A STRATEGY PAPER FROM CENTER FOR DIGITAL GOVERNMENT

CUTTING THE COST OF GOVERNMENT

UNITING FINANCE AND TECHNOLOGY FOR INNOVATION

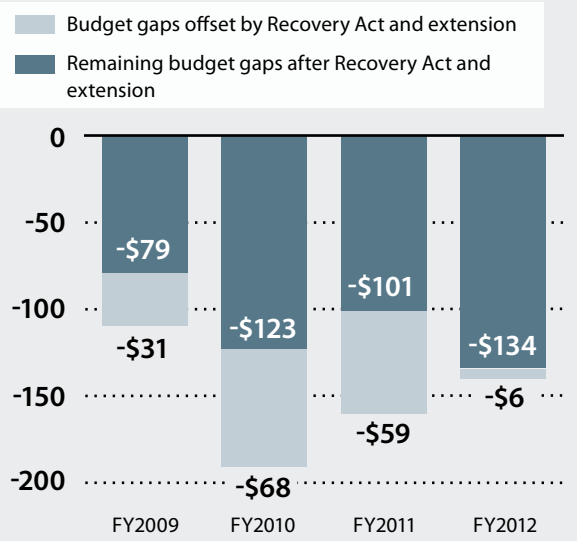
INTRODUCTION: WELCOME TO THE HOTTER SEAT

Reports of a recovering national economy are certainly cause for optimism, but governors, mayors, school superintendents, federal officials, chief financial officers and chief technologists remain in dire financial straits. The Great Recession cut deeply into our budgets — beyond discretionary priorities and into the funds reserved for critical government services. The storm has not yet passed, and fresh challenges are emerging. After several consecutive years of budget cuts, top policy, finance and technology officials are seeking new efficiencies from their already strained bottom lines.

The modest expected increase in overall state revenue in 2012 will not close the gap left from two new budget threats. First, the state and local funding in the American Recovery and Reinvestment Act (ARRA) will largely expire in Fiscal Year 2012. Second, states and localities are facing major increases in formula-based entitlements like health care, education and social services that cannot be avoided without federal action that appears unlikely to happen.

2012 COULD BE WORST YEAR YET FOR STATES

Budget shortfalls in billions



Source: CBPP analysis using data from U.S. Department of Health and Human Services, U.S. Department of Education, Congressional Budget Office, and state budget documents. Revised September 2010.

Center on Budget and Policy Priorities | cbpp.org

ANNUAL CFO SURVEY:

Association of Government Accountants with the National Association of State Comptrollers and Treasurers

"Governments still have many manual operations that could be automated, but only one-third of federal executives are satisfied with the ROI on their IT investments … One reason may be that, when formulated, IT budgets did not anticipate the full lifecycle costs of upgrades and maintenance."

Source: "Meeting the Challenge and Improving ROI," CFO Survey, AGA and NASACT, July 2010

By the numbers, "2012 could be the worst year yet for states."[1] President Obama's recent health care reform bill, the Affordable Care Act, will expand Medicaid to 20 to 30 million new eligible applicants by 2014 — putting further strain on states and localities.[2] The number of people receiving food stamps is up 19 percent since 2008, and the number of people living in subsidized housing has increased 13 percent since 2000.[3] Many of the jurisdictions that have been largely spared because of strong exports and healthy local economies are starting to feel the pinch. In Texas, for example, formula-based K-12 education funding is $400 million short of the budget for FY 2011.[4] Even federal agency expenditures are on the chopping block, as a new Congress aims to trim trillions from all areas of the budget — including defense spending and popular entitlement programs.[5]

THE PERFORMANCE GAP

Government at all levels is facing an unprecedented "performance gap" as our job gets larger and the resources we have to do the job diminish. Those entrusted with fiscal oversight need a new approach, unique strategies and novel tools to combat this clear and present danger to government stability. We need fresh thinking across the domains of policy, technology and finance. To succeed, we need to bring the concerns of the CFO and the CIO together for mutual innovation. We aren't just talking about making cuts within the IT budget, although that is a noble goal. We are advocating smart IT investing that delivers performance gains outside of IT — for case workers, analysts, managers, executives and officials from all walks of life. That's how we can close the performance gap for real.

