

“New Normal” Success: A CIO Survival Guide



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Introduction

The e.Republic Digital Communities program¹ was created to help local government and its industry partners better understand each other and to create and further the working relationships that both the public and private sector need to be successful. As part of that effort, the Digital Communities CIO Leadership Group for Chief Information Officers was formed at the request of some of the largest cities and counties in the United States. Because of the organizational

size of these jurisdictions and the fact that many of them are led by an elected executive, the issues they face can be very different from the vast majority of smaller towns, cities and counties with appointed managers.

Members of the CIO Leadership Group meet face-to-face at least twice a year, collaborate electronically throughout the year and produce an annual thought leadership “white paper” examining an issue that is of current interest to the

membership. The group discussions that form the basis of the *“New Normal” Success: A CIO Survival Guide* began during a face-to-face members meeting in November 2009. Interested public- and private-sector members were later interviewed directly and their comments, impressions and advice for public officials serving in jurisdictions of all sizes form the substance of this paper.

The Questions of the Day

The effects of economic recession have been taking their toll on local government resulting in a significant decrease in revenue from sales and property taxes, licenses, fees, permits and state shared revenue. As these critical components of a local government’s financial foundation have shrunk, so too has government’s ability to deliver the services communities rely upon daily. There is no longer any “business as usual” in local government.

But the business of local government does and must go on and as many of our leaders have pointed out, there is opportunity in crisis and that opportunity should not be wasted. So the question the CIO Leadership Group members posed to each other was this:



“What are you doing or openly considering now that would have been impossible to do or perhaps even discuss when times were better?” To put it another way: “What opportunities

have you found in the current crisis; how are you pursuing them and how might the rest of us be able to benefit from what you have done or learned?”

It's the Economy, Stupid

To get a sense of just how difficult things are for local government, CIOs were asked to describe how funding shortfalls in early FY10 were affecting their communities, their technology organizations and their plans for FY11.

Every person interviewed reported being asked to reduce their departmental budget. Anticipated reductions ranged from approximately 5 percent to 25 percent or more. The reasons for the wide variance can be traced to a number of factors. For example, some communities seem to have begun dealing with the effects of the recession earlier than others. Therefore, some CIOs are faced with making larger cuts now while others are struggling under the cumulative effects of previous years of double-digit reductions.

Geography and the effect it has on the depth and severity of the recession also seems to play a role. Oakland County, Mich., Deputy County Executive and CIO Phil Bertolini reports that his county is struggling to compensate for unemployment rates significantly higher than the national average. As a result, 1 in 56 properties in the county is in foreclosure due in large part to the ripple effects of the decline in the auto industry. The county relies on property tax for approximately 60 percent of its revenue. Oakland County has already made significant budget reductions and is planning for an additional 20 percent reduction in revenue over the next three years.

The city of Seattle, Wash., is facing a current budget shortfall of approxi-



mately 5 percent. Washington has no state income tax and relies instead on sales and property tax. Like many of his peers, Seattle CTO Bill Schrier says that the budget deficits everyone is struggling with now are a long-term issue. "It will possibly be several years before local government revenue returns to its former levels," Schrier says. In response, he says government is going to need to contract and become smaller and as it does, it unfortunately may become less efficient and responsive.

As a former CIO now working in the private sector with many governments across the country, Stuart McKee, national technology officer for Microsoft, says that this is precisely the time for government to invest in technology. "A very difficult realization is the inverse relationship of government revenues to the economy — when the economy is down, the service demands on government go up. Given the current situation of "doing more

with a *lot less*" perhaps the single most important tool is technology — a challenge and opportunity for CIOs to shine," says McKee. Dan Hogberg, who is the national director of state and local government with Symantec, agrees. "With tighter IT budgets, governments are more willing to look at the prospect of leveraging technology to save budget dollars. And the possibility to lower the costs of managing infrastructure, platforms, or applications is compelling."

