

Changing the Way Government Works: Four Technology Trends that Drive Down Costs and Increase Productivity

This paper discusses four technology-based approaches to improving processes and increasing productivity while driving down department and agency costs.

In today's do-more-with-less climate, IT groups must leverage technology to chart a path toward smarter and leaner government processes. Congressional leaders and taxpayers want streamlined processes, improved productivity and enhanced constituent services. Federal agencies must also comply with numerous executive mandates, from telework to sustainability policies and others designed to help agencies deliver efficient, effective and accountable government services while reducing environmental impacts.

At the same time, many federal agencies confront deep organizational challenges, such as budget cuts, siloed departments and resource limitations, making it difficult to meet various competing demands. All this puts intensified pressure on IT departments to cut through the red tape and find technology solutions that will improve processes while addressing organizational challenges.

By utilizing technology trends to streamline work processes, government agencies can find a winning situation: improved business processes that lead to cost savings and more efficient use of resources that culminate in better service delivery. What's more, many of these technology solutions make compliance with overarching federal mandates easier to achieve and help reduce the government's environmental footprint.

In this paper, learn about four technology-based approaches to improving processes and increasing productivity while driving down department and agency costs.

Challenge: Adapting to Shifting Work Habits

With large swaths of government workers retiring or close to retirement, a growing percentage of digital natives are now entering the federal workforce. These new employees desire different, more connected approaches that allow them to work anywhere, anytime and from any device. Telework is now one of the biggest trends in government IT. Last year alone, according to an annual report to Congress, the number of federal employees deemed eligible to telework nearly doubled to more than 1 million.ⁱ Driving this trend is the Telework Enhancement Act of 2010, which is targeted at increasing the number of federal teleworkers to improve the federal government’s Continuity of Operations (COOP) initiative while reducing management costs, limiting environmental impacts and improving work-life balance. The push for telework also comes from executive sustainability goals, which include Executive Order 13514, a federal government-wide mandate to achieve a 13 percent reduction in indirect greenhouse gas emissions from activities such as employee commuting by 2020.

Given these trends, the federal workforce will become more virtual and dispersed. However, the measure of success for government agencies will be determined not only by how much of the workforce is telecommuting, but also by their ability to provide effective collaboration opportunities and communication systems despite time and distance barriers.

In this context, traditional collaboration models, such as conference rooms with high-end AV capabilities, will not provide the best solution for small group or ad hoc collaboration. While

these types of rooms will always have a critical place in the overall collaboration environment, given current government belt tightening and the expense required to outfit traditional rooms, more flexible and less costly collaboration alternatives must be considered to meet the rising demand for versatile collaboration tools.

Many federal government agencies devote a significant portion of their IT budgets to deploying and operating communication systems, including email, audio conferencing, video, instant messaging (IM), web conferencing and telephony.

And typically, each agency might have different solutions for different communication capabilities, which all have their own capital and operational expenses, maintenance contracts and internal support staff.

39% reduction in annualized total cost of ownership for collaboration tools when Lync is utilized.

Cloud-based collaboration can address many of these communication needs. With 39 percent of government agencies either already using or in the process of moving conferencing and collaboration software to the cloudⁱⁱ, there are new opportunities to consolidate communications capabilities like IM, video and telephony. IT teams should be looking for cloud communications solutions that are less costly and easier to maintain and that deliver a more unified approach to collaboration.

Solution: Make Collaboration Easy with Lync® Huddle Rooms

By linking together two innovative ideas—small conference “huddle rooms” and Lync, a Microsoft® unified communications solution that provides audio, visual and instant messaging capabilities—IT teams can quickly and affordably increase the availability of collaboration options for a more virtual workforce. Small, less costly

Crestron RL Makes Lync Simple for Everyone

Crestron RL provides a comprehensive group collaboration solution. Crestron RL makes it possible for anyone to walk into a conference room and, with just one touch of a button, instantly start a collaboration session. Users can employ Lync to share their desktop with local and remote participants, view and annotate over PowerPoint remotely or use the interactive white board.

Crestron RL connects over the corporate LAN, so implementation is extremely easy. No system design or programming is needed. There are no costly hidden add-ons and no intimidating end-user training is required.

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and more flexible spaces equipped with digital displays, video cameras, microphones and Lync capabilities will significantly expand opportunities for virtual interagency and cross-agency collaboration that make it easy to work productively with others whether local, teleworking or in another facility.