> *"WE SAW A SEVEN-TO-ONE SAVINGS BY GOING TO VIRTUAL INSTEAD OF PHYSICAL SERVERS … AND SEVEN TO ONE AGAIN IN STORAGE VIRTUALIZATION."*
>
> ***Jason Albuquerque,*** *Director of Information Technology*
> *Town of North Kingstown, R.I.*

CAN TECHNOLOGY INNOVATION SAVE THE FISCAL DAY? BRINGING FINANCE AND TECHNOLOGY TOGETHER

As economic belts have tightened, top policymakers have looked to create a closer alignment between their finance and technology initiatives. At different points, Washington state and Michigan have placed former financial managers in their state CIO offices, ensuring a connection between the budget hawks and technology top guns. In Texas, pending legislation from state Rep. Byron Cook would create a tighter connection between the state comptroller and IT leadership. There is a trend in the making.

One reason for this is that technology presents a positive return on investment (ROI). A recent report on cloud computing from IDC Government Insights showed that "… the U.S. General Services Administration (GSA) estimates that it has lowered the cost of hosting and support for USA.gov by 72 percent annually by moving it to the cloud."

Jorge Pazos, director of IT for the city of Melrose, Mass., agrees with the power of IT to generate ROI. But he thinks that the financial structure of IT purchasing is a problem as well. "So many cities are overleveraged, and they will not borrow their way out of this," said Pazos. "Cities and towns make a capital investment in infrastructure, then it sits for a couple of years … they say `we're not in the capital management business,' but they are," according to Pazos. Pazos suggests governments change the structure of buying as was done in another Massachusetts town — North Adams. "North Adams was looking at a large capital investment, because their equipment was in the 8-12 year old range. We were able to offer them a plan so they wouldn't need to pay any more in any one year." Pazos continued, "They are removing their capital expense and replacing it with an operating expense … you are buying a service, like a utility."[6] While the specific financing strategies behind this would vary greatly from jurisdiction to jurisdiction, the concept is sound.

Can this brand of finance and technology strategy be the path out of government's budget mess? That will depend on how leaders respond. But one thing is clear: finance and technology working together is a powerful tool for closing government's performance gap.

MAKING THE NUMBERS WORK — ALSO KNOWN AS HOW TO INVEST

It is high time to invest in modernization, and we know it will deliver the productivity that government needs so badly. But how can we pay for the investment in the first place? The dilemma faced by state and local government is similar to the entry-level job seeker who asks, "How can I get a job without experience?" If we are to achieve progress, top leaders need to identify policy and strategy approaches that will work for the current budget environment. There are six main strategies that can help answer that question. These approaches blend finance and operational policy to make investment possible.

BRINGING THE RETURN (ROI) FORWARD
Shared Service Chargeback Model
Shift Capital Costs to Operating Expenses
Financing the Entire Project, Including Services and Installation
Deferring Payment
Tax Exempt Financing
End of Year Budget Optimization

SHARED SERVICE CHARGEBACK MODEL

The Center for Digital Government has written frequently about shared services as a technology strategy. But is it a viable financial strategy as well? As it turns out, it is. And an increasing number of jurisdictions are doing just that.

Jason Albuquerque is the director of Information Technology for the Town of North Kingstown, R.I. Like his peers around the nation, funding was an issue. "The biggest challenge is budget," Albuquerque told us. But that hasn't stopped him from making great progress. "We have a high, 9 percent unemployment rate, so we really needed to change the model of IT in government."[7]

Albuquerque pitched an innovative concept to his town leadership: North Kingstown would make a strategic investment in IT,

THE WINNING PORTFOLIO, A.K.A. WHAT TO INVEST IN

Government's version of the old adage to "buy low and sell high" is to "buy low" when there is a "high ROI." Not all technology projects are created equal when it comes to your bottom line. Certain projects fit today's budget constraints better than others, and deliver the right return to meet our current budget objectives.

	Capital Expenses	Computer Hardware	Staff Time & Payroll	Software Licenses	Travel & Office	Power & Cooling
DATA CENTER CONSOLIDATION Combine and centralize mainframes, servers and the associated technologies that they support to realize economies of scale and service improvements.	✓	✓	✓	✓		✓
INFRASTRUCTURE UPGRADE Identify aging infrastructure throughout the enterprise that may be consuming more power, resources and support costs than needed, and replace.	✓	✓	✓			✓
REMOTE ACCESS TO RESOURCES Open up your enterprise to allow telework, telemedicine, e-learning and other remote applications to flourish as travel and staff costs are reduced.	✓		✓		✓	✓
VIRTUALIZATION Replace aging legacy proprietary servers and mainframes with standards-based virtualized servers	✓	✓	✓	✓		✓

