Pervasive Video Turns University into 21st Century Learning Environment

Executive Summary

Customer Name: West Texas A & M University (WTAMU)
Industry: Education
Location: Canyon, Texas, USA
Number of People Served: 10,000 students and staff

Business Challenge:

▪ Real-time communication with students and staff is essential.
▪ Email no longer effective as primary method for reaching students
▪ Growth in student population created need for improved communications with students and faculty on campus and beyond

Network Solution:

▪ Campuswide pervasive video driven by Cisco technology
▪ Scalable enterprise solution that would build on existing infrastructure
▪ Cisco MediaNet powered by Cisco Media Experience Engine and Cisco Digital Media Player

Business Results:

▪ Improved interactive communication via directed Cisco Digital Signs throughout the campus
▪ Increased video collaboration as WTAMU students connect with students overseas through Cisco Show and Share
▪ More courses delivered over video has increased enrollment for distance learners by nearly 10 percent

"We've developed a framework of pervasive video throughout the campus to communicate targeted messages to our students. We have incorporated video through our web presence, learning-management systems, new digital-signage systems, video-enabled smart classrooms, and video conferencing."

James Webb
CIO
West Texas A & M University

Cisco video solutions enable West Texas A & M University to offer rich media across campus and beyond.

Business Challenge

West Texas A&M University (WTAMU) just celebrated its centennial, marking 100 years of education in Texas. The school is growing in both infrastructure and student population. Enrollment growth is steady, and the university anticipates growing from 8,000 to 10,000 students in the next three years. WTAMU has newly renovated buildings, including the state-of-the-art Classroom Center, a new sports complex, and new residence halls. And with the help of Cisco video technology, WTAMU's innovative administrators, professors, and students have transformed the campus into a 21st century learning center.

CIO James Webb wanted a 21st century enterprise video solution that was scalable and could integrate with the school's existing IT infrastructure. The video solution had to allow individual departments to manage and control their own content. "The IT department has really focused on moving from an infrastructure and operations perspective to more innovation and highly visible creative solutions that break down the silos across the campus," says Webb. "We now have the ability to streamline information into the campus and provide the students the information that they need." Webb chose the Cisco® Digital Media Suite including Cisco Show and Share® and Cisco Digital Signs, the Cisco Media Experience Engine (MXE) and Cisco Video Surveillance Manager (VSM) for physical security. Combined with Flip™ camcorders to collect content and high-definition displays as endpoints, the campus has become one of the most video-enabled educational institutions in the country.

Video has become viral at West Texas A&M. Using video and rich media, the school has changed the way it communicates with students and faculty, how classes are taught, and how information is disseminated throughout campus. Students, faculty, and staff are creating and sharing video within the university and beyond in ways unimaginable just a few years ago. Students are capturing homework assignments, professors are recording lectures, and the administration and staff, including the university president, use video to broadcast important messages across the campus's vast digital media systems.

Cisco Visual Surveillance Manager Records Classroom Activities

Network Solution

With Pervasive Video powered by MXE, students are easily connected to devices and all forms of rich media across the West Texas A&M Campus. Flip camcorders capture media that is shared with faculty and other students through the Show and Share portal. Broadcasts are shared via the robust Digital Media Suite deployed around the campus. After successful trials, WTAMU plans to deploy additional MXE features such as automatically

enriching video with color correction, graphic overlays, watermarks, video bumpers, and speech to text tags and clouds – all available over the network. Rich media assets are more accessible, because they become searchable. Analytics help ensure rich media assets are tagged for ease of use and augmented with other information including experts' comments and other documents.

Video has become the centerpiece for collaborative education. The common services enabled by the Medianet provide a more robust emergency response by monitoring the campus and communicating messages to Digital Media Displays, mobile devices, and other points on the network.

Video is enabling the physical and virtual campuses. With Show and Share, onsite students benefit from the regular communications broadcasts, the ability to use video as part of their class experience, and being able to go back and review recordings of lectures. Selectively viewing specific segments of classes or lectures enables students to truly understand a point, a technique, or a concept.
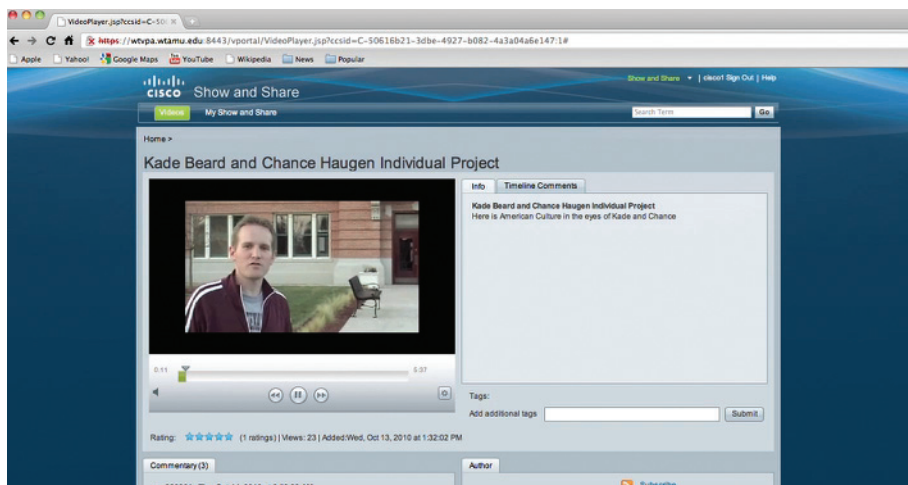
Cisco Show and Share Enables Collaborative Learning Across Borders

