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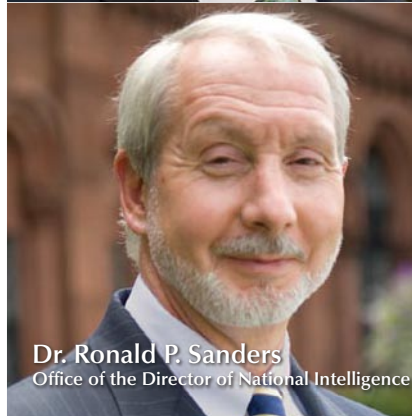
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From the Editor's Keyboard

Conversations with Leaders

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Forum: Management Challenges in an Internet-Enabled World

Management

Research Abstracts

From the Executive Director

By Albert Morales

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Management Matters

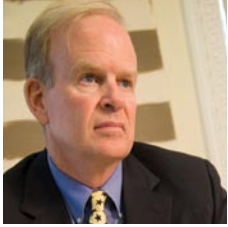Neither good policies nor good investments are likely to work, let alone succeed, if they are undermined by poor implementation.

Yet some people think of "management" solely in terms of reorganization or administrative functions such as procurement, accounting, personnel management, financial management, and information technology. Public management, however, goes far beyond the tools of administration. It also involves the way democratic governments function in a complex world economy and how they balance out the competing and contradictory demands of citizens. It includes leadership and oversight of how agencies devise, obtain enactment of, implement, manage, evaluate, and then, if necessary, modify the statutory programs and policies for which they are responsible, consistent with the policies of the incumbent administration.

The challenge of improving the management and performance of government is increasingly complex and wide-ranging. There is no neat way to separate management from policy or from program design. Moreover, management issues are closely intertwined with the budget process. In the real world, resource allocation and management are interdependent.

Major policy issues with which a modern president must deal seldom fit into the confines of a single department. Revitalizing the economy, controlling drugs, protecting the environment, reforming education, restructuring welfare, or creating jobs—each of these issue areas and dozens of others require coordinated analysis and action across many organizations.

OMB Deputy Director for Management Clay Johnson, who is profiled in this issue of *The Business of Government,* concluded a radio show interview we conducted with him by saying:

> ... *most people think about government work as focusing on what the policy ought to be, and the key is how a policy is implemented, which gets into how money is spent and how an agency is managed. I think it's really, really important.*

So as we begin to look forward to a new administration in January 2009, it is important to remind ourselves that policies and programs, however well intended, must be transformed from rhetoric into an actionable agenda and then into concrete results. *"How"* things are managed is just as important as *"what"* policies or programs are created. ■

Improving the Effectiveness of Government:
A Federal and State Perspective

The IBM Center recently had the opportunity and privilege to converse with two leaders deeply involved in transforming government to be more results-oriented—one at the federal level and the other at the state level. Clay Johnson, deputy director for management at the U.S. Office of Management and Budget, leads federal government-wide management improvement efforts on behalf of President George W. Bush. The Honorable Timothy Kaine is the governor of the Commonwealth of Virginia, which is recognized as one of the best-managed states in the country.

Each of these leaders described strategies that differed greatly in scale. The federal government has an annual budget of $2.8 trillion and a staff of 1.9 million. The Commonwealth of Virginia, in contrast, has a budget of $34.9 billion and a staff of 95,600. However, the commonalities in approach were striking. Both emphasized the importance of clear goals and strong leadership commitment. And both designed their strategies around the premise that transparency in performance information would be a key driver in performance improvement and accountability to citizens.

We hope you enjoy the following excerpts from these two insightful conversations.

Clay Johnson

Governor Timothy Kaine

Photo courtesy of the Office of the Governor, Timothy M. Kaine

A Conversation with Clay Johnson III
Deputy Director for Management
U.S. Office of Management and Budget

Clay Johnson has been the spark plug behind the Bush administration's management initiatives since their inception. In his conversation with us, he discussed the Bush administration's strategic approaches to improving federal agency management.

He described how the administration created the President's Management Agenda in 2001 and has been tracking agencies' progress quarterly via the Results.gov website. A parallel initiative, the Program Assessment Rating Tool (PART) assesses each of about 1,000 major federal programs. Johnson explained how the results of these reviews are shared publicly on a website, Expectmore.gov, to create both accountability and transparency in government operations.

Finally, he offered his advice to the next administration on institutionalizing and sustaining management improvement efforts.

