Pervasive Video Extends University’s High-Touch Culture

Challenge

Founded in 1950, California Baptist University (CBU) is a private Christian college offering bachelor’s and master’s degrees throughout California and online. The university’s main campus in Riverside, California spans 118 acres, housing roughly 60 to 70 percent of the student population. This close-knit, connected culture, along with its commitment to spiritual as well as academic nurturing, has earned CBU recognition as one of the top Christian universities in California.

In recent years, the university began outgrowing the capacity of its physical campus, leading to a greater emphasis on distance learning to broaden its reach. To spearhead this initiative, the university created the Online and Professional Studies (OPS) division in early 2010. “Our president realized that distance education was going to be one of the key modalities of teaching and learning that would help the university continue to grow and spread its message,” says Dr. Tran Hong, dean of technology in the OPS division, who was tasked with building the infrastructure that would support this new strategy. “The directive for our team was to focus on making technology transformational, and to change the way we work, teach, and learn.”

With collaboration technologies and synchronous video, Hong felt they could make this happen. To support a media-rich environment, however, would require CBU to rethink its network infrastructure. “What we needed was seamless integration between video, voice, and data,” says Hong. “So I proposed a converged approach that would bring everything together into a single architecture.”

Due to the lack of space on the university’s main campus, the OPS division laid its roots in an offsite facility nearby. There, it built a collaboration space as a proof-of-concept to demonstrate the potentials of these new advanced technologies.
“Our vision is to work towards providing seamless access to information, resources, and services that will enhance and support the learning experience through the use of innovative technology.”

Dr. Tran Hong
Dean of Technology
Online and Professional Studies
California Baptist University

Customer Case Study

Solution
Hong had worked with Cisco on similar projects in his previous role, and had a very positive experience. Knowing that Cisco offers leading solutions in networking, collaboration technology, and unified communications, he felt that turning to Cisco was the obvious choice.

Working with Cisco from the Start
For the network, the OPS team deployed a full set of Cisco® solutions, from routing and switching, firewall, and media convergence servers to wireless access points. “In the past, we were using various types of networking equipment from multiple vendors, which complicated management and delivery of services,” says Hong. “But with voice, video, and data now converged on a single network, we’re able to reduce operational costs and save staff resources.”

High-Touch Engagement with Desktop Video
With this core foundation in place, the OPS team first began deploying Cisco WebEx® technology, while phasing out the university’s previous online learning solution. “We wanted to provide students and faculty the ability to share desktops, annotate documents, record lectures, and most importantly, engage with each other face to face using high-quality video,” says Hong. “WebEx offered the full gamut of video and web collaboration tools we needed to enhance the workflow and interactions between remote students and teachers.”

With Cisco WebEx Meeting Center, the university can now support as many as 24 simultaneous video sessions at a time, which is typically the number of students in a CBU classroom. “Unlike traditional text-based learning management systems, WebEx, with its high-quality video, allows professors to teach more naturally in an online environment,” says Hong. “They can still keep that high level of face-to-face interaction, and act just as they would in a traditional classroom.”

Because WebEx technology is accessible from any device anywhere that there is an Internet connection, it has created newfound opportunities to invite international students into classes as well. “We now have two students from Rwanda participating in one of our graduate-level literature courses,” says Hong. “This is the first time we’re interacting with students located across the globe in a real-time class session, so for students and faculty, it’s a very exciting experience. Even though these students are 10,000 miles away, it feels like they’re right here in Riverside with us.” As students and faculty gain more exposure to the technology, the OPS team hopes to see WebEx usage continue to spread in the classroom, as well as other departments.

More Collaborative and Impactful Meetings via Telepresence
The second phase of CBU’s video initiative involved deploying Cisco TelePresence®, which would be used in instances where the university needed a more immersive video experience. “Where WebEx is great for a larger class setting, we also wanted to have Cisco TelePresence for smaller-scale group engagements, like conducting online office hours for faculty,” says Hong. “Eventually though, we’d like to see both WebEx and TelePresence technology being used in all of our classrooms simultaneously.”

