



# Beyond compliance: Business advantage of accessibility.



## Executive summary

Employee retention. Cost savings. Increased productivity. Successfully accomplishing your organization's mission. These are the ultimate concerns of many executives—particularly in government—where performance demands are high and financial resources may be limited. In the face of these challenges, organizations are continually pressed to look for innovative ways to streamline business operations while boosting effectiveness.

Innovation occurs at the intersection of invention and insight. It's about the application of invention—the fusion of new developments and new approaches to solve problems. Accessibility is one area where you can harness insight into what makes your organization productive, and steer inventions that are essential to meeting standards and enhancing user experience—to arrive at innovation.

Compliance with standards and regulations to accommodate people with disabilities may at first seem like an unnecessary drain on resources, but in fact, integrating accessibility throughout your agency can increase effectiveness by helping your organization:

- Become more citizen-centric by offering more people greater access to your agency's services through e-government.
- Increase productivity through the use of innovative technologies that benefit more people overall, including people with disabilities and the aging.
- Attract and retain quality employees by contributing to a productive, efficient work environment.

This executive brief addresses how you can move beyond compliance and start using accessibility to support your agency's mission-critical goals. With an infrastructure of accessible hardware and software and an inclusive corporate culture already in place, you can begin to sharpen your focus on gaining business advantage from accessibility investments and transform to an on demand business.

## Beyond compliance

Accessibility in today's terms means enabling IT hardware, software and services to be used by more people, either directly or in combination with assistive technology products.

In the late 1990s, the United States Congress amended Section 508 of the Rehabilitation Act, requiring federal agencies to purchase electronic and information technology that is accessible to people with disabilities. The European Union is promoting adoption of the World Wide Web Consortium's Web Content Accessibility Guidelines for all public Web sites in European institutions and member states. In Japan, the Japan Electronics and Information Technology Association is responsible for developing industry standards that will foster a digital network society aimed at improving quality of life through IT advancement. Throughout the world several other countries have recently passed accessibility legislation or have legislation pending.

While legislative action is driving greater IT accessibility, IBM sees government pursuit of business transformation as the principal driver of accessibility innovation. Because of the proven benefits of e-government, agencies are offering more services online. And, with many constituents—including people with disabilities and the aging population—accessing these services, the need to make IT accessible is rising.



### **Become a citizen-centric agency**

Citizen-focused agencies that have a mission to provide direct service could see the benefits of becoming an on demand business. The potential advantages of lower cost to the organization and increased flexibility to the citizen will likely continue to drive organizations to place more services online. Investing in accessibility may provide a direct opportunity to support both the efficiency and effectiveness of online service delivery to citizens.

Much of the motivation for e-government investment is the need to deliver agency services to all citizens, including people with disabilities and the aging. It could also involve saving time and money by relieving agency staff of repetitive tasks such as answering the most commonly asked citizen questions and possibly reducing operational costs. The improved flexibility that online tools offer could boost an agency's ability to deliver services to the full range of eligible citizens. Certainly, citizens who receive services online have the opportunity to do so with more flexibility—possibly leading to greater satisfaction—by accessing government at their leisure rather than at predefined office hours.

The potential for improved citizen satisfaction and efficiency in service delivery will likely continue to shape and drive e-government investments. This combination can benefit both the agency and the communities it serves, including citizens with disabilities and the aging.

The deployment of accessibility technologies, such as real-time captioning through speech recognition, screen reader support for complex data types and the migration of accessibility to the mainstream through pervasive devices, will likely bring new challenges, new benefits and the opportunity for agencies to realize new value.

### **A model employer**

U.S. federal employment numbers shrank just over 7 percent in the period 1993 to 2002, but during the same time period, the number of federal employees with disabilities declined approximately 12 percent.<sup>1</sup> As disability rights leaders continually examine why the overall unemployment rate of adults with disabilities still hovers around 70 percent years after the passage of the landmark Americans with Disabilities Act,<sup>2</sup> significant pressure will be exerted on the federal government to assume a role as a model employer—recruiting, employing and retaining people with various disabilities.

### **Apply innovative technologies for business advantage**

Innovative technologies designed for people with disabilities often can benefit a broader audience—including those who do not necessarily identify themselves as disabled—and therefore provide a better return on your technology investment. According to the Pew Internet & American Life Project, some usability tests have found that when Web design changes were made to accommodate older users, the changes also improved the performance of younger adults.<sup>3</sup>

An accessible Web site, for example, designed for use with assistive technologies, helps your agency meet accessibility needs. But its straightforward layout and labeled tags may also help resolve issues with other service delivery channels such as personal digital assistants (PDAs) and kiosks.

