A Texas-sized Vision

Disparate Campuses Unify Under a Common Name and a Consolidated IT Team

ommunity colleges in the United States are booming. Some institutions have seen a 30 to 50 percent increase in enrollment over the past few years, and many are struggling to find classroom space and instructors to fill the demand. Limiting enrollment or dramatically increasing tuition rates would be against the charter of these institutions, so many find themselves serving an increasing population with dwindling resources.

There are a number of factors behind this rapid growth. The global economic downturn has resulted in more unemployment, prompting many workers to retool or update their skills. The recent financial crisis has also made young people more wary of accumulating massive

By Mark L.S. Mullins

amounts of student loan debt. As a result, attending an inexpensive community college for the first two years before

transferring to a university is an increasingly attractive economic decision.

"Community colleges make sense, both economically and educationally, and I think that's why they are so popular with students," says Shah Ardalan, vice chancellor and CIO of Lone Star College System (LSCS) in Texas. "Our students take courses here for a fraction of the cost and have successfully transferred to the most prestigious universities across America. Our citizens are getting the training and certifications they need to enter or re-enter today's globally competitive workforce."

Developing a new organizational identity

Just over three years ago, the North Harris Montgomery Community College District recruited Dr. Richard Carpenter as its new chancellor. The district had experienced rapid growth for years, fueled by population growth in the northern and northwestern suburbs of Houston, and had become one of Texas' largest college systems.

Carpenter brought broad experience in leading community colleges, including statewide leadership roles in two states. He quickly moved to bring the district to the next level. "One of his first acts was to work with the

community and the Board of Trustees to change the name of the system, as we had never really established an identity beyond each individual campus," Ardalan explains. A new name—Lone Star College System—and an attractive logo now unify the five campuses and six satellite centers, which serve more than 80,000 credit and continuing education students per semester.

But Carpenter didn't stop there. "He looked for ways to bring the colleges together and create synergy, without sacrificing the local identity of each campus," Ardalan describes. "With a laser-sharp focus on student success and a totally new leadership style, Dr. Carpenter led the organization to more cross-fertilization in the academic arena and streamlined many operations, including information technology."

Standardizing IT services

Carpenter recruited Ardalan to come to LSCS as its system-wide CIO. Ardalan brought more than 20 years of higher education IT leadership experience (see sidebar, page 43) and came from a large community college system in the Southwest, where he led the IT group as an employee of SunGard, the private firm that provided IT outsourcing services for the school.

When Ardalan arrived at LSCS, each campus had its own IT department, with a dean of technology reporting to the campus president. "Things were connected, but each college had a different infrastructure," Ardalan explains. "Different presidents had different knowledge and preferences regarding the management and level of funding for IT, so there was no equity across the system. This was a problem strategically and also operationally, since many of our students take classes at multiple campuses."

Ardalan moved quickly to bring things into balance. "Shah had a plan based on business value," recalls Link Alander, associate vice chancellor in the Office of Technology Services. "He re-aligned the reporting relationships in the org chart in one week. In a month we had



the realignment really going, and in two and a half months, the structure was fully established and everything clarified. No loss of people, but we tried to maximize each person's contribution."

The quick transition caused a bit of stress in the ranks. "Since I came from an outsourcing company, most people thought I was here to outsource," Ardalan relates. "But that didn't make sense in this instance. We had highly talented people who in many cases were limited by the previous structure of the organization. We worked hard to find the right role for each person, and we based much of our enterprise org chart on the skills of the people we had."

From Kurdistan to Texas

hen Shah Ardalan was recruited as vice chancellor and CIO of Lone Star College System just over two years ago, he brought 20 years of experience in IT leadership in higher education. But this career path wasn't the one he had initially planned.

As a young descendant of Kurdish nobility who was enrolled in nuclear power studies, Ardalan left his country for Germany in 1979. "I had to learn the difficult German language," he recalls. "Then, I wasn't able to study what I wanted there, so I went to Switzerland and had to learn French."

Ardalan studied engineering in Switzerland, but wound up moving to the United States and completing a bachelor's degree in physics at the University of North Carolina at Greensboro. He then earned a master's degree in electrical engineering at North Carolina A&T State University.

