

The Disability Network closes digital gap for people with disabilities



"People with disabilities can be limited by not knowing that assistive technology solutions exist for them, or they can be empowered by technology and how it can impact their lives. New HP technology assists The Disability Network in bridging the 'Digital Divide' for individuals with disabilities." — Luke Zelle, Accessibility Specialist, The Disability Network

Located in Flint, Mich., and serving the residents of Genesee County, The Disability Network (TDN) is a nine-year-old, community-based nonprofit organization dedicated to helping people with disabilities to integrate into all aspects of community life. It currently serves more than 4,000 people and is one of 300 Center for Independent Living facilities in the United States.

"TDN was created and is operated by people with disabilities," says TDN Accessibility Specialist Luke Zelle. "At least 80 percent of our Board of Directors and staff are persons with disabilities."

One of TDN's most important services is provided through its Accessible Community Technology Center, a state-of-the-art facility for people to learn computer literacy skills, test high-tech assistive technologies, and access classes that can lead to employment. In the past year, more than 2,300 hours of computer training were provided to more than 1,300 people.

"People with disabilities can be limited by not knowing that assistive technology solutions exist for them, or they can be empowered by technology and how it can impact their lives," Zelle says.

Testing high-tech assistive technology options enables people with disabilities to actually use equipment and see what may work for them. TDN has about a dozen computers with screen readers for blind persons; screen magnification for the visually impaired, voice recognition devices; and computers for operation with eye movement, brain waves or biofeedback.

"There is a 30 percent technology abandonment rate for assistive technology," Zelle says, "so the ability to try these out before you buy makes a big impact. We also have examples of bad technology. A study on one device found that 95 percent of the people who buy it or have it prescribed throw it out. It was just too difficult to learn and use.

"Seventy-five percent of individuals with disabilities do not have access to computer technology, let alone the assistive technology that enables them to operate computers," Zelle says. "These people face enormous economic barriers, and without assistive technology, access to information and technology is out of reach. HP technology enables TDN to address this barrier by increasing access to assistive technology in our technology center, improving our IT infrastructure and advancing the skills that improve the quality, capacity and efficiency of our services."

Easy with orbiTouch, HP

As vital as the IT infrastructure is to TDN's mission, it takes people like Shirley Johnson to recruit, organize and deploy a volunteer corps now numbering 140 to run the technology center and perform other services. To accomplish that job, Johnson relies on her HP desktop PC and the orbiTouch Keyless Keyboard from Keybowl Inc.

Johnson was born with cerebral palsy and has difficulties with speech and mobility. By using assistive technology from HP and Keybowl, Johnson is able to work fulltime, take college classes and achieve a sense of community through her valuable contributions at TDN.

Johnson works as TDN's volunteer coordinator, a position that requires her to use a computer to set schedules, maintain manuals and write reports. A traditional mouse and keyboard added hours to simple tasks and produced aching joints and fatigue. Johnson is now working efficiently and productively at the computer with a new HP desktop PC and the orbiTouch.

"One of my jobs is to prepare a weekly report about volunteer activity," Johnson says. "Before I began using the



At a glance

Organization: The Disability Network

Location: Flint, Michigan

Founded: 1994

URL: <http://www.disnetwork.org>

Phone: 810-742-1800

Primary mission: To facilitate the full integration of persons with disabilities into all aspects of community life

orbiTouch, it would take me more than two hours to complete. Now I'm able to do it in a half hour to 45 minutes."

The orbiTouch Keyless Keyboard features a pair of ergonomically sculpted domes that move to enable "typing" of characters with the same precision as pressing a key. Each dome can be positioned in the eight major directions of the compass, providing for the ability to type 128 characters.

The entire hand moves each dome, and the placement of each function is similar to the corresponding location on a traditional keyboard. The orbiTouch connects to a desktop PC without any special programs or drivers, and learning to operate it takes less time, on average, than it does to learn touch-typing skills.

As a testament to its breakthrough technology, the orbiTouch recently won a da Vinci Award™ from the National Multiple Sclerosis Society and the Engineering Society of Detroit. The annual awards recognize individuals, organizations and corporations in the engineering, construction and technical fields for innovations that empower people.

"We founded this company to bring new products to market that provide universal access to computing," says Dr. Peter McAlindon, Keybowl CEO and founder. "Our mission is to level the playing field. The orbiTouch is the first of a line of products that will change the way people view computer interaction."

For Shirley Johnson, the orbiTouch has helped her achieve more success and satisfaction in her work than was previously possible. "I am able to do more in my job, and it was really easy for me to learn," she says.

"She's an incredibly valuable employee," Zellely adds.

Her success embodies the spirit and mission of TDN, and is just one of the many ways that the organization is using assistive technology to make a difference.

Ongoing mission

The HP desktop PCs are new on the scene at TDN, and the rest of the staff was quick to realize their benefits. "They've made an unbelievable impact," Zellely says. "We literally went from dinosaurs to a stable, productive PC, printer and email platform in one move, and it really shows in employee morale." And that leaves TDN in a better position to pursue its mission.

"HP technology enables TDN to extend the Community Technology Center's capacity to provide access to additional assistive technology training, hands-on access to accessible computers, email and the Internet," he says. "Access to this training increases the technical literacy skills of all citizens, including those with disabilities, and improves their opportunities in all facets of life."

TDN plans to use this technology to help expand its outreach program to the more than 80,000 people with disabilities in Genesee County and the 1.8 million people with disabilities in Michigan. "Our goal is to integrate as many people as possible into the community through the use of public transportation, increased social interaction and technical training," Zellely says.

"We've worked with multiple IT vendors. Before we made our most recent purchases we did an analysis," he says. "We weren't looking only at price, which is important for nonprofits, but overall costs. We needed reliability and performance as well as the opportunity and room for growth. Ultimately our choice was HP."

Challenge

- To build an innovative and sustainable technology/assistive technology infrastructure to bridge the "Digital Divide" for individuals with disabilities

Solution

- HP desktop and notebook PCs
- HP Network Laser Printers (4300N and 4100N)
- HP Inkjet Printers
- HP 5300C and 3300C scanners
- HP 2524-J4813A Router
- Keybowl Inc.'s orbiTouch Keyless Keyboard

Results

- Strengthen support operations for a program that provides more than 2,300 hours of assistive technology training to more than 1,300 people
- Enable key staff member with disabilities to greatly increase productivity and efficiency by using an HP desktop PC equipped with Keybowl Inc.'s orbiTouch Keyless Keyboard
- Provide an opportunity for persons with disabilities to test assistive technology prior to making a purchase decision

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