On His Leadership and Management Approach

I've had a really fantastic professional life. I've been challenged in different areas—the for-profit and not-for-profit world, and the different kinds of industries and companies. And to me, one of the things I've learned is that the key is to go in and find out what it is we're trying to accomplish. What is the definition of success? What are our goals? What is the real output we're trying to create? If we're spending money, what are we buying? How are we going to buy it? And how are we going to assure that we get what we pay for?

So the key is: Let's be real clear about what our goals are.

A second key in terms of management in general is: I think the best definition I've ever heard of a manager—and this is the way I try to approach it—is my job is to help the people that work for me be successful, not vice versa.

One of the things I make sure of is that the four or five people that work directly for me are the best that I can find. They must be particularly well-suited to accomplish what I think needs to be accomplished in the next two, three, four years—

the typical length of time that someone has a job in the federal government—and that they have lots of expertise. Then I help them be better than they might be without me there.

So it's a lot of helping and assisting. That's also the approach that I take when working with the agencies. The agencies are not there to help me accomplish a presidential management priority. The President's Management Agenda (PMA) and I are there to help the agencies be more effective at serving their customers.

So I think those [are the] two general principles I find myself applying to everything I've been involved in.

On the Goals of the President's Management Agenda

The original language that was associated with the PMA talked about wanting the government to focus on results instead of process and control. If you think about what the word "bureaucrat" means, it means slavish attention to the

rules. There are rules, and we're trying to get people to comply with the rules. That is a traditional way to think about the government. The government really, though, is in the "get it done" business. There are certain things it's trying to accomplish for the benefit of America and taxpayers and citizens. So it ought to be not about controlling what goes on in the federal government; it ought to be about getting things done.

So that was one goal. Another goal was to focus on what does it cost to get things done, and bring a cost-consciousness focus on efficiency and also minimization of duplication. We have a lot of programs, for instance, that work on job training, a lot of different programs that work on community and economic development. Are they working in concert with each other? And sometimes are they working in conflict with each other?

Another goal is to strengthen the ability of the government and employees to perform. We might be highly motivated to do a really good job at managing the federal government, but if we don't have the basic abilities to do so, all that motivation is for naught. So a lot of the President's Management Agenda is about the ability to cause your agency or your program to be more effective.

On 'Getting to Green'

I started thinking about what's the difference between an agency that's doing well and one that's not doing well. There are four key things. The ones that are doing well, first, have a real clear definition of what they're trying to accomplish, whether it's in financial management or competitive sourcing or human capital practices.

Second, they have a real specific, realistically aggressive action plan, with due dates, key milestones when certain things are supposed to happen.

Third, they have clearly defined accountability. Who is responsible for doing this to whom by when? And it's not what department. It's not what consulting company we're going to hire to come in and do this for us. It's what specific individual. And as long as we're writing down his or her name, let's write down their phone number and e-mail address just in case we want to call to see how they're doing on it.

And the fourth thing is, it has to be real clear to everybody that this is important. It's important to either the president or it's important to the head of the agency or the head of my department.

The President's Management Agenda and Scorecard

Begun in 2001, the President's Management Agenda (PMA) is the George W. Bush administration's strategy to improve the management of the federal government. The PMA focuses on areas the administration believes experience governmental management weakness. It encompasses five major initiatives in these areas:

