

Overcoming Obstacles to Technology-Enabled Transformation

by

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This is the thirteenth in a series dedicated to understanding innovation in the public sector and in the public interest. The Ford Foundation launched the Innovations in American Government Program in 1985 and funded all of its elements through 2000. In 2001, the Foundation established an endowment at Harvard University to continue the Program in perpetuity and to locate it in a new Institute for Government Innovation. Each year, the Program selects the winners of the Innovations Award from approximately 1500 applications and supports research and casewriting based on the applicants. The Innovations in American Government Program also works in partnership with the Council for Excellence in Government.

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One day in 1999, David Barram stood in his kitchen and stared down at a *Washington Times* headline, which screamed that his proposal to close down the General Service Administration's (GSA) eight warehouses was going to get a bunch of blind people fired. The one thought running through his head was, "Ushering in the future can be a lousy job."

Barram, a Clinton administration political appointee, was head of the GSA, the federal agency responsible for erecting and maintaining government buildings; purchasing and distributing billions of dollars in goods and services; maintaining the vehicle fleet; and innumerable other mundane, complex, expensive and unsexy tasks that keep Uncle Sam functioning. By the mid-1990s it became uncomfortably clear the GSA was in trouble.

In corporate America, almost everything the agency did — from procuring supplies to selling surplus property — was being transformed by technology. But the GSA went about its business the same way it had for decades, funded solely by revenues from services it provided to other federal agencies — services that other companies could now perform far more efficiently. Barram, a Washington transplant who spent decades managing the financial operations of Silicon Valley colossi such as Apple Computer and Silicon Graphics, was painfully aware the agency had to either rise with the digital tide or get swamped by it. During his first week on the job, the former Apple executive asked for a Macintosh in his office. A few hours later, he received a dusty, five-year-old Mac 2 that was ceremoniously produced from the far corners of the building's basement.

This was precisely the sort of archaic mentality Barram was determined to banish. "Given where they were, it was impossible in the environment I came into at GSA to use technology too much," he said. His early attempts to turn the agency into a public-sector exemplar of private-sector efficiency included such relatively uncontroversial projects as GSA Advantage — a virtual marketplace that let federal employees purchase more than 100,000 different supply items online;

"If you are going to sin, sin against God, not the bureaucracy. God will forgive you but the bureaucracy won't."

— Adm. Hyman Rickover

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mandatory purchase cards (in essence, government credit cards) for transactions under \$2,500; and FirstGov.com, the federal government's Internet portal.

The Warehouse Battle

From a private-sector perspective, Barram's decision about the warehouses seemed straightforward. The advent of online procurement, just-in-time delivery methods, electronic purchase cards and nationwide supply companies, such as Office Depot, had long since rendered obsolete the practice of warehousing huge stockpiles of goods for weeks, months or even years at a time. (Dell Computer Corp., for example, maintains less than a week's worth of inventory at any one time.) The GSA's supply-chain system, by painful contrast, remained dominated by hamlet-sized warehouses considered state-of-the-art back when America liked Ike.

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Clearly the GSA could save many millions of taxpayer dollars by moving its operations out of the warehouses and onto the Web. In fact, Barram's early initiatives, like GSA Advantage and purchase cards, already partially achieved this goal.

So in July 1999, Barram announced his intention to shut down the GSA's eight monstrous warehouses and move toward a "virtual platform." Henceforth, supplies would be ordered from GSA's Web page and delivered directly from vendors to agencies. "The warehouse business was a billion and a half business that had declined to under \$1 billion, and eventually it was going to zero," Barram said. "There was no point in trying to hold onto a declining program."

If Barram were still at Apple, the same decision would have been a no-brainer. In fact, failing to perform such cost-cutting might be considered reasonable grounds for dismissing a Fortune 500 CFO.

But in government, no one can cut even one dollar from any service for any reason without generating an equal and

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opposite (or greater) reaction from the entrenched powers whose budgets are being threatened. In this case it was the unions — the American Federation of Government Employees (AFGE) to be precise. The question of whether keeping the warehouses would be good or bad for the American people as a whole was not necessarily of primary importance to the union, whose reasoning was self-interested. Closing the warehouses meant the loss of dues-paying members. QED. As Barrum soon discovered, the union considered his announcement tantamount to declaring war.

It didn't thrill GSA's private-sector partners, either. Numerous vendors who'd enjoyed many lucrative years moving goods into and out of GSA warehouses faced increased competition, and thus decreased profits, if Barram managed to move their longtime fiefdoms online. "We're going to lose a whole lot of business," said a manager for Polaroid Corporation's Fairfax office. "When [customers] find that the warehouses are closed, they're probably going to take their credit cards to Wal-Mart.¹" Barram's initiative would save the taxpayers lots of money – but it could also cost some other people their jobs.

