

Money-Saving Strategies for Coping with Shrinking Government IT Budgets

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Stagnant revenue and rising costs are putting a stranglehold on many state and local government budgets, which poses a dilemma for government CIOs. Applied wisely, IT can increase efficiency across the enterprise.

"In many cases, we're actually seen as an enabler to help cut costs," said Randi Levin, chief technology officer (CTO) of Los Angeles and general manager of the city's Information Technology Agency (ITA). But in times like these, it's hard to pry loose enough dollars to maintain the status quo, much less make new technology investments.

Although tax revenues across the United States rose slightly in 2007, inflation actually left governments with less buying power, said Robert Ward, deputy director of the Nelson A. Rockefeller Institute of Government in Albany, N.Y., whose latest report on

state tax revenues was released in March.

According to the U.S. Bureau of Economic Analysis price index for state and local governments, costs rose by 6.2 percent in 2007's fourth quarter - 3.6 percent more than the U.S. inflation rate. "That means states and localities have to spend significantly more just to provide the same level of services," Ward said.

Tough times demand creative responses. State and local governments are exploring various strategies to stretch IT dollars. Here are five that are finding success.

Don't Buy - Subscribe

When it's time to implement a software application, the software-as-a-service (SaaS) model offers a way to spread the costs over the solution's useful life and possibly reduce them. Under SaaS, instead of licensing software and installing and maintaining it in-house, the user pays a fee to access the application via the Internet. It's like paying the city to pump water to your home instead of drilling your own well.

SaaS is one of two models the North Central Texas Council of Governments (NCTCOG) is using to help small and medium-sized governments acquire software for basic business functions. NCTCOG signed a contract with Tectura of Redwood City, Calif., to provide three applications to interested government member. The applications are: Microsoft Dynamics GP for financials, StarGarden for human resources and payroll, and software from Cogsdale Corp. for functions including utility billing, permitting and work order management.

A government can opt to license one or more of these packages and host it internally. Or it can pay Tectura a subscription fee based on the number of users. Tectura arranges for a third party to host the system.

The latter approach builds an implementation fee into the subscription for the first three years. "And then the annual costs go down, of course," said Tim Barbee, director of research and information services for NCTCOG in Arlington, Texas.

Although the SaaS model eliminates making a major upfront investment, as the government continues paying the monthly fee, eventually the accumulated costs will exceed the one-time cost to buy the software outright. Where the two lines cross depends on which packages the government buys and how many people use it, Barbee said.

When weighing the benefits of SaaS versus licensing, governments also must consider the internal expenses they eliminate when a third party hosts the software, Barbee said. "You have the cost of your hardware. You have the cost of all the people who you have to run the system, the network administrators and those kinds of people," he said. "And you may have additional security measures you have to take, depending on what kind of software you have."

Keep It Open

Open source software offers another method to control IT costs. For tight budgets, the good news is that much of this software is available for free.

Ben Berry, CIO of Oregon's Department of Transportation (ODOT) and former chair of the CIO Council, has found that open source solutions can be just as effective as proprietary solutions, as long as they provide good value and meet one of the state's seven different procurement rules.

The council determined that obtaining an open source software package falls under Oregon's rules for purchases with price tags up to \$5,000; procurements in that category don't require competitive bids. The most significant instance of open source software at ODOT is the Linux operating system on the mainframe used to process drivers' licenses. "We got the Linux environment for free, along with the IBM mainframe," Berry said.

Elsewhere in Oregon state government, there's a push to use open source software where appropriate. For example, the state data center uses open source system software and monitoring tools. "One of their stated goals is to use more open source software to keep the cost down," Berry said. Oregon's Department of Human Services uses the open source SugarCRM solution for customer relationship management.

But government officials must step carefully when assessing the cost of an open source solution, Berry cautioned. Although the software itself might cost little or nothing, if the agency needs help implementing it, that could push the cost into a different category.

In Oregon, a procurement requiring integration services would hit a threshold if the integration services cost more than \$5,000, which inevitably they would, Berry said. "Then the initial procurement should have been for the software and systems integration," he said. Even though the software is free, the agency must conduct a competitive procurement - and the total price could, in some cases, come out higher than the price for implementing a closed source software package.

Similarly the use of open document format promises to cut costs for preserving government records in electronic form, said Theresa Pardo, deputy director of the Center for Technology in Government in Albany, N.Y. A government that archives materials in proprietary formats - such as Microsoft Word documents or Adobe Acrobat files - must buy the same software brand or convert files to new formats as the old ones become obsolete, she said. That wouldn't be the case for a government that stored documents in an open format. "It essentially liberates a lot of the purchasing for today, tomorrow and beyond from these kinds of proprietary requirements," she said.

Use Less Juice

Sometimes the simplest way to cut costs is to use less of something. Virginia saves millions of dollars simply by using less energy to run its information systems.