Faculty and executive management also use Cisco TelePresence Movi to participate in telepresence sessions from their computer or laptop devices no matter where they are, whether that is in the office, at home, or on the road. “Not only does this technology allow us to have better meetings,” says Hong, “it also lets our partners and council members experience the benefits of the technology firsthand when we explain our plans for using it with students.”
Streamlined Conversations with Unified Communications

With its voice and data networks converged through Cisco Unified Communications, CBU-OPS now has a more robust and flexible voice communications system as well. The OPS team and the university’s executive management team are currently using Cisco Unified IP Phones and Cisco Unified Wireless IP Phones, while utilizing the Cisco Unified Communications Manager platform. “Our staff had gotten so used to our old, somewhat antiquated phone system that they had no idea what type of productivity-enhancing features are now available,” says Hong. “Even simple things like having an easily searchable online directory or presence indicators make a huge difference in day-to-day efficiency.” The OPS team is also encouraging staff to use Cisco IP Communicator, which allows users to make calls directly through a computer with an Internet connection.

Hong was especially drawn to the wireless voice-over-IP capabilities that Cisco Unified Communications has to offer. “With Cisco Unified Wireless IP Phones, our staff will be able to receive a call anywhere on campus. And what’s more, the call will be going through our internal wireless network, not an external mobile phone service provider network, so we’ll be saving money as well.” Cisco Unity® Connection further boosts productivity by giving users anytime access to voice messages from an IP phone, mobile phone, web browser or their email.

Employees also use Cisco Unified Video Advantage, together with a Cisco VT Camera II, to make and receive video calls on their Cisco Unified IP Phone, while the video component displays on a PC monitor. “Our long-term goal is to have video at every end point,” says Hong. “And with Cisco, we can make that happen. We’re only beginning to explore the possibilities of technology-enhanced learning. I look forward to all that is to come.”

Results

Thanks to a well-planned deployment strategy, it only took nine months for Hong and his team to deploy this entire Cisco collaboration architecture in the OPS facility. They wasted no time in presenting the proof-of-concept site, as well as a larger deployment plan to the CBU president’s council. Says Hong, “After we demonstrated how the technology could help the university on a broader scale, everyone was in full agreement that this was the direction our university needs to move toward.”

The Cisco collaboration architecture not only supports CBU’s distance learning objectives, but also helps the university convey a positive image to prospective employees. “When we use Cisco WebEx and TelePresence to interview remote candidates that are applying for staff and faculty positions, they are very impressed at the progressiveness of CBU,” says Hong. “These technologies help us attract top-notch people.”

Switching to a video-based online teaching environment has an added productivity benefit for faculty teaching online. “There’s been research that’s shown how online teaching can increase a teacher’s workload anywhere from 40 to 60 percent,” says Hong. “But WebEx reduces that preparation time because they can teach exactly as they would in a traditional classroom.”

As pervasive video starts deploying across the CBU campus, Hong is optimistic about the new opportunities that lie ahead. “From video, telepresence to virtual
environments like Second Life, we’re interested in exploring all the possibilities that technology has to offer within the education space. Our new collaboration architecture will undoubtedly have a tremendous impact on our university, proving to me once again that you just can’t go wrong working with Cisco.”

Next Steps
CBU is eager to continue deploying its Cisco collaboration architecture, both in educational and administrative environments. The OPS team is also looking forward to conducting WebEx meetings over the webcam-equipped Apple iPad 2. “Looking ahead, we can use WebEx to increase availability of our student affairs and financial aid counselors,” Hong says. “Cisco Digital Signage would also be great to have as part of an emergency alert system. Our vision is to work towards providing seamless access to information, resources, and services that will enhance and support the learning experience through the use of innovative technology.”

For More Information
• To find out more about Cisco collaboration, visit: http://www.cisco.com/go/collaboration.
• To read WebEx success stories, go to: http://www.cisco.com/go/webexcasestudies.
• To join conversations and share best practices about collaboration, visit: http://www.cisco.com/go/joinconversation.

Product List
Collaboration Solutions
Conferencing
• Cisco WebEx Meeting Center
TelePresence
• Cisco TelePresence EX90, Profile 52, Profile 42
• Cisco TelePresence Movi
• Cisco TelePresence Management Suite
• Cisco Video Communications Server Expressway
• Cisco Video Communications Server Control
• Cisco TelePresence Content Server

Voice and Unified Communications
• Cisco Unity Connection
• Cisco Unified Communications Manager
• Cisco Unified IP Phones 7975G, 7965G
• Cisco Unified Wireless IP Phones 7925G
• Cisco IP Communicator
• Cisco Unified Video Advantage
• Cisco VT Camera II
• Cisco Unified Presence
• Cisco Media Convergence Servers

Routing and Switching
• Cisco Catalyst® 3750-X Series Switches
• Cisco Aironet® 1142 Wireless Access Points
• Cisco 2921 Integrated Services Routers
• Cisco ASA/VPN Appliance