# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

**Year:**
2013

**Status:**
Laureate

**Organization Name:**
King County Department of Information Technology

**Organization URL:**
http://kingcounty.gov/operations/it.aspx

**Project Name:**
Thin Client Kiosks

**Category:**
Economic Development

**Please provide an overview of the nominated project. Describe the problem it was intended to solve, the technology or approach used, how it was innovative and any technical or other challenges that had to be overcome for successful implementation and adoption. (In 300 words or less.)**

At our Renton WorkSource location, old computers strung together with cast-off parts and ingenuity were expensive to maintain and at risk of failure almost every day. WorkSource is a critical tool for employment-seeking residents – approximately 50,000 a year walk through the doors – and provides employment and training services. Since no fees are charged to users who are interested in using the facility's equipment to update resumes, take basic computer training classes, and otherwise become eligible candidates for jobs, replacing the old equipment with new computers was a financial challenge. Stuck with old equipment, the WorkSource team could not efficiently fulfill their mission to connect businesses and job seekers with the necessary resources and tools for

successful employment, life-long learning, and business development, to ensure a strong and vital economy. After some brainstorming, and rethinking through the technology troubles, Master LAN Administrator Quang Truong began experimenting with thin client technology, to replace the aging PCs in the facility's computer labs and training rooms. Trong, along with IT Services Manager Michael Litt and Work Training Program Administrator George Dignan, soon realized that this solution would enable a greater degree of flexibility for the computer labs. And it would be affordable. Instead of replacing the computers, monitors and keyboards would connect to thin client machines to access software and applications stored on a central server. This would enable users to access up-to-date versions of software without any changes to their experience. In addition, support costs decreased, since the server software could be managed remotely, and on-site staff were not needed to fix jammed floppy discs, repair drives, and coax old computers to fuction. Utilizing technology, the WorkSource team was now able to offer an efficient connection to employment opportunities.

**When was this project implemented or last updated? (Please specify month and year.) Has it incorporated new technologies and/or other innovations since its initial deployment? (In 300 words or less.)**

This project began in March of 2010, and reached full deployment across seven sites by January 2013. The thin client technology used now creates a virtual desktop for users, so they can be imaged and pushed out remotely and uniformly without any increased costs or staff time to maintain. One advantage to technology in this environment is that the user experience is consistent, so residents with little-to-no computer skills can use the "computers" and technology with the same ease as a traditional computer.

**Is implementation of the project complete? If no, please describe the project's phases and which phase the project is now in. (In 300 words or less.)**

Yes.

**Please provide at least one example of how the technology project has benefited a specific individual or organization. Feel free to include personal quotes from individuals who have directly benefited from the work. (In 300 words or less.)**

Elevate America's Veterans WorkSource provides free computer training for veterans and spouses, something that was not as efficient or effective with old computers at risk of damage or failure. Veterans and their spouses can get free online training in computer skills through Microsoft's Elevate America's Veterans

program, in partnership with WorkSource Seattle-King County. They can build skills in Microsoft technologies, plus earn a certification that demonstrates skills to employers. In many cases, Veterans can also save money on the certification exam.

**Would this project be considered an innovation, a best practice or other notable advancement that could be adopted by or tailored for other organizations and uses? If yes, please describe that here. (In 300 words or less.)**

This project would be considered a notable advancement that could be adopted by other organizations in computer-training situations. Thin client technology enables any computer to access server-based software and applications like spreadsheets without having to install the application on every desktop system.

**If there are any other details that the judges should know about this project, please note them here. (In 300 words or less.)**

In the old WorkSource lab configuration consisting of 95 conventional workstations spread out in 5 different rooms, LAN staff could spend an average of 370 or more hours per year patching and supporting the conventional workstations in use. This doesn't include the downtime and loss of use by residents needing access to job postings, resumes and work training applications. In addition, the machines were subjected to extreme use by the public, and repair and replacement of components was common and often delayed due to lack of parts. The current labs consist of thin client terminals with an average cost of $250 each. As money became available over the past few years, each of the 5 labs was converted from conventional workstations to thin client technology. When the terminals first start up, they make a request to a server that hosts VMware View application. The application consists of a Windows 7 desktop with Office 2010 and any other special apps required for use in that particular lab. When the thin client is started, the VMware View application starts up a desktop for that client. To the user, it appears as a normal Windows 7 workstation startup. Each time another terminal starts, another desktop is started from the same image. When the user logs off the terminal, the desktop image disappears and restarts fresh the next time the terminal starts up. Any upgrades or patching only need to be applied to the base image. Since the thin clients have no hard drive or moving parts, they consume less power, generate less heat, and last longer than a standard, conventional workstation. The bottom line is WorkSource has saved over $45,000 annually in equipment and support costs and has better equipment to offer for public use.