And some of them might be blind. "GSA Plan to Shut Warehouses Down May Put Blind Out of Work," read the *Washington Times* headline. For more than 50 years, GSA was the principal distributor of goods produced by the National Industries for the Blind (NIB), which argued that 1,400 blind and disabled workers might be affected by the closures. "The domino effect could jeopardize the whole program," warned NIB President Jim Gibbons.

So roughly a year before a presidential election, Barram faced an enraged coalition of business and usually Democrat-friendly labor, and the NIB layoff PR catastrophe added fuel to the fire.

If all that didn't put him far enough behind the eight ball, AFGE took the GSA to court, arguing that Barram's warehouse plan violated a 1993 memorandum of understanding between the

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union and the agency. The arbitrator agreed and ordered GSA to keep the warehouses open. At this point, not even the most feverish cost-cutter would have blamed Barram — or as some GSA staffers called him, “Scrooge” — for folding his tent. Live to fight another day. You gave it your best shot, right?

Wrong. “In government, the usual practice if you do a good job is to jump in the foxhole to avoid the bullets,” Barram said. “But I was determined to see this one through. Philosophically, we’re better off as Democrats if we don’t always kowtow to the unions and other special interests.” Just three days after the arbitrator’s decision, Barram issued a defiant statement saying he would go ahead with the closures, pending an appeal to the Federal Labor Relations Authority. “Nobody at the White House ever told me not to do this,” Barram recalled. “I think they were frustrated that I couldn’t make it work with the unions, but they didn’t ask me to give in.”

In autumn 2001 — several grueling years and one change in administration later — six federal supply warehouses were shut down. The closures will save American taxpayers \$176 million over 10 years. At the end of the day, only 63 warehouse employees received pink slips.² And the blind workers still have their jobs.

A Matter of Will

Until recently, the decision to pursue e-government and other technology-enabled government reform tended to be relatively painless, typically involving the addition of another service channel rather than program cuts, employee layoffs or arduous re-engineering. Barram’s saga represents the other side of the coin — the side we’ll see more frequently in the near future, as governments facing major budget shortfalls try to use information technology to transform Byzantine, outmoded systems.

“E-government transformation will be a matter of will,” said Texas CIO Carolyn Purcell. “Government leaders have to have the will to revamp their systems.” Anybody who feels threatened by change is a potential opponent — from public employees who

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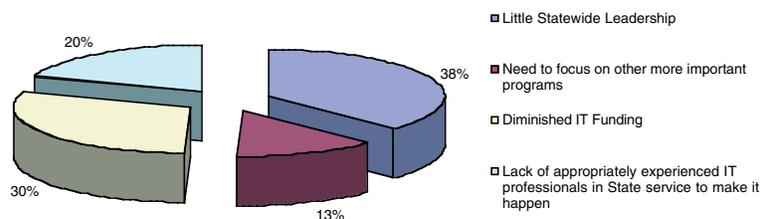
fear losing their jobs, to department heads who worry about losing control and budgetary authority.

“We discovered that technology was the least of the challenges,” recalled John Kost, former Michigan CIO and current vice president at Gartner Group. “The bigger problems were turf battles, organizational problems and politics.”

These are only the beginning of the nontechnology challenges. Add to this list privacy and security — both of which require wholly separate treatments. Then there are problems with jobs, stovepipes, money and culture. These are just some of the challenges facing CIOs intent on modernizing government. But across the country, at all levels of government, public-sector technology leaders are showing how these and other barriers to transformation can be overcome.

Table 1: Primary Barriers to IT-Enabled Transformation

What would you identify as the primary barrier(s) to using technology to reform government?



Source: Deloitte Research Survey of Public-Sector CIOs, 2003

Jobs

No aspect of government reform provokes a fiercer reaction than threatening the jobs of public employees. Connecticut Gov. John Rowland found this out the hard way several years ago when he proposed the consolidation and outsourcing of all state IT operations. Despite the governor’s promise that all displaced public employees would be given jobs with the private sector for at least two years, his plan engendered intense opposition from the state public employees’ union. After years of battling both the union and its legislative allies, Rowland finally dropped his signature government-reform initiative — what

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would have been the largest state outsourcing deal in history — four years after its introduction.

To date, very few public employees anywhere have lost their jobs as a result of digitization. Even the few layoffs resulting from the GSA warehouse shutdown were anomalies.