• Budget and Performance Integration

• Competitive Sourcing

• Electronic Government

• Strategic Management of Human Capital

• Improving Financial Performance

Each major agency is rated against criteria in each of these five areas and is scored quarterly on a publicly available "red-yellow-green" scorecard. Agencies have been striving for seven years to achieve a "green" score in all five areas.
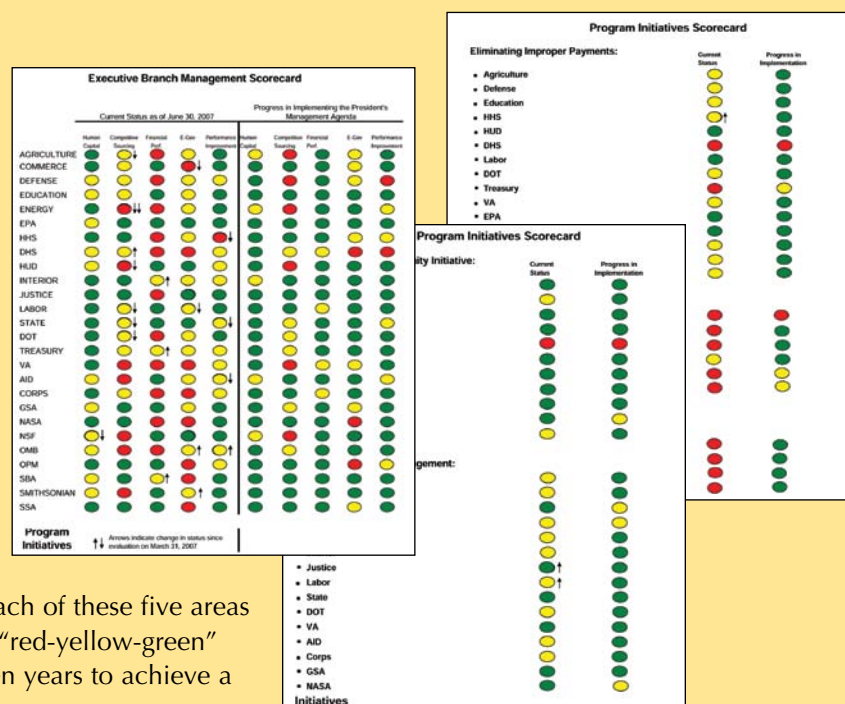
Source: www.whitehouse.gov/results/agenda/fy07q3_scorecard.pdf

So all four of those are about clarity: clarity of purpose, clarity of method by which we're going to get there, clarity of accountability, and clarity that it's a priority and, therefore, somebody very important wants it done.

When you have those four elements, 100 percent of the time, in the PMA anyway, people accomplish their goals. You miss one of those or more, and 100 percent of the time it doesn't get done.

On the Results.gov Website

The Results.gov website was all about the ability to do well—about getting to "green," about improving our ability to become more effective—and there was an opportunity to focus it on taking all these abilities and in fact causing programs to work better. So we decided to change it. We had matured and we needed to focus on getting beyond green, as we've talked about.

We created three sections. One section identifies programs that have used various PMA abilities to cause them to be more effective. They used to perform at one level and they saw opportunities to make it better—when I say "they," I mean federal employees. They took action. They've made changes in the program, and now it's working at some improved level of performance. That's one new section on the website.

Another new section is "keys to success"—management keys, teamwork keys. And a third section describes obstacles that exist out there that people should be mindful of and should work with us and Congress to remove. So there are things that help us be more effective, things that get in the way of us being more effective, and then examples of us overcoming all these challenges and causing our programs to be more effective.

So we're very excited about it. It's Results.gov, and we think it's the way the site ought to be focused now, given where we are after six years of the PMA.

On the Program Assessment Rating Tool

The Program Assessment Rating Tool, or PART, was developed in 2001 under the leadership of [then-OMB director] Mitch Daniels and [then-OMB deputy directors] Sean O'Keefe and Mark Everson. And when they wanted to focus more and more on the effectiveness of programs, they realized there was no consistent way of evaluating programs, and there were a lot of programs [that] couldn't tell you whether they worked or not.

And so that it was [about] developing a number of questions that we should ask ourselves about every program that every

What Is Results.gov?

Results.gov was launched in the first year of the Bush administration to serve as a resource for political appointees regarding management issues. It also serves as the homepage for the President's Management Agenda. Recent revisions have included a feedback option to allow citizens and federal employees to provide advice for improving government management.
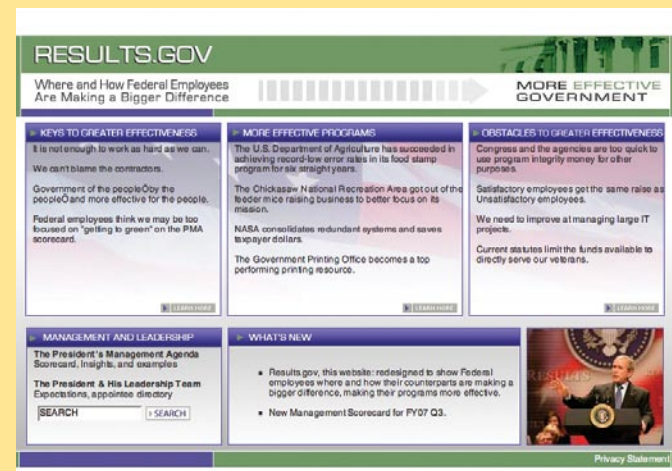
Source: www.whitehouse.gov/results/

small business, every large business, every nonprofit organization either does or should be asking themselves: What's our purpose? How are we set up to achieve that purpose? What sort of plans do we have for the future? What's the quality of our management? How do we define success? What are our performance measures? How accountable do we hold ourselves, or are we held accountable for those results?