With dramatic growth in both popularity and functionality, Microsoft Lync is a top choice for virtual collaboration and is being adopted by a number of federal agencies, including the Federal Aviation Administration (FAA). Just last summer, the FAA migrated 60,000 users to Microsoft Office 365, allowing employees to use Lync software to instant message, make audio and video calls, and hold web meetings where they can share desktops, view PowerPoint presentations and use a virtual whiteboard to transfer files.ⁱⁱⁱ

As agencies have already discovered, the advantages of deploying Lync huddle rooms for small group collaboration are numerous. Not only are these types of collaboration-capable huddle rooms less expensive than traditional conference rooms with proprietary solutions, but by utilizing Lync, organizations can reduce their annualized total cost of ownership (TCO) for collaboration tools by 39 percent compared to other solutions.^{iv} In addition to cost savings, the availability of collaboration-ready huddle rooms supports attainment of government telework and sustainability mandates; allows agencies to provide a comprehensive COOP solution—keeping more people connected from more locations, something that older telephony environments cannot do—and fosters work habits that increase employee productivity through reduced travel time and costs as well as better use of space.

Challenge: Personal Work Space is Costly and Underutilized

With almost two million civilian employees, the federal government and its taxpayers incur a significant cost to provide work space for federal workers.^v But as telework continues to gain traction in this sector, the government administration, eager to unlock real estate savings, has made it a priority to make more efficient use of the government’s real estate assets and has implemented a “Freeze the Footprint” policy for federal real estate.

Many agencies are resistant to adopting new real estate standards, but with huge numbers of General Services Administration (GSA) leases expiring in the next three years and bipartisan support in Congress for aggressive action to improve space utilization and cut lease costs^{vi}, agencies must face the music and prepare for tighter standards. Already, some agencies have felt the pinch. In a May 2013 press release, the House of Representatives specifically noted the savings created by requiring GSA to improve work space utilization and showed a reduction in useable square feet (usf) per person in six federal agencies, including the Department of Defense (by 85 usf/person), the U.S. Fish and Wildlife Service (by 58 usf/person), and the National Labor Relations Board (by 107 usf/person).

The challenge, however, is that while work space is shrinking, many employees that telework may not do so every day. In 2009, the United States Office of Personnel Management reported that approximately 103,000 federal employees were teleworking. However, less than 14,000 were teleworking three or more days per week.^{vii} While the overall number of telecommuters is higher

today—at almost 160,000 —the 2009 study reveals that most teleworkers continue to work in the office at least some, if not a majority, of the time.^{viii} And this means that they must have an in-office work space.




To offset the pressure for space reductions while still providing some work space for teleworkers, agencies must consider flexible, space-saving options. According to one study, a typical business would save \$11,000 per person per year for workers who work from home even just half the time.^{ix}

Solution: Adaptable Work Spaces




To resolve this problem, one popular solution is to create open-space layouts that reduce overall space but leave room for everyone to “plug in” when and as needed. Open-space environments, however, often provide more distractions, which can reduce productivity levels. According to a 2013 Gensler survey, worker density has increased nationwide since 2008, but time spent collaborating has decreased 20 percent, and overall workplace effectiveness has declined.^x Avoiding these types of productivity losses requires balancing job focus and the need to collaborate with space optimization.

4 Trends That Drive Down Costs and Increase Productivity




Telework on the Rise

-  1 million federal employees eligible to telework
-  13% reduction by 2020 in indirect greenhouse gas emissions from activities such as federal employee commuting
-  \$11,000 saved per year by the typical business for workers who work from even just half the time




Increasing Virtual Collaboration

-  39% annualized total cost of ownership reduction on collaboration tools with Lync
-  Lync huddle rooms are less costly to outfit than traditional conference rooms
-  Lync huddle rooms increase productivity through reduced travel time

Better Space Management

-  28% reduction by 2020 in direct greenhouse gas emissions from fuels and building energy use for federal agencies
-  50% to 65% energy savings from use of occupancy sensors
-  29% energy savings with facility-wide lighting control

Setting Audio Visual Standards

-  8-10 technology devices in typical mid-size conference room equals low productivity
-  Standardizing equipment increases productivity through reduced training time and improved utilization
-  Saves money with less training and maintenance for staff

Implementing an adaptable work space approach that allows each employee to reserve whatever type of individual or group work space they need for a particular task can provide an effective and productive work atmosphere while still reducing the overall footprint. In addition to utilizing traditional conference rooms or small group huddle rooms, agencies can create hot desks or hot offices—desk space or offices where teleworkers, mobile employees and guests from other agencies with mobile devices (laptops, etc.) can plug in and work, make calls and access agency intranet applications and the internet. To further improve efficiency, interactive digital signage connected to meeting-scheduling software allows the space to be reserved in advance or at check-in, and can also be programmed to display the employee's name when credentials are submitted.