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Cisco Digital Signs Provide Customized Messages

The virtual students who join WTAMU through WTClass, WTAMU's distance learning program, watch pre-recorded lectures, post their own videos, and keep up to date on all campus communications through the Show and Share portal.

Video enables WTAMU to bridge the physical distance between local students and students who are part of the university's programs around the world, including Russia and Germany.

In Dr. LaVelle Mills' Cultural Intelligence course, students use Show and Share for video collaboration with students in the United States, Russia, and Germany. "The students in Russia and Canyon are interacting individually, and then they are posting information to Show and Share," says Dr. Mills. "We have one video clip, for example, that shows two students in Russia talking in English, and the WTAMU student talking in Russian. That's a unique exchange of information." Each student has contributor profiles. Students can upload and record video. WTAMU plans to build out distance learning opportunities around the world, and with video there is no reason the university cannot achieve this goal.

Cisco Digital Signs are used to help engage and retain students by targeting information directly to them. Over 100 DMS displays across the campus stream announcements and advertisements for athletic events, student advising, career placement, university functions, and other time-sensitive announcements. This capability builds community on campus, because students are always aware of what activities are available. Directed content can be pushed to specific digital displays in specific areas of the campus.

WTAMU uses the Cisco Digital Media Suite (DMS) as part of a multimodal approach to campus security and emergency notification. Emergency information is pushed to the Cisco DMS environment through the Digital Media Manager. Cisco Digital Signs provide the administration with expanded coverage for campus-wide notification. WTAMU has deployed the Cisco Video Surveillance Media Server for Physical Security, which integrates with the university's existing security system. The university is phasing in Cisco IP security cameras to work alongside the existing analog cameras. With the Cisco Video Surveillance Media Server, incidents can be captured instantly and shared with on campus officials and local emergency service through the network on any video-enabled device, including PC, mobile device, or digital display.

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The Results

Pervasive video, powered by the Medianet and the MXE, has improved interactive communication via directed Cisco Digital Signs throughout the WTAMU campus. Video collaboration has increased as WTAMU students connect with students in Russia and Germany through Cisco Show and Share. The university has more than 200 Flip camcorders available for checkout to students and faculty, allowing instruction to be captured and shared.

Enrollment for distance learners has increased by nearly 10 percent as a result of more courses being delivered over video. MXE gives WTAMU the ability to deliver digital content to any device. MXE is empowering the Virtual Math Lab (VML), a web-based resource available to any student in the world, free of charge. The VML had 6.6 million unique visits in 2010.

CIO James Webb describes the transformation to a fully video-enabled campus as a "P2V Effect," plumbing to visual, meaning that the technology being implemented is visible to the end-users. It's no longer behind the scenes. On the WTAMU campus that means that students, instructors, administrators, and staff are fully engaged to utilize the technology. For WTAMU, it was clear that a Medianet architecture from Cisco would enable them to realize and scale the power of video. Cisco DMS, MXE, and VSM are enabling next-generation teaching, learning, security, and communications

Students and Faculty Alike Use Flip Camcorders To Record Assignments and Classes

on campus. These tools offer the school the ability to leverage the network architecture to provide video solutions for the entire campus. Most importantly, they provide the flexibility for students and faculty to be creative in their approach to education.

"What's amazing to me is the rate at which people are creating content, the sheer creativity," says Webb. "The way the departments have adopted the [video] technology is pretty incredible. And as the CIO, what I like the most about the system is that it makes IT relevant again. We have shifted from a behind-the-scenes perspective of plumbing, operations and infrastructure to suddenly becoming relevant again, and creating innovative solutions for the campus."

For More Information

To learn more about Pervasive Video and the Cisco solutions go to **www.cisco.com/go/businessvideo** for more information.

Product List

Cisco Digital Media Player

Cisco Digital Media Systems

Cisco Digital Signs

Cisco Flip Camcorders

Cisco Media Experience Engine

Cisco Unified Communications

Cisco Video Surveillance Manager