FCW

Invest to Save with Collaboration Technologies

How government and education are achieving positive ROI by modernizing their voice, video, and mobile capabilities

When the Technical College System of Georgia (TCSG) migrated from a traditional telephony system to an IP-based communications platform to enhance collaboration among faculty, staff, and students, TCSG colleges not only improved services but also saved enough money to pay for their new systems in just three years. Similarly, when Bexar County, Texas, adopted state-of-the-art video teleconferencing to enable defendants, lawyers, and judges to meet "face-to-face" from remote locations, the county not only streamlined processes and expedited justice, it also saved enough on travel and other costs to pay for the new technology within several years of use. And after the U.S. Patent and Trade Office (PTO) implemented a formal telework program supported by a new suite of voice, video, and mobile technologies, the agency realized annual savings of more than $19 million for office space. A report on the PTO's hoteling program by the Department of Commerce's inspector general concluded that the additional costs for IT infrastructure and hoteling support services "are significantly offset by avoided real estate costs as well as revenue generated from the additional patent applications reviewed."[1]

Collaboration technologies are helping IT managers "invest to save" by delivering significant long-term savings while improving the effectiveness of their organizations.

These experiences are being replicated by public sector organizations at all levels. Federal military and civilian agencies, state and local governments, and educational institutions are achieving positive returns on their investments when they deploy a unified communications platform for IP-based voice, video and mobile collaboration. Demonstrating measurable ROI is extremely important for government and education. Although IT managers recognize the many benefits of using collaborative technologies, justifying investments in new technologies is key in today's constrained budget environment. This white paper will examine the ROI imperative for adopting collaboration technologies, including the actual experiences of government and education organizations that have made the transition from traditional telephony systems. Many IT managers are discovering they can "invest to save" with collaboration technologies that not only pay for themselves in just a few years, but also deliver tremendous long-term savings while improving the overall mission effectiveness of their organizations.

Collaborating with New Voice, Video, and Mobile Technologies

Government organizations today are challenged on multiple fronts. Nearly all must contend with shrinking budgets, smaller staffs, and reduced travel for managing, training, and collaborative activities. At the same time, they are being asked to take on more mission responsibilities in areas ranging from national defense, law enforcement, and border security to healthcare, social services, and disaster recovery. Citizens expect government to deliver an expanding array of services they can access at their convenience anytime, anywhere, and from any device. Students have similar expectations of education: They want to access educational services and experience learning using the social and mobile technologies they use in their everyday lives. "Doing more with less" may be a cliché, but for public sector organizations, it's a reality.

New collaboration technologies can help government and education address these challenges. Integrated voice, video, and data applications facilitate natural face-to face interaction and sharing of documents among

[1] "United States Patent and Trademark Office: The Patent Hoteling Program is Succeeding as a Business Strategy," U.S. Department of Commerce, Office of Inspector General, February 1, 2012, from "Report in Brief."

people working in dispersed locations. Such technologies also support secure teleworking and mobile collaboration in a bring-your-own-device (BYOD) environment, giving workers at home and in the field the same capabilities they have at the office. This not only provides citizens with wider access to public services from their personal devices, it also makes it easier for public employees to deliver social services, healthcare, public utilities, policing, and other services directly to citizens at their doorsteps.

Especially powerful is high-quality video teleconferencing. For example, Cisco Telepresence brings together dispersed teams for meaningful, face-to-face interactions, allowing them to converse, exchange ideas, and work collaboratively as if they were meeting in the same room. This capability transforms business processes by expanding opportunities to engage citizens, train remote staff, gather experts quickly to solve problems, and carry out other important transactions. Video teleconferencing and other collaborative technologies enable government and education to save in numerous ways, including reduced costs for travel, facilities, operations, and service delivery. At the same time, overall performance improves as employees spend less time traveling and more time collaborating with colleagues, engaging constituents, and focusing on mission responsibilities.

Video teleconferencing and other collaborative technologies enable government and education to save in numerous ways, including reduced costs for travel, facilities, operations, and service delivery.