As part of a 10-year contract with Northrop Grumman to modernize the state's information infrastructure, the Virginia Information Technologies Agency (VITA) is replacing 60,000 workstations and monitors used by state employees. The new hardware, which complies with federal Energy Star guidelines, consumes less power than the old technology. VITA further optimizes performance through configuration techniques, such as standardizing the computers' transition into sleep mode when not in use.

"All those things make a big difference in energy consumption," said Lem Stewart, CIO of Virginia. By June 2009, when the state expects to finish refreshing its desktop systems, VITA should see the cost of powering those systems shrink by \$12 million a year. "That's about a 35 percent energy reduction," he said.

Virginia's modernization program includes plans for continuous hardware replacements. "Every four years, we should be replacing everything," Stewart said.

VITA expects to boost its energy efficiency even further as it moves from its existing data center to two new ones, which also are designed and configured to consume less energy. One major project involves replacing 3,000 servers with 1,000 Energy Star-compliant machines running virtual servers.

"I think our total environment is going to land somewhere between \$15 million and \$20 million a year [in energy savings]," Stewart said.

Of course, replacing old technology with more efficient boxes requires a considerable investment, and it was more than VITA could afford to pay up front. The state solved this problem by having Northrop Grumman supply the needed funds. "We repay that investment over time through the benefits of what we're achieving in modernization, the first of which is energy," Stewart said. Once the state has used its savings to repay Northrop Grumman, it will keep the further savings that accrue.

Share and Share Alike

In California, about 70 local governments and parking authorities save money by buying parking citation processing services from the city of Inglewood. More than 20 years ago, Inglewood developed its mainframe-based Inglewood Citation Management Service (ICMS) in-house for its own use. "But it was really good," said Michael Falkow, Inglewood's assistant city administrator and CIO.

So good, in fact, that several nearby cities asked to use it. Gradually the service grew to serve municipal customers as large as Oakland, San Diego and Sacramento.

If ICMS didn't exist, most of those cities would have outsourced the job to a commercial citation processing vendor rather than buy their own software, Falkow said. As a nonprofit entity, ICMS could offer better pricing than private-sector competitors. Also, cities could do business easily with Inglewood, since they didn't have to conduct competitive procurements if they gave their business to another government agency, he said.

Since running a mainframe system with in-house staff no longer made good business sense, Inglewood recently outsourced its citation processing work to one of its private-sector competitors, Duncan Parking Technologies of Harrison, Ark. Although it lost a few customers in the move, around 70 cities, airport authorities and universities now pay ICMS for the service.

As a consortium buying services through ICMS, these customers still get a better deal than they would contracting with Duncan directly, Falkow said. "We have about 2.2 million citations that we command across these 70 some-odd agencies," he explained. "They were able to give us an amazing price - a price that probably even Oakland, the biggest of our customers, would not likely have received if they had just gone separate."

ICMS also brokers other third-party services for its citation processing clients, including document imaging for parking tickets from Continental Data Graphics in Cypress, Calif., and collection services from Law Enforcement Systems Inc. in New York.

In Virginia, VITA also is banking on shared services to cut costs. The state agency has invited local governments to use its IT facilities, including its data centers, disaster recovery center and telecommunications networks, said Stewart.

The cost of running a data center is the same no matter how many users it supports, Stewart said. The more users there are, the lower the bill to each state customer. "And the theory on the other end is that those whom you're providing the service to pay less because they're in a much larger, leveraged environment than they are as individuals," he said.

Find Strength in Numbers

Just as several jurisdictions can save by sharing a common technology service, a single government can boost its purchasing power when different agencies buy technology through common contracts.

When Levin became CTO of Los Angeles last year, she noticed the city had many contracts with technology vendors. "We're not leveraging the pricing that we could be getting," she said. "There's a need to consolidate those contracts and really tap into the total buying power of the whole city."

To that end, ITA is taking stock of the technology contracts in place throughout city government. The agency is calculating the collective spend and projecting how much the city will spend on technology in the next two to three years. ITA is also examining various contract vehicles it can use - including contracts negotiated by the city, county, and in some cases, the federal government - to determine which ones offer the best rates. Then, city officials and vendors will explore how the city can obtain better volume discounts. "We sit down and have some discussions about moving to more enterprise licensing," Levin said.

As of late April, ITA had completed this process with two vendors and was working to do the same with six more, she said. Because it's not easy to calculate the total amount agencies have spent in the past with individual vendors, Levin said she couldn't predict how much money this process might shave off the city's technology costs. "But we know there is a lot of money out there to be saved," Levin said.

Strategic sourcing is just one of several lines of attack ITA is pursuing to control costs as Los Angeles heads into a new fiscal year with a deficit of about \$406 million. In another related strategy, ITA is examining the software applications in use throughout the city government and trying to reduce that number.

"As you reduce the portfolio, you generally reduce the number of vendors, contractors or other parties that are involved," Levin said. "By doing that, we would reduce our costs."