His educational experience and environment offered him the perfect preparation for a career in research and development. "I started designing ASIC chips in the Research Triangle Park in North Carolina," he explains. "We were always working with students, and I started to like the challenges and opportunities of higher education."

After serving as a research associate and then a senior systems analyst, Ardalan advanced to become director of business development at a Texas university, chartered with growing the school's funded research. He later hosted national conferences on engineering in higher education. "Bringing people together to accomplish a purpose was very attractive to me," he says.

Since then, Ardalan has worked at institutions across the American South and Southwest—from Ph.D.-granting universities to small community colleges. "I really found my home at community colleges," he says. "I believe in their critical role in the future of our country and want to be an active part of making it even greater. Local communities really have a sense of ownership of these institutions—more so than with universities. And the student body is more academically diverse—from participants in vocational programs to students who will eventually earn a Ph.D."

Ardalan firmly believes that a CIO's role is as people-focused as technology-focused. "Ultimately, both strategic and operational CIOs find innovative ways to leverage people and technology to achieve a goal. Technology is complex but not nearly as complicated as the human mind. The CIO's job is to get the two to work with each other.

"The CIO is in the service business, so it's all about the customer," Ardalan continues. "It's about understanding and respecting people and providing them with the services they need while exceeding their expectations. I have always focused on what technology does for the client and how it can empower the organization to meet its mission and reach for its vision."



Members of the Lone Star College System IT team (standing, left to right): Nishae Brooks, Systems Administrator II; Shah Ardalan, Vice Chancellor and CIO; Oscar Ramos, Executive Director at the Kingwood campus; (seated) Link Alander, Associate Vice Chancellor

Re-assessing priorities

Alander had come to LSCS from Illinois in 2004 to become dean of technology at Lone Star College–North Harris, and became one of Ardalan's key deputies after the realignment. While the reorganization of the IT

Podcast (

Listen to the Executive Spotlight Podcast featuring **Shah Ardalan** and team at **go.symantec.com/ardalan**.

Video

Watch the Lone Star College System team discuss their IT transformation at go.symantec.com/lonestar. departments was still underway, Ardalan asked Alander to conduct a review of the 30 technology projects that were in process at the time.

"Every project was put on the table for review and evaluated

against LSCS's strategic goals," Alander recalls. "Some projects were kept, some were changed, and others were scrapped. And we had new projects arise based on the analysis we had done. For example, we had a LAN project that was in

the design phase, but we had to rework it because it wasn't designed for high availability."

One priority that emerged was the need to standardize and bolster endpoint management. "Since the campuses didn't always have the same infrastructure, it was important that we gain an enterprise view of our servers and endpoints," Ardalan observes.

Studying the Lone Star College System

Founded: 1973

Headquarters: The Woodlands, Texas Locations: 5 colleges; 6 centers; administrative and training offices Student Body: 62,000 credit and 20,000 non-credit students (Spring 2010)

Faculty and Staff: 4,800 Notable: Texas' largest producer of

associate's degrees **Website:** www.lonestar.edu

Another pressing problem was security at the endpoint. "Each campus had somewhat different policies, procedures, and toolsets with regard to security," Alander explains. "We needed to standardize around common policies with a single toolset."

Centralizing endpoint management

Several years earlier, Alander had selected Altiris Client Management Suite from Symantec as the endpoint management solution for the North Harris campus, and the other campuses quickly followed suit. But when conversations began after the realignment, it became clear that each campus was using the tool in a different, and limited, way.

"Each campus had 'pockets of excellence'—specific things that they did very well—but since the campuses weren't communicating with each other, the knowledge transfer didn't take place," recalls Nishae Brooks, the systems administrator who was chosen to lead the endpoint management standardization project.

A committee was formed to evaluate various endpoint management solutions. After extensive proofs of concept, they affirmed that the Symantec Altiris IT Management Suite, which includes Altiris Client Management Suite, Altiris Server Management Suite, and Altiris Asset Management Suite, fit LSCS's strategic goals best. At the same time, another committee selected Symantec Endpoint Protection and Symantec Endpoint Encryption for the organization's security toolbox, so the solutions were combined during the purchasing process and their deployments were planned together.

The winning bid for the business came from Valerent, a Symantec Platinum Partner that specializes in providing workflow and business process consulting to large organizations.