Similarly, speech-to-text technology can help disseminate information throughout your organization. For example, Webcasts could be delivered using captioned speech that is automatically synchronized with supporting charts to be used as a learning module. You can also enhance comprehension for employees who speak English as a second or foreign language by simultaneously providing speech in text form. And captioning provides a transcript of spoken words that may be referenced and searched on Web sites by other employees.

Other technologies can help users navigate the Internet more easily by reading Web pages aloud and by allowing them to resize panes, enlarge font size and change background color for better contrast. Some governments have introduced these technologies on their Web sites to assist users with low vision as a way to be more customer-oriented to an aging society.

While most of these inventions were initially designed with disabled users in mind, they also further the cause for usability; that is, designing products and environments to be usable by more people—to the greatest extent possible.



*“Out of our work making computing easier to use for people with disabilities*

*we will think of radically new approaches. Out of these approaches we will find not just ways of helping people with disabilities but ways of making computing far more natural and intuitive.”*

*— Dr. Paul Horn, senior vice president,  
IBM Research*

### **Expand your employee talent pool**

When you create an environment that allows people to compete for employment regardless of their disabilities, you can broaden the talent pool available to meet your hiring needs. Improved access to agency information may expand choices of jobs for applicants and choices of applicants for the hiring agency, and it may create additional opportunities for current employees with disabilities who might otherwise languish in under-employment. More opportunities can contribute to employee satisfaction and retention and possibly improve staff capabilities for your agency.

The expense of recruiting and hiring, combined with the disruption of turnover and staffing shortages, can seriously impact your agency's effectiveness. When you expand the number of potential job candidates, including people with disabilities, you may be able to fill open jobs more easily. At the same time, creating a work environment that makes it possible for aging workers to remain on the job with sustained satisfaction and productivity may also be part of your staffing strategy. With half of the U.S. population projected to be 45 years or older by 2010,<sup>4</sup> more public sector employees or applicants may have some type of limitation or disability than do today. Hiring and retaining aging workers may help your agency maintain or expand its knowledge base.

Accessible tools and infrastructure can benefit your employees who are not disabled as well. According to a study commissioned by Microsoft®, 60 percent of working-age adults in the U.S. (more than 100 million) are likely to benefit from using accessible technology.<sup>5</sup> The study notes that many people with mild disabilities who would benefit from the use of such technology do not identify themselves as having a disability and that their difficulties probably go unnoticed by their colleagues. Much of this population may already work for you or receive your services. They may comprise your employee or potential employee base.

Some employees with declining visual clarity benefit from the enlargement of font sizes on screens and printed material. Others retain information better with audio and visual input. And still others create knowledge from data by combining audio, video and symbolic inputs, all left to the ability of each user to customize—and thus optimize—his or her learning style. By providing accessible systems, you can help expand your talent pool and deepen the knowledge of those already in it, so they can contribute more to your organization.



### Establishing a comprehensive approach to accessibility

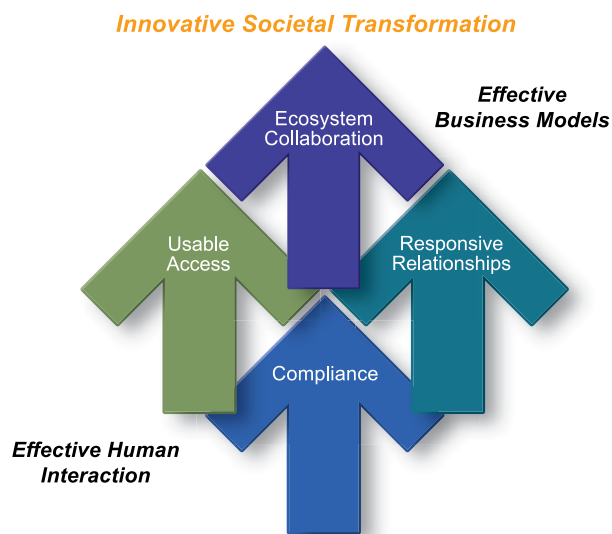
IBM strongly supports, and engages itself, in a holistic, integrated approach to driving human ability and accessibility initiatives within and across organizations. Our vision is built upon four sets of capabilities that agencies can invest in to drive sustained value, enhance human ability and ultimately contribute to a broader goal of societal transformation. These capabilities—compliance, usable access, responsive relationships and collaborative ecosystems—are separate but interdependent components that an organization should seek to develop and refine to become truly accessible to all of its stakeholders.