Resources to Learn More about the Technologies Above

This section serves as an investment guide to help you craft the right policy, finance and technology plans to meet your organization's unique needs. The Center for Digital Government also offers detailed thought-leadership white papers on a number of topics, including these listed above. These additional resources are available free at http://www.centerdigitalgov.com.

seek out additional cities, and provide IT for them on a regional basis. By thinking big, North Kingstown surpassed its IT challenges and built a regional service center that was capable of serving multiple communities. By pooling together, each city would pay less for its IT services due to economies of scale. And for North Kingstown, the new model meant a revolution from a finance, technology and policy perspective.

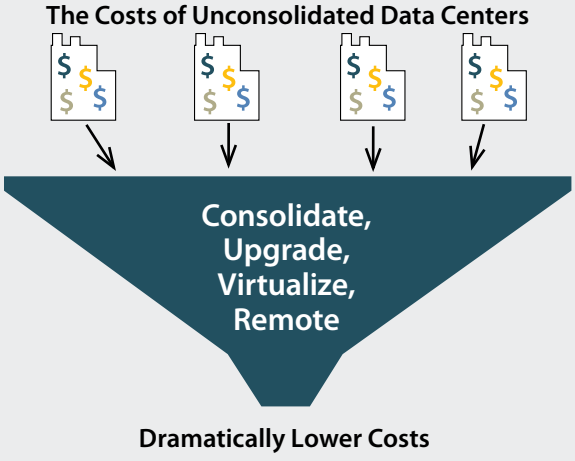
"I really wanted to be innovative and pioneering, to reduce overhead on our budget and to become a managed service provider for other entities in our area," said Albuquerque. "We are trying to turn the department into a revenue department."[8]

The bet seems to be paying off. "A year ago, we brought on our first community. We are the IT department for that community." That first town was Exeter, R.I. "We went to their city council and we have been their full- blown IT department for a year."[9] North Kingstown provides a full range of IT services, including private government cloud, full unified IP telephony, application support and much more. "We have no IT silos at all anymore," said Albuquerque.

"We can support 3,000 IP phones, and we probably have 350 now," reported Albuquerque. "We are looking at local communities who can't afford IP telephony on their own but that have to replace their PBX." In essence, Albuquerque is looking for jurisdictions that are preparing to make a large capital investment in an old technology, and convincing them to join his shared environment at a lower, variable cost. "This is about using money wisely," he said.

LOWERING THE COST OF GOVERNMENT

Technology Powers the Bottom Line



"We have even had private companies approach us who want to host their software in the North Kingstown data center. We will serve as the cloud provider for the rest of the state," Albuquerque said. They are evaluating local municipal court applications, permitting and a range of other products.

If successful, North Kingstown will go from being just another cash-strapped municipality to one of the leading government private cloud providers in the nation. Instead of being a drain on the town's budget, IT for North Kingstown will be a revenue center. And the "customer" towns joining on to Albuquerque's shared service center will obtain far better IT services at a much lower cost.

SHIFT CAPITAL COSTS TO OPERATING EXPENSES

At a first read, shifting capital costs (CapEx) to operating expenses (OpEx) may seem like accounting slight-of-hand. If I have to pay a large bill, why not just get the whole thing over with up front? Why prolong the pain by dragging it out?

Well, the reality is that paying for a major technology investment up front is sometimes just not possible. Capital planning for technology refresh is a difficult art, and not one of which government budget planners are usually very good. In a prosperous economy, money may be flush but the systems might not need to be replaced. In a bad economy, the systems may be on the verge of collapse just as the budget is as well. The chance of the economic cycle lining up just right to the technology capital refresh cycle is just that — a chance. And not a very likely chance, if the present experience of state and local government is any indication. What happens if my major refresh was scheduled for 2011 or 2012? How do I choose between my system going down and my budget going bust?

In other areas of capital purchasing, options such as leasing and financing are more commonplace. While governments have typically optimized other consumable fleet management functions in this way, we still haven't made much progress in technology. The goal of this strategy is to smooth out the lumpy capital investment cycle by purchasing as an all-inclusive operational service. Instead of buying an e-mail server, government would buy e-mail-as-a-service. The budget benefits of the shift in cost could make or break a fiscal year. By leveraging a larger, shared infrastructure, the total costs could end up going down. Typically this is not something that government can do on its own, but something that is achieved by a public-private partnership with a technology company or consortium.