Deploying the solution

The LSCS team employed a phased approach to deploy the endpoint management solution. After extensive planning and training, the team deployed the Altiris agents, developed a complete inventory of assets, and updated patch management for all servers and endpoints. Then, they developed a common, hardware-independent image for the organization and added a power management strategy across 15 domains.

The results have been dramatic. "We now know what we have out there in terms of inventory, software deployed on each machine and whether it is being used, and the status of software updates and patches," Alander reports. "This has helped us keep our systems more secure while maximizing our budget and staff time resources."

"The time required to prepare a classroom for a new semester has been cut in half," Brooks adds. "And for the first time, we have been able to put service level

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- Shah Ardalan, Vice Chancellor and CIO, Lone Star College System

agreements (SLAs) in place with our constituents."

Inventory management is also much more efficient, as each campus had previously used different tools. "I used to spend six hours trying to merge all the asset data from the five campuses," Brooks recalls. "Now it takes me six minutes to review a report and send it over to management."

Reduced power consumption also promises significant savings. Altiris Client Management Suite integrates with Intel vPro technology to optimize power management on each endpoint, and Ardalan's team projects as much as a 60 percent reduction in power use per machine, based on vPro technology and energy efficient computer standards. This will translate into three-year cost savings of as much as \$440,000.

Adding endpoint security

Once endpoint management was fully operational, the LSCS team used the deployment capabilities of Altiris Client Management Suite to deploy Symantec Endpoint Protection to all servers, desktops, and laptops. The product's antivirus, antispyware, and firewall technologies are now in use, and the team is testing the intrusion prevention, device control, and application control capabilities.

"We're very excited about application control because we can lock the applications we are using and prevent users from introducing changes on their own," Brooks notes. This is especially useful for an organization whose computers are used by thousands of students on a regular basis.

LSCS also deployed Symantec Endpoint Encryption on laptops, which protects sensitive student data in the case of loss or theft. "Students and their parents are more sensitive about their data than ever before, not to mention our moral, professional, and regulatory obligations," Ardalan comments. "It's comforting to know that this data is protected."

Looking to the future

Just over two years after Ardalan arrived, LSCS is beginning to see many of its goals being realized. In addition to having more secure and bettermanaged endpoints, the IT team is deploying a state-of-the-art data center to supplement its existing center. "This is not a cold DR site; it's a hot co-location," Alander explains. "We're actually revamping a tier-four data center on the former Compag campus" (see above sidebar).

From his vantage point, Ardalan sees success not only in his group, but across the system. "Dr. Carpenter began the vision of unifying the campuses," he notes, "and taxpayers were inspired by that vision when they approved a \$440 million bond that has made many of the system's initiatives possible."

"It's really all about people," Ardalan continues. "If we at Lone Star College System can do a good job of helping people achieve their potential, we have done our job. And if my

Going to School at a **Corporate Landmark**

n April 2009, Lone Star College System (LSCS) purchased the core of the Hewlett Packard North Campus—once the home of Compag's world headquarters. The selling price of \$42.2 million caught the attention of The Wall Street Journal, which noted that the soft commercial real estate market was benefiting some educational institutions.

The purchase gave LSCS more than 1.2 million square feet of new space, close to many corporate offices and tens of thousands of potential students. The plan is to make a variety of higher education options available at this campus, now called Lone Star College-University Park.

After renovations at the site were completed, a satellite center opened, offering community college classes to supplement those at the overcrowded North Harris and Tomball locations. "We opened the campus in January 2010, without advertising, and 4,000 students showed up," reports Vice Chancellor and CIO Shah Ardalan. "This is a clear case of LSCS leadership understanding and doing what its community wants and needs."

Another early occupant of the campus is Lone Star Corporate College, which offers employee training and continuing education to corporate customers. And the campus's elegant Conference Center is available for large and small meetings.

This summer, LSCS opened its second University Center location at the University Park campus. This program partners with universities to offer bachelor's degrees, master's degrees, and continuing professional education at LSCS locations. "We've set aside 400,000 square feet for our university partners, and they are moving in now," says Associate Vice Chancellor Link Alander.

group can provide services that help make this possible, then we're making a contribution."

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