Thanks to the state and local budget crisis, this will change. Policy-makers are increasing their reliance on technology not only to provide better services to citizens, but also to fulfill the old promise that tech innovations can cut costs. This new emphasis on the bottom line is likely to threaten the jobs of public employees in two ways.

As more citizens take care of government needs on the Web, fewer government clerks will need to process requests, fewer human resource professionals will fill out personnel forms, and fewer data processors will transfer information from paper to computer.

First, as more governments pursue IT outsourcing and consolidation, some government IT jobs will disappear. “When I came in, there was a LAN every 40 feet, and instead of having three people supporting it, there were twelve,” said former Georgia CIO Larry Singer. “That kind of thing is standard practice in government.” Such practices are a 1990s luxury that today’s cash-strapped governments can no longer afford.

Second, as more citizens take care of government needs on the Web, fewer government clerks will need to process requests, fewer human resource professionals will fill out personnel forms, and fewer data processors will transfer information from paper to computer. These and countless other tasks will be done by machines, or by citizens themselves via self-service Web transactions. Florida, for example, plans to reduce the number of state human resource employees by 1,200 — saving \$24 million a year — by Web-enabling and outsourcing payroll, human resources and benefit administration. The Texas Comptroller’s Office has calculated that \$40 million could be saved by shifting Medicaid applications from face-to-face interviews to call centers and the Web, which would mean cutting state employee workloads in half, shuttering many field offices and trimming 3,500 state jobs.³

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Another government job likely to be affected by automation is the issuance of licenses and permits. Around 17,000 different government entities in the United States issue 100 million-odd building permits each year. The annual cost of administering these permits is around \$16 billion – or \$160 per permit.⁴ With electronic permitting, a good chunk of these costs go away. Because most of the costs are in staff time, eventually fewer employees will be needed to hand out building permits.

Public employee unions are clearly worried about the potential impact of technology on government jobs. The Social Security Administration (SSA) maintains over 1300 field offices, an average of two and one-half for each Congressional district. Fearing job losses, the union representing SSA is categorically opposed to closing any of them and considers e-government the biggest potential threat to the existence of the offices. “Congress should be alerted to watch closely and recognize that Internet claims taking could result in more centralized workloads, and the closing and consolidation of community-based offices in every congressional district,” said Witold Skwierczynski, president of the union representing Social Security employees, to a congressional committee several years ago.⁵

Although the potential loss of public-sector jobs will surely complicate any attempts by budget offices to extract hard cost savings from information technology, it shouldn’t be viewed as a deal-killer. There are ways to cut workloads and jobs without massive layoffs. “It’s the same as any other business,” said Harvard professor and former Indianapolis Mayor Stephen Goldsmith. “Some people will retire. Some will be retrained. Some will be employed in the private sector. Some will actually be moved to more meaningful work. Instead of determining whether people are eligible for a service, their job would be to actually help them.”

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demand without piling more work onto existing employees. “By [2010] we’re going to be looking at workloads that are 22 percent to 28 percent higher than they are now,” says John Erwin, a member of the Social Security Administration’s Internet projects team. “How do you get 28 percent more work with the same staff? You have to find a way to offload that work, and get the public to help themselves.”⁶

Moreover, governments will need to cut fewer jobs than it may at first appear because the governmental work force is graying: Nearly 70 percent of senior federal civil servants will be eligible for retirement by 2005. At the state and local level, 42 percent of all government workers are between 45 and 64 years old. The aging work forces allow governments to use attrition to secure cost savings from IT with a minimum of layoffs.

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Breaking Down the Stovepipes

The year 2000 brought one of Florida’s worst droughts in years. Craig Fugate, director of Florida’s Emergency Management Agency, asked his staff to find available federal assistance for drought victims. Florida officials discovered there was no central place to find this information and were forced to navigate their way through a convoluted maze of more than 1,000 federal disaster response grant programs in 250 different federal agencies.

“We made dozens of calls and went to hundreds of Web sites,” Fugate recalled, adding that he estimated the process occupied hundreds of hours of staff time. “To obtain this kind of information, you have to become an expert on how every agency is organized.” It took Fugate and his staff more than a year to finish researching the grants, by which time the drought assistance was no longer needed. It had started raining again in Florida.

Unfortunately, Fugate’s experience is pretty standard fare when it comes to dealing with the federal government. Cities, counties, states and even average citizens face similar tribulations daily. The root of the problem: the stovepipes that dominate the federal government. While nearly all governments experience

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some problems getting agencies to cooperate with each other, nowhere is the problem worse than in the federal government.