No Shortage of “Opportunities”

If populations and demands for service are going to continue to grow and revenues remain depressed for several years, it is clear that local public service will indeed have to change and that a “new normal” will need to be identified. Despite such significant uncertainty none of the CIOs interviewed for this

paper are ready to throw in the towel and concede defeat. In fact, they are looking for opportunities to turn their current challenges into opportunities, realizing that it is during difficult times like these that things previously thought impossible may just become possible.

Opportunity for improvement seems

to lie in how three general but interconnected areas are viewed and managed. Those areas are, simply put: people, places and things.

The People

No matter how you look at it, people are at the heart of public service. It is people who provide service and people who receive it. And despite recent attempts by some to characterize public employees as “they” or “them” in an effort to express their frustration and dissatisfaction with the economy and community life, the fact of the matter is that local government employees are the fathers, mothers, brothers, sisters, friends and neighbors of those they work to serve.

The approach communities are using to deal with the people component of their reduced budgets varies considerably across the country. Hiring freezes is a unanimous strategy and requiring employees to take unpaid “furlough” days is common. The number of days varies from four per year in Milwaukee, Wis., to a proposal from the mayor of Los Angeles to have non-essential services, such as libraries, parks and senior centers shut down two days a week.²

In the city of Chicago, as an expression of solidarity, information and communication technology (ICT) support contractors have agreed to take an equal number of non-paid days as the city employees with which they work.

Approximately half of the jurisdictions interviewed have been forced to initiate employee layoffs. No place has unequivocally ruled it out, but Palm Beach County, Fla., has placed a high priority on maintaining current employment levels except for positions lost through normal attrition. The degree to which employees are unionized and the political and legal strength of those unions is a factor for some when looking to implement layoffs. Seven of the 10 jurisdictions interviewed have seen cuts in direct public services. Building and development services, parks and recreation and administrative positions in many departments were the most common first cuts to be





made, but several jurisdictions are now even contemplating cuts to public safety, long considered a measure of last resort in most communities.

It may be hard to see how large reductions in the number of employees available to provide service will create an opportunity for change and improvement, but some examples have already begun to surface.

Meaningful change often comes most easily from a shared understanding. In Seattle, Mayor Mike McGinn has taken CTO Schrier and the rest of his executive team through a forced ranking process for departments and the services they offer. The idea is that once a prioritized list of services is identified and agreed to by the team, services will be funded from highest priority to lowest for as far as the available funds will go.

ICT governance and community engagement have also re-emerged as important enterprise management tools. In the city of Phoenix, CIO Charles Thompson has partici-

pated in supporting an Innovation Efficiency Task Force (IETF) comprised of business executives from city departments other than his own. The IETF charter is to identify opportunities for enterprise efficiencies in ICT, enhancements to business processes, opportunities for service consolidation and improvements to the contracting and procurement process. Thompson is optimistic that the IETF will be able to identify approximately \$10 million in savings through short, medium and long-term operational changes and improvements.

Similarly, Chicago CIO Hardik Bhatt says that the current economic climate has been a major factor in causing Chicago to fundamentally rethink the services it provides and how it provides them. Through its Innovation Center, staff have reached out to the community and engaged interested citizens in working with nine city departments to develop a strategy for dealing with vacant buildings. Ideas are exchanged face-to-face and electronically and strate-

gies are developed and supported by a vacant buildings database that is available to community members, banks, businesses and city departments and staff. This comprehensive approach has saved significant time and money by streamlining the often difficult process of dealing with neighborhood issues and furthered community understanding and engagement.

The Places

Even if some economic analysts are correct and the summer of 2010 marks the end of the recession and the beginning of recovery, it will be at least 2012 before any significant benefit of the

and to whom they provide service.

Agency and department consolidation, merger or outright elimination is an enterprise strategy most are pursuing. CIO Thompson won't predict a specific

number of consolidations while Los Angeles and Palm Beach County are still viewing it as an option.

Technical consolidation of things like data centers, servers, applications and user support is an even more common strategy. Some jurisdictions, like Orange County, Fla., and Corpus Christi, Texas, fully consolidated years ago and have been enjoying the associated efficiencies for some time now. Others have used current economic conditions as an opportunity to overcome historical opposition and move ICT out of operating departments and into the central organization where the enterprise can benefit from a more coordinated and centralized focus to infrastructure and support activities.