Achieving ROI with a Strategic Collaboration Architecture

Despite the advantages of new collaboration technologies, many government organizations cannot deploy the latest applications because they are using outdated communications platforms, such as TDM and Centrex for voice or ISDN for video. Although these older platforms are expensive to operate and maintain, many IT managers hesitate to make the transition to less-costly IP-based voice, video, and mobility solutions, fearing the required investment will overwhelm their limited IT budgets. Such fears are mistaken. Many government organizations have realized a complete return on investment in as little as 36 months after updating their communications platforms. Moreover, the savings and productivity gains continue growing over the long term.

Key to making this transition is a strategic architectural approach to collaboration that helps organizations deploy scarce resources when and where they can make the most significant impact. Too often, government organizations are locked into legacy systems and contracts that limit their ability to upgrade voice, video, and mobile capabilities. Planning becomes ad hoc and new applications seem makeshift rather than organic to the organization's IT infrastructure. In contrast, a strategic collaboration architecture provides organizations with a vision and path for reaching their objectives. As shown in Figure 1, an architectural approach enables organizations

Figure 1: A Strategic Approach for Collaboration Evolution. A strategic collaboration architecture enables organizations to continually grow capabilities for the most efficient and productive education or work environment. Source: Cisco

to transition or "evolve" over time to more sophisticated collaboration technologies, continually increasing their capabilities while reducing costs. In this way, the architecture helps organizations meet mandates and guidelines, such as "The Digital Government Strategy" and BYOD strategy within the federal government. And as new collaboration tools are developed, organizations can seamlessly incorporate the emerging technologies into their IT infrastructure, helping them get the most from their collaboration investments now and in the future.

The transition to a modern communications platform also represents a boon for IT staff. This may seem counterintuitive to IT managers who fear opposition from staff who have grown comfortable administering legacy platforms. In fact, initial resistance is not uncommon among employees who are wary of playing a more active role in administering the IP-based voice, video, and mobile technologies. But resistance dissolves rapidly with effective training and experience. Not only do IT staffs quickly gain the necessary skills, but they also recognize that their new expertise opens up opportunities for advancement and career growth.

The Collaboration Evolution: Examining the Government's ROI

The challenges and needs of each government agency and educational institution are unique. A strategic architectural approach enables them to invest wisely by identifying the collaboration solutions and tools best suited for their individual requirements and budgets, and then provides a path for adding new collaboration technologies over time, often by using the savings from the initial investments. Here are a few examples of Cisco public-sector customers who are achieving significant cost reductions as well as improvements in mission capabilities and performance:

• The Technical College System of Georgia (TCSG) oversees 25 technical colleges, adult literacy programs, and a variety of economic and workforce development programs. TCSG's colleges have begun transitioning to a unified communications platform of IP voice, video, and messaging to take advantage of emerging capabilities for high-quality remote collaboration. For example, TCSG staff now use video-enabled phones to meet with colleagues throughout the state. Students use video conferencing to consult directly with administrators about registration and courses from dispersed locations. The transition has generated valuable cost savings through improvements in staff productivity and reductions in travel and communications costs. For example, the cost for phone services for one TCSG campus was reduced by nearly 80 percent—from $29,000 to less than $6,000 per month. Today, more than half of TCSG's technical colleges are using a unified voice and video communications system, and more are coming on board. TCSG officials say the system pays for itself in two to three years.

• A large U.S. state government transitioned from a Centrex platform to an IP telephony system to reduce costs and improve the quality of its phone services for more than 22,000 endpoints. The investment cost over a ten-year period for the new equipment, including the network refresh costs for routers, switches, and servers, was $28.7 million. The total savings over the ten years from reduced costs for equipment, maintenance, and calling services was $69.8 million, yielding a net return of $41.1 million and an ROI of 143 percent.

• A Canadian province with 8,500 endpoints is expecting a complete payback for its investment in IP telephony within just eight months. Canadian officials estimate that the cost of equipment, installation and refresh during a three-year deployment will be $6.8 million (U.S. dollars), while the benefits generated during this same period will be $70.4 million, which consists of $28.5 million in reduced operating expenses and $41.9 in productivity gains. The net benefits in just three years will be $63.6 million for an ROI of more than 900 percent!

