

Low-cost computing for non-profits and NGOs

Bangladesh non-profit provides job training for the handicapped

Challenge

Deploy a low-cost, easy-to-maintain computing system in a community center for disabled people in Bangladesh's rural areas.

Solution

Enable SFD trainees to share a single PC simultaneously at a minimal cost using the NComputing X-series solution.

Impact

Increased access to computers enabling disabled students to graduate with computer literacy certificates. Minimal maintenance and electricity costs, making it an ideal solution for developing countries.

Partner

AMD contributed the computers for the solution while leading NGO bracNet provided internet access.

Computer literacy and internet access is critical in emerging-market economies. It provides access to fair crop prices and agricultural best practices. It is also the only way to prepare the next generation of workers for higher paying jobs. The need is just as acute—if not more so—for the disabled. Salvation for the Deserving (SFD) provides disability and poverty alleviation assistance in Bangladesh. The charity was founded by Nasir Sinha, who was himself born with a disability.

As a focal point of assistance, the SFD community center in the village of Singair Union provides healthcare, education, and vocational training services to help disabled people in the community earn their livelihood and become self-reliant.



SFD's computer training center.

Vital skills; serious challenges

Computing skills provide disabled and poor villagers with better job and economic opportunities. SFD wanted to set up a computer literacy training program in its community center and a way to provide better information access for the local community. The solution had to be low-cost and easy to maintain. Because the area experiences frequent power outages, an uninterruptible power supply (UPS) was also required. A room full of PCs would need a large and expensive UPS, which was not affordable. So the solution for SFD could not consume much electricity. Providing internet access in the rural areas of the country can also be quite challenging.

"Favorable conditions and willpower enables a person to reach at the peak of success."

NASIR SINHA
 SFD FOUNDER & CHAIRMAN



Creativity and charity

SFD solved all of their problems with a combination of creativity and charity. AMD, a leading processor company, donated the computing equipment. The center needed more training stations, so they multiplied the power of the donated PCs with NComputing X-series virtual desktop kits.

The NComputing solution is based on a simple fact: today's PCs are so powerful that the vast majority of applications only use a small fraction of the computer's capacity. NComputing's virtualization software and hardware tap this unused capacity so that it can be simultaneously shared by multiple users. Each user's monitor, keyboard, and mouse connect to the shared computer through a small and very durable NComputing access device. The access device itself has no CPU, memory, or moving parts so it is rugged, durable, and easy to deploy and maintain. A single NComputing X-series kit allows up to 6 users to simultaneously access a shared computer. An additional kit can be installed for a total of 11 users sharing a single PC. This solution not only saves money, but saves space and power as well. Just one small UPS protects all of the users from brownouts.

bracNet, a local NGO and internet service provider, donated internet access. A single modem that connects to the shared PC can be used simultaneously by all users. This eliminates the need to set up a local network—greatly simplifying the installation and maintenance of the facility.

Beneficial for the whole community

The training program teaches basic computer use as well as Microsoft Office and internet skills. At the completion of a 4-week class, students receive a certificate of completion that will help them find administrative jobs that require computer knowledge. Thus empowered, they proceed to use computers to improve their own—and their village's—economic conditions.

The local community benefits from the additional computer access as well. Villagers now have email access, which they use to connect with relatives living around the world, as well as with doctors who provide remote medical services. Farmers now have internet access to research the latest agricultural technologies and modern farming methods to further improve the value of their crops.

SFD will install additional PCs combined with NComputing X-series virtual desktops to meet the increasing need for computing access for the students and in the community. And the success goes beyond the individual and the community: the Singair Union computer lab is a model of success for expansion into every district in the country.