Smart CIOs are not only closely watching their personnel issues but are also fundamentally rethinking how, where and with whom and to whom they provide service.

recovery makes its way to local government and into agency and department budgets. Therefore, smart CIOs are not only closely watching their personnel issues but are also fundamentally rethinking how, where and with whom

outcome of the IETF process but sees the new number of city departments in Phoenix falling somewhere between the original seven and current 26. Chicago, Orange County, Fla., and Seattle have already accomplished a



Oakland County and Palm Beach County are two places that have established themselves as consolidated service providers to other governments. Oakland County has purchased enterprise licenses for software as part of a plan to then provide that software to the villages, townships and cities within the county. For one application, 20 of the 62 eligible local governments within the county have effectively outsourced application management and support to the county. Oakland County has provided several enterprise applications, including GIS, Public Safety and Assessment & Tax for the majority of the 62 communities for over 35 years. Deputy County Executive/CIO Bertolini says that state governments are best positioned to act as demand aggregators and service providers and if they undertook the same approach it would be “hugely successful.”

Palm Beach County CIO Steve Bordelon

has been working to cross-connect ICT networks with Martin County, Broward County, school districts and some cities within his county to develop what is rapidly becoming a regional public-sector network. This move has increased available bandwidth to schools by a factor of 10 and reduced cost by 50 percent. The county has also effectively flipped the offshoring model and become a service provider host for business applications and Outlook e-mail for the U.S. Virgin Islands. The county may not be done yet. There are plans to start actively marketing other internal applications like planning, zoning and building applications in a fee-for-service model to other interested governments. Strategies like this create a number of opportunities for government by removing geography, staff numbers and specific expertise from the service delivery equation for customer jurisdictions and by creating additional revenue opportunities for providers.

While ‘do it yourself’ or ‘do it for others’ infrastructure or application support has the appearance of entrepreneurship and tighter controls, there are many hidden risks with leaner capital budgets and ROI in this current environment of rapidly changing technology. Rusty Rhodes, regional vice president for AT&T, has over 30 years experience in the telecommunication business and is a long-term supporter of the public-private partnership model. Rhodes states that the current economic situation provides a great opportunity for government to reinvent the long-standing request-for-proposal (RFP) and price-based procurement process. “The current process restricts the ability for innovative and out-of-the-box solution work that we know public sector wants to see in the responses. Companies like AT&T want to better support government by bringing those solutions to the table but the process precludes the ability to bring those ideas forward.”

The Things

Perhaps the most talked about “thing” isn’t a thing at all but an evolving approach to ICT support that has organizations looking to the Internet to connect them to the “cloud.” Cloud computing is a fee-for-service method for using shared or pooled resources to provide computing and communication infrastructure, software applications and end-user or customer services without having to buy or maintain the underlying hardware or software layers.

“We have no choice but to move to the cloud. We can’t continue to be so inefficient.”

– Charles Thompson, CIO, City of Phoenix

Historically, local government has generally wanted to be able to see and touch ICT support infrastructure and be able to put their hands on it if something went wrong. But reduced budgets are causing local government to re-examine that position. Owning,

maintaining, continuously upgrading and managing a complex system of systems can be a very expensive proposition.

Oakland County’s Bertolini is very direct in his assessment of economic conditions calling this the time when local



government is faced with needing to “do less with less.” Orange County, Fla., CIO Rafael Mena says, “Today there are critical technology components in every single business unit and cuts are being made everywhere. Sometimes I just ask them ‘What do you want me to turn off?’”

There is solid group consensus that there is no alternative but to reduce expense everywhere possible. According to Bertolini, Oakland County can no longer buy everything it once did and even if it can afford the initial purchase, it can’t afford to maintain new systems. Phoenix’s Thompson is perhaps the most vocal proponent of a move to the cloud. “We have no choice but to move to the cloud. We can’t continue to be so inefficient,” says Thompson. However, even Thompson tempers this

enthusiasm for the flexibility and agility he sees available through a “pay for what you consume” cloud model with the requirement that a well-defined and understood exit strategy should be part of any service agreement.