Organizations that are forward thinking in using technology to promote the most efficient and productive work atmosphere will reap the most benefits. Hot desks or hot offices as well as other adaptable work space options ensures the successful implementation of telework by providing work space that allows for high levels of focus, collaboration and productivity—all while significantly reducing space and saving money.

Challenge: Ad Hoc Technology Solutions Create Inefficiencies for Routine and Mission-Critical IT Functions

Technology fragmentation—the inefficient, piecemeal deployment of solutions—is a common problem in large organizations and enterprises. Government procurement processes often promote segmented planning or decentralized purchasing that can compound the fragmentation, as do current GSA P-100 standards, which provide few details for AV room or facility standards. Consequentially, agency facilities become a patchwork of technology solutions that aren't user-friendly or efficient.

The typical mid-size conference room contains 8-10 technology devices. Using and maintaining different devices in different rooms or buildings leads to headaches and lost time as users struggle to figure out how to use each new device. In mission-critical applications, such as multi-site deployments that require collaboration technologies used by emergency operations and military organizations, the ramifications of fragmentation are even greater. Time delays in these situations due to unfamiliarity with technology from location to location can result not just in lost productivity, but endangerment to national security or someone's life.

On the support side, agencies are left with numerous small support contracts that are complex and costly to maintain and users often don't know who to call for help. With pressure mounting on the federal government to streamline processes and run more efficiently, IT teams must resolve their legacy of ad hoc technology solutions.

Solution: Set Audio Visual Standards Across the Agency

From business conference rooms to large auditoriums to mission-critical military or public safety meeting facilities, establishing best practices and standardizing technology choices and graphical user interface (GUI) configuration is the first step to improving overall IT efficiency. Over time, adopting audio visual (AV) room standards ensures opportunities for new construction, renovation and tech-refreshes that create more productive and aesthetically pleasing work spaces.

To combat government procurement processes that often make standardization difficult, building tenants should consider working with their contracting office to establish Blanket Purchase Agreements (BPAs) to streamline AV acquisition. Using a BPA leverages the government's buying power and, if properly defined, guides consistent implementation of room standards. Use of leading AV brands with comprehensive portfolios balances the need for design flexibility with the objective of achieving a consistent and familiar look and feel for the end user while also meeting Section 508 compliance.

For users, access to standardized AV equipment throughout an agency's facilities increases productivity. Meeting participants are no longer left fumbling to figure out different equipment in every conference room they enter. Familiarity with the equipment, regardless of which room employees are using, also provides cost savings by reducing training costs (employees only need to be trained on one system). Likewise, consistent use of one system over time increases efficiency because users become confident with a system and proficient enough to use its advanced capabilities.

In mission-critical applications, such as military or emergency operations centers, standardized solutions are crucial. It is imperative that no technology delays or difficulties occur like the kind users confront with unfamiliar technology from location to location. Whether in a local or satellite office, operating collaboration and communications technology in time-sensitive situations should be second nature, not something that has to be learned on the spot. In these kinds of environments, implementing a standardized solution that provides secure access and quickly synthesizes information across all locations is key to generating fast and accurate decision making.

On the IT side, maintenance, troubleshooting and support all become easier when AV solutions are standardized. When the system is the same in every room, support technicians develop a more in-depth knowledge of the system and can quickly troubleshoot and fix problems. There is also less overhead in spare supplies, since the same equipment is used in all locations. Configuration and programming are also more streamlined because all rooms use the same code, eliminating the need to customize each room.

Challenge: Buildings Need to Run More Efficiently

Federal government employees occupy nearly 500,000 buildings. Consequently, the federal government has a responsibility to lead by example when it comes to environmental performance. Executive Order 13514 sets sustainability goals for federal agencies, with a focus on making improvements to environmental, energy and economic performance.

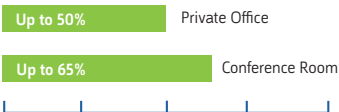
The order requires the federal government to reduce its direct greenhouse gas emissions, such as those from fuels and building energy use, by 28 percent by 2020. The order also requires government to reduce indirect greenhouse gas emissions, such as those from employee business travel and commuting, by 13 percent by 2020. By meeting these two goals, the federal government could save up to \$11 billion in energy costs over the next decade and eliminate the equivalent of 235 million barrels of oil from its own activities.^{xi} The order also requires agencies to meet a number of energy, water and waste reduction targets, including implementation of a 2030 net-zero-energy building requirement.