Take e-government for example. It has been used elsewhere to connect stovepipes and present a unified face to the public, but as Fugate's experience demonstrates, the feds had used e-government mostly as a way to replicate in cyber-space the stovepipes and duplication existing in brick-and-mortar government. The result: endless islands of automation. (Exhibit A: the Department of Health and Human Services' 2,000 Web sites and 3,000 different servers.) "In one division, I found we had 5 financial systems, 13 grant management systems, 6 acquisition systems, 6 personnel systems, and 13 separate e-mail systems," explains Health and Human Services Secretary Tommy Thompson. "Now, how do you run a department like that?"¹⁰

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This is the grim situation Mark Forman confronted when President George W. Bush appointed him as the administration's technology and e-government czar. Hardly anyone in the know in Washington expected Forman to do much about this state of affairs. Jaded Beltway insiders said he'd never get turf-obsessed federal agencies to cooperate with each other. They warned him Congress would never let him get away with shifting IT money from individual agencies to cross-agency projects. They snickered when he said he hoped to change the culture of federal agencies in 18 to 24 months.⁷ They told the press that a non-Senate confirmed, OMB associate deputy wouldn't have the power or authority to knock bureaucratic heads together. "eGov will not achieve the transformation everyone dreams of because of the inertia," said a former federal CIO in what was a typical comment at the time. "Mark has a bigger job than anyone could possibly do. I'm not sure the president can hit this with a big enough hammer to make it move."⁸

It was hard to argue with the gloom-and-doomers — history, after all, was on their side. The permanent Washington bureaucracy already chewed up and spit out countless wild-eyed reformers who tried much less ambitious things than what Forman

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had in mind. There was just one problem this time: Forman wasn't listening. "They had such a constrained vision of what was possible to accomplish," Forman recalled. "I just didn't believe we needed to be years and years behind private industry, so I just told the agencies that we're going to do this — and we did it."

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His third day on the job, Forman said the feds might have been spending too much on IT due to the existence of hundreds of duplicative and overlapping federal IT projects. The statement shocked federal contractors, who assumed this former tech executive would usher in an era of unfettered IT budgets. A few days later, he told federal managers that many federal digital government efforts were just spinning their wheels. "If 20 agencies are improving their service to a citizen by moving it online, but not working together, it still means the citizen has to walk through 20 doors," Forman noted. "It just digitizes the confusion." All in all, Forman estimated the duplication in the federal government was costing taxpayers at least \$9 billion in IT costs alone.

Simplify and Unify

As the person most responsible for making good on Bush's campaign promise to make the federal government citizen-centered, Forman said he hopes to eventually reach a point where citizens can walk through just one door to conduct most interactions with the feds. Forman joked that a healthy byproduct of this effort will be to "get rid of the need for the legions of lawyers and accountants" citizens today are forced to hire to navigate the federal maze. To get to this point, he's working to eliminate redundant systems, consolidate e-government projects, convince agencies to look beyond their traditional silos, and focus attention and money toward cross-agency and cross-governmental projects. His approach, dubbed "simplify and unify," while still a work in progress, offers several lessons for how to break up stovepipes:

Create Champions. One of the first manifestations of "simplify and unify" came days after 9-11, when the Office of

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Management and Budget (OMB) announced that more than 300 federal e-government projects would be consolidated into just 24 initiatives. Forman created champions for each initiative by designating the agency with the most “skin in the game” (usually the one with the most resources invested) as the lead agency responsible for the day-to-day work of each project. For example, the e-grants project — which involves consolidating 800 different federal grant applications into one online process — is managed by the Department of Health and Human Services (HHS) because it doles out more grant money than anyone else. Dozens of federal agencies have their own grants processes and have been asked to not only cooperate with HHS, but to give up some control over budget, policy and resources. This lead agency model provides each of the lead agencies with several powerful incentives to shepherd the project to completion: more recognition, more turf and more money.

Establish consequences. Even with these incentives, Forman still had his share of problems with the lead agencies. A handful of project managers were replaced and several projects were taken from lead agencies that weren’t getting the job done. Such problems were trivial, however, in comparison to the resistance Forman faced from many of the “partner” agencies, all of which would lose a certain degree of control and funding under his plan. “No one wants to give up something they are already working on,” explains an official from the Social Security Administration. “Other agencies don’t want to cooperate with our project and we don’t want to cooperate with theirs.”¹¹

One strategy that helped agencies play together was the scorecard. Each agency was graded on their progress in meeting the president’s management goals. Those that refused to play ball received failing grades — represented by red dots. The grades were made public, and Bush referred to them in meetings with his Cabinet secretaries. “The Cabinet secretaries don’t want to be red,” said an anonymous senior OMB official. “They’ll do what they have to do to get out of the red.”

