

# TEACHING WEB DESIGN PROS TO BUILD ACCESSIBLE SITES

## 2005 COMPUTERWORLD HONORS CASE STUDY

### GOVERNMENT & NON-PROFIT ORGANIZATIONS

KNOWBILITY'S ACCESSIBILITY INTERNET RALLY (AIR) PROGRAM LEVERAGES THE CREATIVITY AND COMPETITIVE NATURE OF TECHNOLOGY PROFESSIONALS TO ENSURE THAT TECHNOLOGY APPLICATIONS ARE TRULY ACCESSIBLE TO PEOPLE WITH DISABILITIES AND THE ASSISTIVE TECHNOLOGY THEY MAY USE. AIR USES THE SKILLS OF THE TECHNOLOGY SECTOR TO BOTH RAISE AWARENESS OF ACCESSIBILITY BARRIERS AND TO OVERCOME THOSE BARRIERS. [20055287]

### SUMMARY

Advances in technology create the potential for people with disabilities to participate as producers and consumers in the information marketplace to an extent never before possible. If society is to realize this potential, however, we must ensure that technology applications are accessible to people with disabilities and the assistive technology they may use. Knowbility's Accessibility Internet Rally (AIR) program leverages the creativity and competitive nature of technology professionals to engage these very creators of technology applications in the problem. AIR uses the skills of the technology sector to raise awareness of accessibility barriers and to overcome those barriers.

### APPLICATION

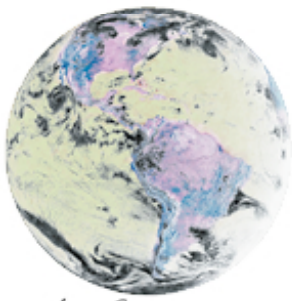
People with disabilities want the same things as everyone – the chance to learn, to work and to earn a high standard of living. Advances in information technology make it more possible than ever in history for people with disabilities to live independently. The key is to ensure that we provide access. Information technology, including hardware, software, and Internet applications must be designed to be accessible in order to realize the unprecedented potential of technology to support the independence of children and adults with disabilities. Accessibility is defined as the ability for someone with a disability to use a piece of technology and get the same information or perform the same functions as a person without a disability. Technology professionals do not deliberately exclude people with disabilities from using their products and services. In nearly all cases, the problem is simply a lack of awareness of the need for accessibility and a lack of understanding of the tools and techniques that are available to provide that access. Knowbility's Accessibility Internet Rally (AIR) program raises awareness in the context of a fun, friendly web raising competition that provides benefits throughout the entire community.

The overarching goal of the Accessibility Internet Rally (AIR) program is to improve access to technology – and specifically to the Internet – for people with disabilities. The approach is to issue a challenge to web professionals: Come learn how and why to make web sites that can be used by everyone, including people with disabilities. Knowbility provides training that includes a look at the issue itself and then focuses on specific techniques of accessible design. Once trained, teams of web pros demonstrate their new skills by designing new and fully accessible web sites for participating nonprofit organizations. The web-raising Rally occurs on one high energy work day! Following the Rally day, accessibility experts judge the newly created sites. The AIR program closes with a high profile ceremony to recognize all efforts and award winners in three categories. The AIR program began in 1998 in Austin Texas and has been held each year since then. The program has expanded to be held in Dallas, Houston, Denver, San Francisco and is planned in other new cities in 2005. The achievements of the AIR program include training the tech sector about the issue, creation of accessible web sites for nonprofit organizations and increased public awareness of the need for accessible technology. The program is nationally recognized for excellence and innovation by agencies and organizations including the Peter F. Drucker Foundation, the US Department of Labor, the Governor of Colorado and the White House.

### BENEFITS

One of the most powerful and effective attributes of the AIR program is the way it creates benefits for so many segments of participating communities.