While the cloud may be one way to lower cost and improve efficiency, Bertolini speaks plainly about his concerns with moving quickly to that model. He doesn’t believe the public cloud is ready to accommodate government, citing security and privacy issues and the uncertain viability of potential cloud service providers. Schrier too is concerned about ultimate responsibility for data in an uncertain and still-developing legal and regulatory environment. Most group members believe it will be quite some time before local government is

ready to move critical systems and data like law enforcement and utility SCADA systems into a public cloud.³ Richard McKinney is a government technology advisor at Microsoft and he sees it this way: “While I certainly understand that governments have very legitimate security and privacy concerns that need to be addressed before they adopt cloud services, as a former public sector CIO I clearly remember those same levels of concern at the dawn of the Internet and services like e-mail. And while it is probably true that some applications and some data may never be candidates for cloud services, clearly there are opportunities today for governments to begin to use cloud services to drive down costs in areas and for specific users where their security and privacy

concerns can be met and overcome by service providers that understand those needs and concerns and tailor their product offerings and service level agreements accordingly.”

On the whole, CIO Leadership Group members are optimistic about the possibilities of government community clouds. In a community cloud, the cloud infrastructure is shared by several organizations and supports a specific community that has shared concerns (e.g., mission, security requirements, policy and compliance considerations). It may be managed by the organizations or a third party and may exist on premise or off premise.⁴ Dan Hogberg of Symantec advises organizations to combine budget drivers with risk concerns when looking at cloud. “Regardless of the approach, any cloud computing strategy requires careful consideration to ensure it delivers on the promise of efficiency and cost savings without compromising security. At the end of the day, cloud strategies must support an organization’s acceptable risk profile and be information-centric.”

Governments coming together to share a resource pool is seen as a way for participants to benefit from the efficiencies of a cloud-type infrastructure and alleviate some of the concerns about data security, privacy protection and provider viability and stability since in most examples the cloud would be hosted and managed by one of the government participants. Mike Bilardo, director of government solutions for Hyland-OnBase, says government



is becoming increasingly interested in shared service models where licenses may be pooled and applications deployed faster than through the traditional procurement and implementation process. He has also seen interest increase in hosted solutions. Bilardo says that during difficult times like these the most important thing is for partnerships to be open and honest with a focus on “making it work” under whatever structure is most appropriate and beneficial. In his experience, “The best solutions come when all the parties make their needs known and take the approach of working together.”

As Bilardo pointed out, local government is paying more attention to Software-as-a-Service (SaaS) now than it did a few years ago. Essentially, SaaS is the capability provided to the consumer to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through a thin-client interface such as a Web browser (e.g., Web-based e-mail). The consumer

does not manage or control the underlying cloud infrastructure, including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings.⁵

Chicago, Seattle, Palm Beach County, Corpus Christi and many others have moved at least some of their applications to software services providers in the past few years. Michael Armstrong, CIO in Corpus Christi, Texas, sees moving selected applications as a way to “reduce the amount of stuff we have to manage” during these difficult times. SaaS is not just a one-way street with applications being moved out of government data centers. In Palm Beach County, Steve Bordelon looks to his experience providing service to the Virgin Islands and sees the SaaS model as a possible growth area for his IT organization and asks the question, “Why can’t a large, full-service IT department market itself as a service provider to other — especially smaller — jurisdictions?”

Whether you call it moving to the cloud, SaaS or outsourcing, perhaps the largest and most visible local government move to acquire technology service was recently undertaken by Los Angeles when it contracted with Google to provide e-mail

“Why can’t a large, full-service IT department market itself as a service provider to other — especially smaller — jurisdictions?”

– Steven Bordelon, CIO, Palm Beach County

service to 30,000 city employees. If not for the current economic conditions and the severe effects they have had on the city, such a significant transition may not have taken place. Faced with escalating budget deficits and 30 percent reductions in department funding and staff, Los Angeles Chief Technology Officer Randi Levin realized she needed to fundamentally rethink how ICT service is provided to city staff and residents.