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Another weapon Forman had in his arsenal was also the OMB's most powerful weapon: money. An obscure provision in a little-known congressional law called the Clinger-Cohen Act — a law that Forman himself helped draft when he was a Senate staffer — gave him the authority to transfer IT funds from one agency to another. The fear of antagonizing powerful, turf-conscious congressional appropriators kept anyone from previously using the authority, but Forman was undeterred. “If it frees up money that can be used for other things, the Hill will be happy,” Forman said. “If it looks like we’re trying to impinge on their power of the purse, they’ll be upset.”

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Pull the trigger. Beginning in the summer of 2002 and continuing in 2003, Forman made good on his threats. He sent out a batch of Clinger-Cohen letters to noncompliant agencies stating in no uncertain terms he was shutting down their IT projects. “You need a head on the pike so other people sit up and take notice,” he said matter-of-factly.

He got their attention. The group of powerful deputy Cabinet secretaries who collectively form the President’s Management Council had a fit. “The deputy secretaries all ganged up on me and said, ‘You can’t do this,’” Forman said.

The final *piece de resistance* came several weeks later when the OMB froze billions of dollars in IT modernization and infrastructure funding for agencies slated to become part of the new Department of Homeland Security. Forman justified the action by citing estimates that consolidation would save several hundred million dollars. The action surprised the federal IT community, coming as it did months before Congress even passed legislation to create the department — let alone agreed on which agencies would be included. But the goal of OMB’s pre-emptive strike was unmistakable: To the extent possible, the new Department of Homeland Security would be stovepipe-free.

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Overcoming the Funding Challenge

In the wake of one of the worst state fiscal crises since the Great Depression, the most formidable obstacle many public-sector leaders face is finding money to pay for e-government and modernization. Confronted with either maintaining school budgets or investing money in digital government, legislators choose schools every time. The funding challenge is particularly acute for local governments, which had fewer IT dollars to disperse even before the new state aid cutbacks.

One of the most promising ways to overcome the funding barrier is to squeeze some savings out of current IT spending and reinvest it back into e-government. Every ex-CIO will say there's plenty of duplicative, redundant and wasteful IT spending hidden in individual agencies. Consolidating IT operations and spending — not unlike Forman's "simplify and unify" strategy — could bring considerable savings. One CIO said most states could run their IT shops on half of what they're spending now. "What's buried in the base [of the IT budget] is very important," said Georgia's Singer. "If the CIO's office can partner with the budget agency to peel the onion and show the inefficiencies, then these funds become funds of opportunity."

"What's buried in the base [of the IT budget] is very important," said Georgia's Singer. "If the CIO's office can partner with the budget agency to peel the onion and show the inefficiencies, then these funds become funds of opportunity."

Sounds reasonable, except for one little problem: Most governments don't have a clue about how much they spend on information technology. "When I became governor, I asked two basic questions," said Virginia Gov. Mark Warner, a tech-savvy Democrat. "First, how much do we spend on information technology? And second, how many people work in technology?"¹² Instead of a spreadsheet, Warner got blank stares. "They told me it's somewhere between \$800 million and \$1.2 billion," recalled the governor, who was incredulous that they couldn't get any closer than a \$400 million spread.

Warner wasted no time charging his handpicked CIO George Newstrom, a Republican plucked from EDS' Asia operations, with getting answers to his simple questions. It took Newstrom's team nine months, but the wait was worth it. The

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inventory of IT spending uncovered enormous amounts of duplication in what Newstrom calls the “factory of technology” — mainframes, servers, storage, networks, and service and call centers. “We had every e-mail system known to mankind — and none of them talked to each other,” Warner said, his voice dripping with disdain.

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The inventory results gave Warner and Newstrom sufficient ammunition to propose one of the most far-reaching IT consolidation plans ever attempted by a government entity. Virginia will consolidate nearly all state IT operations, spending and staff into a newly created office of information technology. Cost savings: a whopping \$100 million over three years. A chunk of this savings will come from consolidating the dozens of state data centers now scattered all over Richmond. Several other states have already realized multimillion-dollar savings from consolidating data centers.¹³ The most ambitious effort to date has been in Pennsylvania, which is saving \$140 million over five years from consolidating 18 data centers into one.¹⁴

Another approach for digging savings from IT budgets is to “retire” clunky mainframe systems — a euphemism for sending IT systems to the computer graveyard. The Transportation Security Administration, for example, is retiring more than 700 of the Federal Aviation Administration’s legacy mainframe systems as part of its effort to Web-enable all processes and information flows around a common enterprise-wide platform.