First and foremost, the program benefits more than 55 million Americans with disabilities by raising



*A Search for New Stories*



Robert Carrigan,  
Chairman of the Chairmen's Committee

Ron Milton,  
Vice-Chairman of the Chairmen's  
Committee

Dan Morrow,  
Chief Historian

awareness and skills that result in technology that they can access and use. And AIR demonstrates in a hands-on way how accessibility features that are built into technology applications provide a better user experience for everyone. AIR participants are encouraged to think of ways that physical access accommodations such as wheelchair ramps also benefit travelers with rolling suitcases, parents with children in strollers, and delivery drivers with heavy loads. Similarly, a Forrester Group study indicated that more than 60% of all users receive benefits from accessibility options when they included in software applications. These benefits are demonstrated to AIR participants in ways that they remember and apply.

Second, the AIR program benefits an array of nonprofit organizations that receive professionally designed and fully accessible web sites within the context of the competition.

Third, the AIR program builds community by engaging the high tech sector of web professionals and the technology companies that they often work for into the greater community in which they live. AIR provides meaningful volunteer opportunities and fosters understanding and long term community connections.

Finally, the AIR program benefits the companies and individuals who participate by providing clear instruction on accessibility practice, law, tools and techniques. Surveys indicate that more than 70% of AIR participants have used their training in their daily work and have identified business benefits to their participation. Once they understand how and why to create accessible technology, they bring that knowledge into their commercial work, thereby improving the overall accessibility of the information technology landscape.

## **IMPORTANCE**

The National Council on Disability says, "For most people, technology makes things easier. For people with disabilities, technology makes things possible." Knowbility is led by a Board of Directors comprised in part of people with disabilities and others who have family members with disabilities. Much of the work of the AIR program is performed by expert users of technology who, by the way, have disabilities. Many of us have successful professional careers that are technology based. Some of us are in school and depend on technology to keep pace with our peers. We are engineers, entrepreneurs, technology trainers and community leaders, and it is hard to imagine that our lives would be as independent or as productive without the technology that supports our work.

## **ORIGINALITY**

Several organizations address the issue of technology. The World Wide Web Consortium (W3C) has developed enormously useful guidelines and the US federal government has mandated standards for its agencies through the Section 508 amendments to the Rehabilitation Act. The tech sector, however is characteristically made up of creative thinkers who are not particularly amenable to being told that they MUST do things in a prescribed fashion. Technologists are also notoriously competitive. By putting the issue in the context of a competition, the AIR program invites the pros to overcome accessibility barriers creatively. As a result, technology specialists who enter the game skeptically often become passionate accessibility advocates as they rise to the challenge of solving accessibility problems and are recognized for their effort to do so. Rather than the push of government mandates, the AIR program pulls the tech sector into the creation of accessible technology as a creative, competitive activity.

## **SUCCESS**

Among the successes realized by the AIR program are these:

- Trained more web professionals than any other program in the world in the need for accessible design and the techniques and tools to achieve it.
- Created accessible web sites for more than 200 nonprofit organizations that serve various missions. Because of AIR, constituents with disabilities can access the information of organizations that provide arts, human services, environmental, and educational information to serve millions of people.
- Increased public awareness of the need for accessible information technology
  - Accessibility articles published in conjunction with AIR in daily newspapers, business journals and online publications in Austin, Denver and San Francisco
  - TV and radio reports of AIR activities and accessibility issues in Austin, Houston, and Denver
  - AIR participants featured at national conferences including Peter Drucker Leader to Leader Conference, SXSW Interactive Media Conference, and CSUN Conference on Assistive Technology

- Created a network of best practice where web professionals can continue to test ideas and improve their accessible design skills.
- Created a referral service through which businesses and agencies that need accessible designers can find the specific expertise they need to meet standards and mandates.
- Support business understanding of the market potential of reaching people with disabilities – a \$1 trillion market according to Fortune Magazine – and the ways that accessibility features benefit everyone.
- Through close collaboration over more than 5 years with the University of Texas Accessibility Institute, have contributed to the finding that UT is the most accessible university web site in the nation.

## **DIFFICULTY**

AIR is community collaboration like no other. The very originality of the AIR program can create a difficulty in finding traditional nonprofit sources of funding. Many foundations see the AIR program as an “event” and do not fund events.

The nature of the Internet is not local. Although the AIR program has been replicated in other cities, it has not taken root as an annual program elsewhere as it has in Austin. To have the impact that we seek, we must find more effective ways to sustain the program in other locations.

As a nonprofit mission, the issue of technology access can be abstract and hard for people to understand.