Levin says that the move to SaaS will improve government efficiency and lower cost through economies of scale and help mitigate city staff reduction, improve information sharing and employee data access and reduce power consumption and energy cost.⁶

During times as difficult as these, local government executives must look not only to the clouds but in every nook, cranny and corner of their organizations to find savings and efficiencies.

Open source software has recently become better understood and more acceptable within the local government context. Chicago CIO Hardik Bhatt says

they have been using open source software for several years now and they are currently working to move more systems to open source when it makes sense.

Chicago's position on open source reflects the view of most of the CIO group. Seattle too continues to use it where it makes sense. Nancy Olson, CIO of Milwaukee, Wis., says her view of open source software hasn't changed. "The initial cost of the software isn't the biggest issue for me. Maintenance and support are a bigger concern so I am interested in the most efficient overall approach," says Olson. Rafael Mena sums it up this way: "We are looking at it more now than before. Local government has a history of sharing so why not?"

Corpus Christi has been able to save some money by changing the way it manages cell phone usage. Historically the city provided cell phones for employees for official use and then required employees to reimburse the city for any private use of the phone. Now the city simply reimburses employees when they use their private phones for offi-

cial city business. Palm Beach County recently adopted a stipend approach for business use of personal phones rather than issuing county-owned cell phones as it did in the past. This saves Palm Beach approximately \$120,000 annually.

Other common strategies among CIO Leadership Group members include extending technology refresh cycles. Desktop computer replacement schedules that previously called for replacement every three or four years are now being extended to five years or even longer. In some places desktop transition plans allow "super users" to receive regular upgrades and employees that primarily use e-mail and word processing now receive two- or three-year-old retired super user machines. Equipment leasing has also become more commonplace recently because it serves as a way to operationalize hardware expense and effectively spread payments over a number of years.

Servers and network infrastructure are also being pressed into longer service. Shorter replacement and upgrade cycles may be a budgetary necessity but such frugality can come at a price. Pat O'Brien, regional sales manager for CDW-G, understands the financial position governments are in but he advises thoughtful analysis when replacement decisions are being made. "There are good reasons to hold to regular replacement cycles. By replacing hardware consistent with industry recommendations, government is able to benefit from more capable and more efficient equipment. It is even better if critical system component replacements are considered as part of a comprehensive virtualization strategy



that can help extend the life of current technology investments.” O’Brien says CDW-G has been working with many local government customers to help them replace equipment when and where it returns the greatest benefit and then to repurpose components within the enterprise infrastructure.

Perhaps the most controversial budget balancing strategy has been summed up by Steve Bordelon this way: “Renegotiate everything lower.” CIOs are looking at hardware, software, networking components, transport, maintenance, support and every other agreement and they are coming to their private-sector partners looking for a better deal. In many cases they simply don’t have a choice. Budgets have fallen off so sharply since some agreements were negotiated and signed, local governments simply are not able to adhere to payment schedules.

When the money to pay is simply not there, something has to give. For some, that something is software maintenance. The spectrum of approaches

When the money to pay is simply not there, something has to give. For some, that something is software maintenance. The spectrum of approaches varies by the degree of financial difficulty.

varies by the degree of financial difficulty. Some are looking to reduce their level of maintenance support from the historically common, all inclusive, high-end “platinum” 24/7, 365-days-a-year support government routinely paid for to something that better reflects a calculated acceptable level of risk. Mike Armstrong sees it this



way: “If you bought a good product and are any good at using and managing it you shouldn’t need a lot of help.”

But calculating an acceptable level of risk can be a difficult and complicated thing to do and renegotiating contracts that are currently in effect can have ramifications that go beyond the balancing of an annual or even biennial budget. Out of dire necessity or tactical adjust-

ment, several jurisdictions are considering dropping some software maintenance and support agreements altogether, leaving them on their own without vendor support.