FINANCING THE ENTIRE PROJECT, INCLUDING SERVICES AND INSTALLATION

Most government leaders are familiar with the concept of leasing, but they typically apply that technique to hard assets alone — items such as computer servers and network gear. Much of the cost of a project goes beyond that in the form of services and installation activities. What should be done when the cost of services and installation is still too much for this year's budget?

A growing number of government entities are looking to public-private partnerships to finance services as well as hard asset purchases. By financing an entire project, agencies can ensure that costs are tied directly to specific, contractually mandated milestones.

In 1992, the state of Kansas pioneered a flexible public-private partnership model to fund its state portal and e-government initiative. More than 20 states followed suit over the years, including Texas, Utah, Virginia and Kentucky. Some cities adopted the model, including Indianapolis. But it wasn't until recently that full-project financing took off in the public sector.

DEFERRING PAYMENT

While state and local government should be highly cautious when considering any sort of future debt obligations, sometimes an extended financing approach is necessary to begin a cost-saving project. If a major project can critically save costs elsewhere in the organization, postponing the first few payments just might be a prudent thing to do. The critical factors to consider when making a decision like this are:

- What will my future cost savings be (the "return" in our return on investment)?
- What is the total cost of ownership of the project?
- Will the payment deferral allow me to meet a critical implementation deadline that I would otherwise miss?
- Can we ensure that the cost of deferring payment (i.e. interest) is offset by future cost savings?

TAX EXEMPT FINANCING

According to the Cato Institute, "Interest payments on municipal bonds are generally exempt from the federal income tax. State and local debt is thus tax-favored over private debt."[10] Typically, state and local governments obtain lower interest rates and more preferential treatment in financing arrangements. This lowers the cost of borrowing, which can be another tool to help governments pay for projects out of the very cost savings that those projects generate.

One hurdle to overcome, however, is that the deferred costs will typically need to be paid in a future appropriations period. Governments are often prohibited from taking on obligations that would bind the organization to future debt. To make such an arrangement work, finance agreements need to include a non-appropriations clause. The non-appropriations clause relieves the government of the burden of payment in the event that sufficient appropriations are not allocated in the future.

END-OF-YEAR BUDGET OPTIMIZATION

Budgeting is an inexact science, and even the best-written budget can overshoot a current year's obligations. When budget dollars remain at the end of the year, they can always be returned to the organization's general fund. But if sufficient funds are available for the next year, organizations often look to productive uses of end-of-the-year funds.

Rather than making a rash or ill-advised purchase of some item that may or may not be needed, governments should consider using end-of-the-year excess funds in a more

TECHNOLOGY TRANSFORMATION AT THE CITY OF MESA, ARIZ.

"THE (UNIFIED COMPUTING SYSTEM) PROVIDES MESA WITH THE FOUNDATION FOR A BROAD SPECTRUM OF VIRTUALIZATION INITIATIVES THAT CONSOLIDATE RESOURCES AND AUTOMATE DATA CENTER PROCESSES. THIS, IN TURN, REDUCES OUR EQUIPMENT AND OPERATING COSTS."

Alex Deshuk
Manager of Technology and Innovation, City of Mesa, Ariz.

ACTIONS TAKEN

- ✓ Data center consolidation
- ✓ Virtualization
- ✓ United computing, network, and storage
- ✓ Infrastructure upgrade

BENEFITS REALIZED

- ✓ Reduced power & cooling costs
- ✓ Reduced staff time on maintenance
- ✓ More efficient use of hardware and software
- ✓ Overall hard dollar cost savings

strategic way. These small pools of capital can be used as a down payment on a project or modernization, which can significantly reduce interest or other finance costs. Instead of buying something you don't need, governments can use these dollars to get a head start on an important priority. And of course, the IT budget isn't the only one we need to manage. The raison d'être of technology projects is to gain performance in other parts of the organization so we can do more with less.

WHAT TO LOOK FOR … YOUR BUSINESS PLAN FOR INNOVATION

You've read about where to invest, and identified some powerful new investment strategies that can help break the budget deadlock. But how can we move forward to take the first step? Building your business plan begins by identifying the right resources.