Similarly, the Department of Education’s Federal Student Aid Office (FSA) saved \$46 million from retiring five redundant mainframe computers, enough to pay for much of FSA’s modernization and e-government efforts. Best of all, it didn’t cost the agency a dime, because the contractor fronted all project costs in return for a percentage of future savings. The success prompted FSA to enter a handful of additional “share-in-savings” contracts. The most innovative was a contract in which the agency aims to save \$79 million over five years by phasing out paper processing of student loan applications, payments and communication,

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moving it all to the Web and e-mail. Payments to the contractor are almost completely dependent on the firm's ability to change customer behavior by driving student loan recipients to the Web.

For smaller cities and counties with tiny IT budgets, the most promising funding approaches are either by piggybacking off the state's digital infrastructure, or sharing costs with other local governmental entities. All 67 Florida county clerk offices joined together in 2002 to create a centralized portal where citizens could go to find, search and purchase marriage licenses, birth certificates and other official records online. The cost of building and operating the portal would have been too high for any single county clerk's office. However, by linking together, they saved millions of dollars, as well as provided better customer service by allowing citizens to go to one place to view official records from any Florida county.

Fear of the Unknown: Cultural Impediments

When he became CIO of the Department of Commerce in 1998, Roger Baker had what he thought was a pretty simple idea: The Census Bureau should let Americans fill out their 2000 census forms online. When he broached the idea with Census, the notoriously change-resistant agency wanted no part of it, calling the use of online forms "experimental." Baker, a former high-tech executive, couldn't believe what he was hearing. "How can you look at the Internet as experimental in the year 2000?" he asked. "They really didn't want to do it," he recalls. "They spent six months trying to get around me."

Fortunately, Baker's boss, then-Commerce Secretary Bill Daley, liked the idea, so eventually the Census Bureau relented and put the census questionnaire online. Story over?

Not quite. Rather than prominently displaying an icon on the agency's home page, the online forms were buried in the bowels of the Web site. Anyone wanting to fill out his census form in cyber-space had to have the detective skills of Philip Marlowe to find it. Baker attributes the opposition to simple fear of the

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unknown. “They didn’t know if people would answer questions differently online, so their first instinct was to kill the idea,” he explained.

Not every government agency is so adamantly anti-change. But many are. Employees don’t want to rock the boat. Managers are unwilling to take risks. Hard-charging department heads are too often captured by the bureaucracy. Change often threatens deeply held values and habits — and bureaucracies are very good at resisting changes they want to resist.

Success requires changing people’s attitudes, belief systems and ways of doing business — helping move them from what they know to something new and strange. Inevitably, some people will be unable to adapt. Others will be unwilling, hoping the change will fail because failure is in their interest. Overcoming such opposition requires a cadre of people who are maniacal about transforming government. “A governor or mayor can give a lot of speeches about the importance of technology, but if you don’t staff it up with the right person, then you don’t get very far,” said former Michigan Gov. John Engler.

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Where do you find such people? Sometimes, you need to bring them in from the outside to shake up the organization (hence the large number of IT executives recruited to serve as public-sector CIOs). Sometimes outsourcing the function is the only way to accomplish the needed transformation. “Before I came into government, I was not a big fan of outsourcing,” Singer said. “But sometimes it’s necessary to bring about major business and cultural changes.”

More often than not, the revolutionaries already exist in government — they just need to be identified, trained and empowered. Several years ago, Washington state launched the Digital Government Applications Academy, a place where employees from different agencies work together on building digital government applications. In addition to the technical goal, Washington state officials hoped to change state agency culture by

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creating a corps of e-government professionals to unleash on the agencies. “One of the main points of the academy was to create a set of insurgents to send out to agencies to fight for a different way of doing business,” said former Washington CIO Steve Kolodney. “To achieve change in government, you have to figure out ways to intrude into these long-standing organizations.”

Intrude would be a mild way of describing what William Bratton did to the culture of the NYPD when Rudy Giuliani named him his first police commissioner. When Bratton took over the department, the NYPD culture was completely dysfunctional: Bureaus didn’t talk to each other; beat cops didn’t talk to detectives; and years of negative publicity and fear of corruption had paralyzed beat officers. Surveys of NYPD officers revealed the activities they believed were most valued by their supervisors were “holding down overtime,” “staying out of trouble,” and “treating bosses with deference.” “Reducing crime, disorder and, fear” – Bratton’s top priority – was considered by officers to be the activity least valued by their superiors.¹⁵ Bratton knew he had to thoroughly transform the culture of the organization if he hoped to bring about the massive crime reductions he had promised the mayor.