Reaching *compliance* is about understanding and adhering to regulations and legal mandates established in each country.

Fostering *usable access* requires moving beyond compliance to actively improve all users' experience with an organization's technology systems.

Driving *responsive relationships* involves creating a more adaptive human-business experience by extending technology systems into the fabric of an agency to sense and respond to unique user needs and preferences.

Participating in a *collaborative ecosystem* means actively supporting the seamless flow of communication—both within and between organizations—to ensure the ongoing delivery of products and services designed to respond to the needs of all people, regardless of age, ability or disability.



Together, these capability sets can help governments execute an integrated approach to human ability and accessibility that drives a positive result, and a measurable return on investment—resulting in more effective personal interactions, increased user satisfaction, an expanded market reach, better employee retention and enhanced relationships with clients and partners.

### Gain business advantage from accessibility investments

Implementing a comprehensive accessibility strategy in your organization can help you provide people with disabilities and the aging comparable opportunities as everyone else, but also may allow you to better serve the full range of constituents, improve citizen and employee satisfaction and extract new value from your technology investments.

## Catch the wave of older users

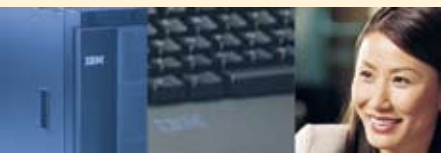
A major factor in many organizations' business strategy could become the number of seniors using the Internet and staying in the work force longer. A survey by the American Association of Retired Persons (AARP) shows that a majority of older workers—nearly 7 in 10—plan on working in their retirement years.<sup>6</sup> In addition to the fact that the number of seniors online rose almost 50 percent in four years, the baby boom generation is expected to drastically increase the number of older people using the Internet. This “silver tsunami,” or people now in their 50s as identified in the Pew Internet Project's 2001 report *Wired Seniors*, use the Internet in far greater numbers than those over the age of 69. As the silver tsunami retire and get older, they will be accustomed to being online and unlikely to stop using the Internet.<sup>7</sup> At the same time that these seniors expect online access, they may also start to encounter barriers because of age-related disabilities, including vision problems. Serving your older work force and constituents with tools to let them overcome these barriers may allow them to remain productive members of the work force longer and access government services independently.

IBM has the creative and technical knowledge, usability expertise, research innovation and business insight essential to address the end-to-end accessibility requirements facing government organizations. Whether you are considering small, individual projects or a large, complex solution, IBM can help you integrate accessibility into your organization to gain business advantage. Whether your agency is trying to meet standards and regulations or wants to move beyond compliance, IBM Accessibility Services can help you formulate a strategy to make the most of your IT investments. Whether you require a standalone solution or need accessibility incorporated into your existing architecture, IBM can offer the technology, skills and range of products designed to help you realize your agency's goals.

When the infrastructure barriers that preclude people with disabilities from being employed and self-reliant are removed, more people can reach their potential—facilitating productivity and helping agencies reach their mission-critical goals.

### For more information

Visit the IBM Human Ability and Accessibility Center at [ibm.com/able](http://ibm.com/able) to learn more.





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<sup>1</sup> [http://www.eeoc.gov/federal/fsp2002/part1.html#Section\\_1.3](http://www.eeoc.gov/federal/fsp2002/part1.html#Section_1.3). U.S. Equal Employment Opportunity Commission. Annual Report on the Federal Work Force, Fiscal Year 2002.

<sup>2</sup> Vanderheiden, 1990.

<sup>3</sup> Fox, Susannah. Pew Internet and American Life Project. "Older Americans and the Internet," March 25, 2004.

<sup>4</sup> Forester Research, Inc. 2003.

<sup>5</sup> Forester Research, Inc. 2003.

<sup>6</sup> <http://www.aarp.org/research/press/presscurrentnews/cn-2002/Articles/a2003-06-03-nr092302.html>

<sup>7</sup> Fox, Susannah. Pew Internet and American Life Project. "Older Americans and the Internet," March 25, 2004.

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