“Vendors are being pressured for concessions after the fact,” says Paul Christman, vice president for sales at Quest Software. While this may look like

a good business strategy to government, Christman and other software executives point out that granting such concessions after a contract has been signed is essentially impossible for them because of the legal requirements their corporate accounting practices are subject to under Financial Accounting Standards Board (FASB)⁷ and Sarbanes-Oxley Act dictates.⁸

That is not to say the private-sector partner community is unsympathetic to the situation government is in or unwilling to help. They are. For example, Quest is actively working with customers to renegotiate where they can, offering additional support without additional cost and structuring more flexibility into licensing plans so they can more easily be transferred around the enterprise. Automatic escalation clauses are also being negotiated out of some contracts.

Mike Bilardo at Hyland-OnBase says, “We are continually evaluating our approach to maintenance and developing different maintenance levels to meet specific needs. We are also reinforcing our value proposition and adding Web blogs and



other electronic means of connection and we are improving our user group and user conference support activities.”

Sometimes it is tempting for government to think that private-sector companies are somehow immune from economic challenges and therefore better able to weather the current storm, but private industry is suffering along with its customers. Bilardo says, “Maintenance payments are closely tied to the production readiness of the software. Today’s maintenance payments fund tomorrow’s new releases and increased functionality.” When government moves toward consuming just what it needs today in an unbundled, pay-as-you-go approach, it makes it very hard for vendors to budget and plan customer support.

According to Christman, when government stops making regular maintenance payments, “It becomes very difficult for us to maintain the level of service we like to provide and to quickly deliver upgrades. Bugs will take longer to get fixed. Expansion to new platforms will be delayed. We are just like our government customers. We are trying to figure out how we can best maintain a high-

level support capability when government is facing difficult decisions about how much maintenance it can afford. Government and industry are in it together; our success is closely linked.”

Without strong private-sector partners to support it, government will be forced to rely more on internal staff capability. That too can be a precarious position. Based on Center for Digital Government Digital City, Digital County and Digital State survey data, as many as 40 percent of current employees are eligible to retire right now in some communities. AT&T’s Rhodes cautions against the “we will just do it ourselves” approach to critical infrastructure support saying, “That doesn’t look to maintenance or upgrade or long-term total cost of ownership. You have to go in with your eyes open and make sure you understand the total opportunity cost.”

Eliminating maintenance and support may seem like an opportunity now but there will likely be some cost associated with it in the future when it is time to re-establish it. According to Rhodes, “Letting contracts lapse is very dangerous and if you want to go month-to-month, prices

will go up.” Christman says, “Customers that stop paying now will have to negotiate and work with their vendors in the future to re-establish support.” Each company will establish its own policies for dealing with such things but some vendors may require past-due maintenance payments or even charge additional reinstatement penalties as a disincentive to leaving in the first place.

All of the private-sector partners participating in Digital Communities understand that true success is something that is shared and that their future is closely linked to their local government customers. That is why the top priority for everyone is to maintain strong partnerships and good relationships. Bertolini captures the view of government when he says, “The relationship with the private sector has changed in the past few years. It used to just be vendor and customer. Now I need someone who understands our problems and comes with solutions.”

Bilardo sums up the private-sector view when he says, “Everyone just needs to be completely open and honest and focused on making it work during these difficult times. The best solutions come when both parties make their needs known and take the approach of working together.”

Local government will continue to face difficult choices and significant challenges for some time yet. A commitment by all to openness and honesty seems like the best possible strategy for success as government and industry work together to identify and establish a “new normal” that provides transparency into the public process, furthers trust in government, improves efficiency and affordability and provides the vital services upon which communities depend.

Endnotes

- 1 www.digitalcommunities.com
- 2 <http://latimesblogs.latimes.com/lanow/2010/04/villaraigosa-calls-for-shutting-down-some-city-departments-amid-budget-crisis.html>
- 3 SCADA is an acronym for supervisory control and data acquisition, a computer system for gathering and analyzing real time data.
www.webopedia.com/TERM/S/SCADA.htm
- 4 <http://csrc.nist.gov/groups/SNS/cloud-computing/index.html>
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