His most famous strategy for doing this, Compstat, gave Bratton and his lieutenants the information they needed to make decisions on resource deployment, while helping to focus precinct commanders on results. But Compstat was only one part of Bratton’s multi-pronged culture war strategy. In addition, he purged the department of the old guard, devolved power to precinct commanders, won over rank-and-file officers by backing up them up in confrontations with the public (unless there was clear evidence of wrongdoing), created real consequences for poor performers, and established audacious goals, such as reducing crime by 40 percent. “You need to set the tone, and you need to set stretch goals that would inspire people,” explained Bratton.¹⁶

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The Leadership Imperative

Nothing is more important for transforming government than the unwavering support of a strong chief executive. Nobody understands this better than former Iowa CIO Richard Varn.

When Iowa Gov. Tom Vilsack appointed him CIO, Varn wasted little time shaking up the system. He created the state's first Information Technology Department; vastly expanded the number of e-government offerings and transactions, and built an award-winning Iowa Return on Investment (ROI) program to manage all IT investments for state government. Before long, the former state legislator became one of the best-known state CIOs in the country.

“Without leadership from the chief executive, you simply cannot take it through to the end,” Varn explained. “The departments will try to undermine what you’re doing. When that happens, the governor needs to help get you across the goal line.”

Everything was going smoothly until he dared touch the third rail: IT consolidation. Like Georgia, Virginia and dozens of other states, Iowa's fragmented IT system was chock full of redundancy. The state had over 800 servers, 37 separate e-mail systems, 45 e-mail servers and hundreds of different storage systems. Varn calculated that consolidation could save millions of dollars.

Not surprisingly, as soon as he came out with his plan to consolidate state IT operations, the predictable complaints from agencies came pouring in — they'll lose control, the service will not be up to snuff and so on. Incredibly, the head of the state's health department told him they couldn't participate because they needed all the servers and other IT systems located within the building in case of a bio-terrorism attack.

This is the fateful moment nearly every hard-charging CIO faces eventually: the moment when the chief executive must step in and help. “Without leadership from the chief executive, you simply cannot take it through to the end,” Varn explained. “The departments will try to undermine what you're doing. When that happens, the governor needs to help get you across the goal line.”

So Varn made his appeal to the governor. But rather than back his CIO in this showdown with his department heads, the

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governor turned the other way. At that moment, Varn knew his run was over. “When faced with the really hard decisions, the governor wasn’t willing to follow through,” Varn said. “When the opportunity came, he chose to back off and do other things.”

Varn and Gov. Vilsack have since parted ways. Like many of the high-flying government CIOs of the late 1990s, Varn left government and went into the consulting business. The moral of his story is clear: Not even the most dynamic, visionary public manager can drive reform alone.

Another leadership lesson for technology-enabled transformation is that it’s not enough for chief executives to simply delegate transformation to others. They must be personally engaged in the effort in order to send a signal to the rest of the organization that technology modernization is one of their top priorities. This lesson was learned the hard way at the Federal Bureau of Investigation (FBI).

By all accounts, Louis Freeh, the FBI Director throughout most of the 1990s, is a passionate, charismatic, hard-charging individual. A former FBI agent himself, Freeh was more respected by G-men in the field than any director in decades. This, along with his political skills, helped Freeh become the most powerful FBI director since J. Edgar Hoover. When he left the bureau in May 2001, Freeh was widely praised by Democrats and Republicans alike. President George W. Bush asked the Clinton appointee to stay on, while allies on Capitol Hill, such as Senate Judiciary Chairman Patrick Leahy (D-VT), praised Freeh’s legacy as “an updated attitude appropriate to 21st Century law enforcement.”¹⁷

Freeh didn’t have long to bask in the bipartisan adoration, however. In the aftermath of 9/11, his reputation was badly tarnished — as was that of the agency he once led. Almost daily news articles, investigative reports, and congressional testimony focused on the failings of the FBI. The reports made our nation’s most elite law enforcement agency sound like the worst kind of

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The reports made our nation's most elite law enforcement agency sound like the worst kind of slow-moving, turf-defending, information-hoarding, dinosaur bureaucracy –the Department of Motor Vehicles, with guns.

slow-moving, turf-defending, information-hoarding, dinosaur bureaucracy –the Department of Motor Vehicles, with guns. Forget about real-time information sharing with the CIA or the INS. FBI agents didn't even have the ability to quickly pass information along to each other. One year *after* 9/11, many G-men were still working on archaic 486-generation desktop PCs attached to green-and-black screen monitors; connecting to the Internet through 56K dial-up modems; and hunting for information through 35 or more unconnected databases that couldn't communicate with each other.¹⁸ In the unlikely event that an agent went through all the hassles of individually searching the dozens of separate databases, she probably still wouldn't have found the information she needed: Over half the FBI's records were still in paper form. A query about Mohammed Atta might have turned up paper records in Los Angeles, New York, and Virginia.¹⁹ Writer Shane Harris wittily described the prehistoric state of the FBI's computer systems in a piece in *Government Executive* magazine:

