future for your business as a whole? Technology is changing faster than ever. Trends in mobile computing and communications are creating demand for access to products and services through devices, which by their very nature, create accessibility problems. Moreover, customer expectations of online service can only increase as new channels become established.

With more and more suppliers to choose from, customers tend to favour companies that make it easy to interact when they want, how they want. That's why the any time/any place/anywhere philosophy is central to the IBM e-business on demand vision. When business can deliver anything a customer needs, automatically, and with minimal effort, it won't just be e-business on demand – it'll be accessible e-business on demand. Accessibility is an issue of growing importance, and in the accessible future, it will be incorporated into every relevant business process to maximise profitability, and make the 'total customer experience' available to everyone.

For more information
For more information on accessibility and IBM accessibility solutions, visit **ibm.com**/bcs/uk.

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