

Synapse gives big boost to disabled

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SAN RAFAEL – When the U.S. Census Bureau used Synapse Adaptive's assistive technology to employ disabled census workers, the result was startling: The disabled workers outperformed their able-bodied colleagues. Now, the bureau is experimenting with extending the technology's use to able-bodied workers – and Synapse is looking at a vast new market in productivity tools.

It's not the first time founder and CEO Marty Tibor has rounded a corner into a brand new landscape. Only recently, the company's no-hands computer systems were discovered to aid children with learning disabilities, opening another new market for the technology.

Mr. Tibor was running a computer consulting firm, Synapse Adaptive, in 1990 when he was approached by Vernon Cox, a Marin resident and quadriplegic. Mr. Cox hoped a new voice recognition technology could be integrated into a computer system and replace the mouth wand he was using to tap each computer key.

Mr. Tibor built that system and dramatically improved the

life of Mr. Cox, now 73 and a computer-wielding team leader at the Marin Independent Living Center in San Rafael.

First, intrigue

Intrigued by technology that could cause such a change to a person's life, Mr. Tibor sought out Neil Scott, research leader of the Archimedes Project at Stanford's Center for the Study of Language and Information. With Mr. Scott supplying the engineering skill and Synapse the programming, they came up with a universal access technology that uses voice recognition, head-tracking, and other technologies to activate any computer, regardless of age or operating system. They called it the Synapse TAP (total access port).

"It'll plug into Sun, H-P, and SGI workstations; all mainframes; PCs; and Macs," says Mr. Tibor. "Last month, as part of a celebration on the 10th anniversary of the Americans with Disabilities Act, we took it to the White House and demonstrated it to vice-president Al Gore on an ancient Mac."

The Synapse TAP, not surprisingly, has found a broad range of customers. Federal agencies are mandated to em-

ploy a certain number of disabled workers, and schools and businesses must provide equal opportunities to disabled students and employees.

"There's no reason other than ignorance to believe someone who has become disabled through an injury or illness can't go back to work," says Mr. Tibor.

Synapse TAP has returned disabled computer users to work at NASA, Wells Fargo Bank, Bank of America, Sony, Intel, Apple Computer, Silicon Graphics, IBM, Autodesk, San Francisco *Chronicle*, *New York Times*, Lockheed, Boeing, Pacific Bell, and Stanford University, among others. Many are programmers and writers with carpal tunnel syndrome.

Though Mr. Tibor's first system cost nearly \$15,000 to build, the Synapse TAP, which can enable four computers at a time, sells for around \$10,000, with onsite installation and training.

Growth appears inevitable

Synapse Adaptive is privately held, and Mr. Tibor doesn't disclose revenues, but he says they are in the seven-figure range.

"We've had offers to go public. But we have cash; we don't owe any money; and we're on

plan," he says. "If we receive too many million-dollar orders, we may need to consider obtaining some additional capital."

With two major new markets opening for the Synapse technology, growth appears inevitable whether or not the company remains privately held.

NIMA (National Imagery and Mapping Agency) wants the head-tracking technology to speed up the daunting task of updating its computerized library of aerial photographs.

"Workers can just look at a portion of a map and describe it aloud," says Mr. Tibor. "Accurate descriptions are vital to NIMA. If their information had been up to date, the U.S. wouldn't have bombed the Chinese embassy in Belgrade."

While Synapse Adaptive is developing a system for NIMA, it has an ongoing relationship with the U.S. Census Bureau.

David Hackbarth, assistant division chief for technology and information at the Census Bureau's National Processing Center, says four individuals in a 25-member unit were given Synapse Tap voice recognition systems, and the productivity of the group was tracked for an 11-month period.