If you own a personal computer, or use one in your office, you can get a sense of what's it's been like for FBI agents over the past decade. First, disconnect the computer from the Internet. This will keep you from accessing the Web and receiving e-mails. Now, throw the computer away. It's far more modern than anything FBI personnel have used for years. Throw out the mouse, too. Replace everything with a machine that was manufactured in the 1980's, recognizable by its black background and flashing green cursor, and by the delay of a second or so before typed characters appear on the screen...²⁰

How did an organization that was considered the premier law enforcement agency in the world become such a technology backwater? Much of the blame lies with the technophobia of Louis Freeh himself. Ronald Kessler, the author of *The Bureau: The Secret History of the FBI*, explains: "Repeatedly Freeh was told by people in the bureau that they needed to upgrade [the technology]. [He] made it clear that he wasn't interested in technology... Freeh's aversion to technology—he did not himself use e-mail—led to the fact that the FBI until recently had computers that no one would take even as donations to churches. With these machines... the FBI was supposed to keep track of terrorists."²¹

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A leader sets the tone for the organization, and in this case Freeh never devoted adequate resources or managerial attention to modernizing the bureau's information systems. "Frequently the bureau would take money from the technical sides and apply it to needs elsewhere – cases that arose," said former FBI agent I.C. Smith. "It was a cash cow."²² The result of Freeh's exceedingly weak technology leadership was an agency that, at times, was about as technologically sophisticated as a junior high school classroom.

It would be hard to find a greater contrast to Freeh's technophobia than Florida Governor Jeb Bush. Sitting atop Bush's L-shaped desk in his small office –outside the "official" one he uses only for meetings – is an IBM think pad, a sleek, 19-inch flat-screen LCD display and a Cieva digital picture frame that he uses to exchange digital photos with his famous parents and other friends and relatives. The Governor uses technology extensively in his daily life—and has for years. He has to be the only governor in the country who regularly gives out his private email account, meaning anyone listening to him on a radio call-in show has about the same electronic access to him as his famous brother and father.

In many other states, governors might like e-government, but their direct involvement doesn't go much beyond making sure their picture and name are displayed prominently on the state homepage. Not so in Florida. Bush is without question the main driver and cheerleader for the state's digital government program. A top aide admitted sheepishly that because the governor knows more about technology than all but two or three of his senior staff, he occasionally has to tutor *them* on technology subjects.

A governor, mayor, or agency head does not need to know how to write XML code in order to demonstrate leadership and vision on technology issues. However, he does need a vision for how technology can transform government, and he must be able to communicate that vision – and it doesn't hurt if he's actually used a computer a few times himself. "You need to understand things in a hands-on way if you're going to be a leader of an organization,"

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said Angus King, the tech-savvy former governor of Maine who went as far as to personally review the technology specifications in state information technology requisitions. “If you’ve never used it yourself you don’t know what to ask nor are you able to understand the capacity and needs.”²³

Effective leaders often use simple but powerful slogans and symbols to encapsulate their vision and demonstrate their commitment to a cause. During his two terms in office, former Pennsylvania Governor Tom Ridge was one of the nation’s most aggressive governors in moving services online. He never stopped talking about how important technology was to his state’s future. Few actions he took in office symbolized this more than when he insisted that the state’s website address be prominently displayed on all Pennsylvania license plates. With that simple but powerful action, Ridge signaled that in Pennsylvania, digital government would be more than just a passing fancy.

Technology-enabled transformation entails breaking old habits, learning to do business in new ways, and adopting a radically different approach to serving your customers.

Technology-enabled transformation entails breaking old habits, learning to do business in new ways, and adopting a radically different approach to serving your customers. This, in turn, requires taking risks and embracing change. None of this comes naturally to government. In fact, nearly all the incentives in government work against all of these things. That is why strong leadership is so indispensable to achieving fundamental change in government and why, absent such leadership, the transformation effort will inevitably fall short.²⁴

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ENDNOTES

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22 Dante Chinni, "As FBI woes deepen, Freeh gets more flak," *The Christian Science Monitor*, www.csmonitor.com, July 24, 2001.

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24 Strong leadership means having clear vision for the future, an ability to communicate the vision, a willingness to invest political capital in realizing the vision, and the management skills to make the vision a reality.

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