Integrated Building Energy Savings

29% Energy savings with facility-wide lighting



Typical range of savings using occupancy sensors



Christie Phoenix for Mission Critical Content Management

Christie Phoenix enables secure access and control of information from one or multiple users in virtually any location. Users are able to synthesize information quickly and generate fast and accurate decisions in critical situations. It is the clear choice for fast-paced command and control centers with mobile and dispersed workforces such as public utilities, government, security and surveillance, transportation and telecommunications.

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To meet these various mandates, government organizations must carefully consider all options for energy reduction and look to new technologies for help.

Solution: Unify All Energy Systems for Greater Efficiency

While recycling older projectors and displays (those purchased before 2010) makes sense and promotes energy efficiency, selecting EPEAT or Energy Star products is just the beginning. To fully leverage available technology and reap the most reductions—both in emissions and utility costs—IT teams must look at integrating all building systems onto a single, intelligent building management platform.

By unifying all energy-consuming systems—including HVAC, lighting, shades, AV, voice and data, security, room scheduling, and more—organizations can eliminate inefficiencies while still maintaining occupant comfort and productivity. In fact, managing and monitoring disparate systems from a single workstation can be one of the biggest benefits of an integrated system. By managing and controlling all of these technologies throughout the entire facility from one dashboard, agencies should see lower labor costs and improved operations.

But that's far from the only advantage. In one Crestron building system integration case study, energy savings from the use of occupancy sensors ranged from 50 percent in private offices to 65 percent in conference rooms. And facility-wide lighting control provided a 29 percent energy savings compared to a manually controlled system. Complete system integration reduces the time it takes to respond to problems, improves maintenance and helps keep all systems operating at peak performance for the highest energy savings possible. Even when complete building systems integration is not attainable, meaningful change is still achievable through incremental implementations—room by room—that can eventually be tied together.

Conclusion

It has always been difficult to implement new business processes and technologies in the public sector, but given the current climate of constant connectivity and the pace of change, transformation is necessary if government agencies want to meet constituents' demands and simply work more effectively. Technology that improves collaboration, better manages a more mobile workforce, streamlines training and maintenance and reduces energy costs is an effective and highly efficient way to do more with less.

A solutions provider experienced with using leading brands and working with agencies at a local and enterprise level will help ensure the highest cost savings and efficiency. IT teams can calculate these savings not just from hard dollar returns, such as reduced space costs, but also through indirect savings. Indicators of success include: increased room utilization; ability to provide a work environment that attracts and retains qualified staff; and compliance with policy mandates on energy use, travel, real estate consolidation and ADA compliance, as well as how much more productive and efficient the agency is as a whole. The agency's ability to better achieve its mission while eliminating organizational challenges that have long been barriers to optimal performance will be the final payoff.



About AVI-SPL

AVI-SPL is the federal government's premier source for communication and collaboration solutions. Independently recognized as the leader in Video Teleconferencing (VTC), Digital Media (DM) and Audiovisual (AV) Systems Integration, we provide custom-integrated and off-the-shelf solutions to Department of Defense, civilian agency and Global 2000 clients worldwide. AVI-SPL's Customer Care Program provides manufacturer-authorized maintenance, tiered-support options and access to our U.S.-based helpdesk staffed by trained AV and VTC specialists 24/7/365.

To learn more about these and other technology solutions, visit <http://www.avispl.com/markets/government/>



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Christie has industry-leading, ready-to-use display systems or completely customized display solutions—all built on proven technologies, engineering strength and expertise. Whatever your vision, from small briefing rooms to complex command centers and anything in between, Christie delivers the best visual display solutions—anywhere, every time. Many of our products are listed on GSA Schedules 58 and 70. Christie's exceptional products, service, knowledge and expertise are an integral part of the entire solution.



About Crestron

Crestron understands the unique and specialized needs of government and military agencies and the importance of securely automating control of the technology throughout a facility. Crestron streamlines and simplifies the technology you use to make your job easier. Our Crestron RLTM solution combines Crestron hardware with Microsoft Lync® software to remotely monitor and control all systems. We also provide lighting, HVAC, security and AV control and automation from anywhere, at any time.

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