• Bexar County, Texas, implemented Cisco Connected Justice with high-definition video teleconferencing at 20 strategic endpoints throughout the county, including courtrooms and jails, to gain a variety of benefits. Court officials can use video teleconferencing to obtain remote testimony, hold virtual hearings, and conduct a wide variety of other processes. This has enabled the county to dramatically cut travel expenses for inmates, security guards, defense lawyers, expert witnesses, and others. Video teleconferencing has also helped streamlined proceedings and reduced caseloads, thus reducing the jail population and its associated costs. Overall safety

has also improved. County officials estimated that in 2011 alone, the county saved hundreds of thousands of dollars from the resulting efficiencies, and they expect the system to pay for itself over the next few years.

• Numerous federal agencies also are adopting an IP-based communications platform. As mentioned, the Patent and Trademark Office reported that its telework program generates more than $19 million in cost avoidance annually for office space, which is more than enough to pay for new infrastructure and other support, such as new voice, video, and mobile technologies. The National Institutes of Health is connecting doctors and researchers using video, voice and collaboration tools to expedite the review of medical data and make collaborative decisions quickly, all without the need for travel. Similarly, the Department of Veterans Affairs is using video and telepresence to connect doctors with veterans experiencing posttraumatic stress disorder (PTSD), so veterans can have face-to-face consultations without having to travel to local VA hospitals. This has increased the number of patients that doctors can see, while also making it easier for veterans to receive treatment. And for frontline Army troops, collaboration technologies purchased through the Army's Warfighter Information Network-Tactical (WIN-T) program have enabled commanders to communicate securely with deployed soldiers, even in harsh environments, thus helping to keep warfighters safe and enhancing mission effectiveness. Although a precise ROI has not been calculated for these engagements, the organizations are seeing desired payoffs in performance, such as improvements in the health and safety of U.S. warfighters and citizens, and enhanced mission effectiveness.

Conclusion

With budgets and staffs stretched thin, public sector organizations are searching for ways to cut costs and help employees work more productively. IT leaders recognize that collaborative voice, video, and mobile technologies could enable their organizations to achieve these goals, but they expect to implement these technologies when investment dollars are more plentiful. In the meantime, they are trying to get by with current communications platforms that are just good enough. Such thinking is faulty on two counts. First, there is no guarantee that budgets will turn around anytime soon, and so they are pouring scarce resources into expanding and maintaining less capable and more expensive legacy systems. Second, they are missing an opportunity to "invest to save" in new technologies that actually pay for themselves—often within 36 months—while providing the productivity gains to improve services and take on expanded mission responsibilities.

The transition from a traditional communications platform to high-quality voice, video, and mobility technologies begins with a strategic collaboration architecture that charts a path for continuous upgrades and the seamless incorporation of emerging technologies into the IT infrastructure. It also includes effective training for IT staff and the adoption of new processes that capitalize on the new technologies. Organizations that have adopted this approach have been able to identify ways to invest limited resources in collaboration technologies that generate the biggest payoff in terms of cost avoidance, operational efficiencies and increased revenue streams. Most importantly, the collaborative environment created by unified voice, video, and mobility will spur innovation and efficiencies in unanticipated ways to improve mission capabilities and performance.

Cisco

For more information:

· Technical College System of Georgia (TCSG)
http://www.cisco.com/web/ strategy/docs/education/state_college.pdf

· Connected Justice in Bexar County, Texas
http://www.cisco.com/web/strategy/docs/gov/case_study_bexar_county.pdf

· Wake Forest University
http://www.cisco.com/assets/swa/vid/ent/WakeForest.mp4

· Madison Area Technical College
http://www.cisco.com/web/strategy/docs/education/stufac_collab.pdf

Cisco Collaboration in Government
www.cisco.com/go/govcollabevolution

Cisco Collaboration in Education
www.cisco.com/go/educollabevolution