CHOOSING THE RIGHT TECHNOLOGY DIRECTION AND PARTNERS

Jason Bates manages IT for Midland County, Texas, and he knows the importance of choosing the right technology partners. In Jason's words, Midland County is "a large enough government to have big needs, but small enough to take the risk of innovating."[11] Bates has always been ahead of the curve. His enterprise has been using VoIP for eight years and virtualizing servers for four years — with a staff of only nine people. They just finished a major data center upgrade project and have been cutting costs with video arraignment and video visitation for the county jail. The county has even implemented digital signage, opening up potential new revenue streams. All of this remarkable success began by choosing the county's technology direction and partners wisely.

Bates said that his county can't afford low-quality technology. "If it comes three years down the road and I need to replace it, I need to come up with $600,000. Budgets are difficult as it is without that."[12]

CHOOSING THE RIGHT FINANCING APPROACH AND PARTNERS

One of the secrets to the success we uncovered in Midland County, the city of Mesa, and North Kingstown is a savvy approach to finance. This means identifying cost savings, bringing the ROI forward to the present budget year and financing the project creatively. After documenting major cost savings from virtualization projects, the town of North Kingston "took that budget, and we really thought hard about what we wanted to be in the future," said Jason Albuquerque. Reinvestment of savings — coupled with a creative financing strategy — is critical for innovation.[13]

CONCLUSION: CLOSING THE PERFORMANCE GAP

The road ahead will not be easy, but by identifying concrete ways to finance technology innovation we can make it much smoother. Tom Pauken, chairman of the Texas Workforce Commission, understands the challenges that we articulated here better than most. His agency has been battered by the economic downturn, and the end isn't in sight. Despite these difficulties, Pauken and his leadership team are still believers in the power of technology innovation to cut costs. "When budget dollars are tight, government leaders must look to technology to make the utilization of those dollars more efficient and more productive."[14] Smart policy isn't just about cutting IT costs, although that is certainly a worthwhile goal. Our goal — the goal of all information technology — is to deliver performance gains in the rest of the organization. Properly applied, IT will cut costs for case workers, managers, analysts, executives and nearly all of the job functions that are so greatly stressed in these tough times. With these innovative techniques, we are all one step closer to doing just that.

ENDNOTES

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7. Interview with Jason Albuquerque, Director of Information Technology, Town of North Kingstown, Rhode Island, December 20, 2010.
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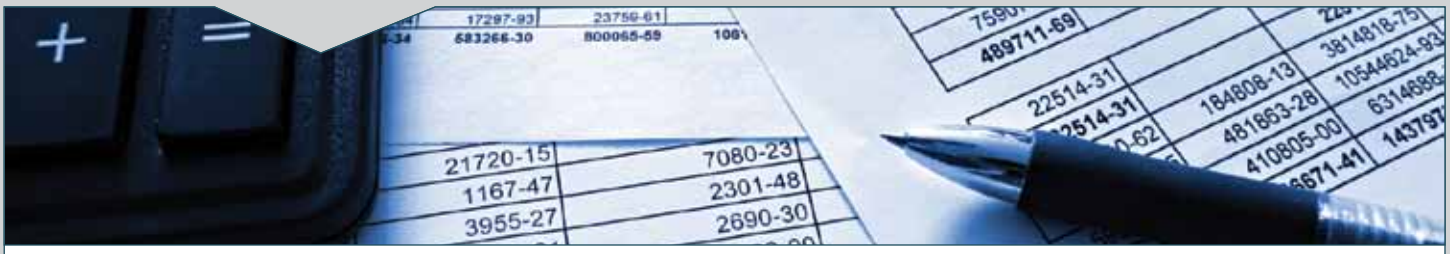
13. Interview with Jason Albuquerque, Director of Information Technology, Town of North Kingstown, Rhode Island, December 20, 2010.
14. Speech by Tom Pauken, Chairman of the Texas Workforce Commission, "Doing More with Less," Government Technology Events, March 2010.



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After a successful career as a private sector software executive, Miri was appointed by the Texas Governor to the top regulatory board overseeing statewide electronic government. He went on to lead transformational projects for two successive Texas State Chief Technology Officers and has become an advisor and close confidant to leading state and local government CIOs around the nation. As the former Director of E-Government and Web Services for the State of Texas, Miri led the state to breakthrough results of 829 online services, 83 million citizen financial transactions, and $5 billion in online revenue. He helped found three web-based technology companies that leveraged Web 2.0 and cloud computing to achieve dramatic results for clients in the commercial markets. Miri has been a passionate advocate of next generation Internet technologies for more than a decade and is a nationally recognized speaker and author on government technology.