These are 25 to 27 common-sense questions that are not esoteric. They are questions any organization ought to be asking itself, and you can ask them of Defense programs, Interior programs, or Social Security programs.... If they don't work to our satisfaction, if we don't have satisfactory answers to all those questions, where are there shortcomings? What do we need to work on to cause a good program, a medium program, or a bad program to work better?

There was not enthusiastic acceptance of PART for, say, the first 12 months of the President's Management Agenda being in effect. But then agencies and federal employees began to realize that this was about programs working better—programs that were priorities and programs that were not priorities working better. There's another process for deciding whether we get rid of programs or not.

What Is the Program Assessment Rating Tool?

PART is a questionnaire used by agencies and OMB to assess the effectiveness of individual programs. The questionnaire comprises four sets of criteria, weighted for significance:

- Program purpose and design (20 percent)
- Strategic planning (10 percent)
- Program management (20 percent)
- Program results (50 percent)

Over a five-year period, OMB assessed nearly 1,000 programs and rated them from being "effective" all the way to "ineffective." OMB could not rate a handful of programs for which meaningful outcome measures have not been developed.

In the first year, when we evaluated 20 percent of all the programs in the federal government, half of the programs evaluated in that first year could not demonstrate a result, either positive or negative or neutral.... So what agencies have probably spent the most time on in the last five, six years as a result of PART is developing clearer definitions of success. You can't hold employees at the lowest level, the medium level, or the senior manager of a program responsible unless you can define clearly what success is.

The primary purpose of PART is to help management and people who oversee the program's performance in Congress work together to cause it to be more effective. And a secondary but very important use of it is to inform the budget process.

On the ExpectMore.gov Website

One of the things we try to do [with PART] is to get Congress to pay more attention to whether programs work or not, and interest groups to pay more attention to whether programs work or not, and agency personnel to pay more attention to whether programs work or not. And we realize that one way to make this happen is to make all this performance information [from the PART assessments] really, really public, really unavoidable. So this information had all been placed in the public domain.

[However, it was too technically written]. So we decided we would make it much more public and much more readable by a lay audience.... We did focus groups with people, asking them to review some of our write-ups, and got great feedback about what they understood and didn't understand and the kind of information they would pay the most attention to.

So [ExpectMore.gov] has created lots of attention in Congress. We've had authorizing committees call us and ask about the programs that don't work, and we've asked them,
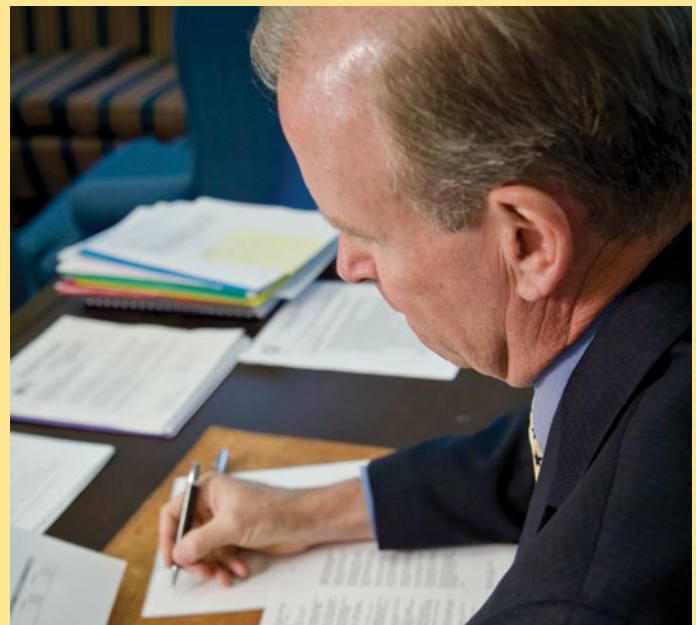
> "I think the best definition I've ever heard of a manager—and this is the way I try to approach it—is my job is to help the people that work for me be successful, not vice versa."
>
> — *Clay Johnson, Deputy Director for Management, U.S. Office of Management and Budget*

ExpectMore.gov: A Citizen's Window into Agency Program Effectiveness

Source: *www.whitehouse.gov/omb/expectmore/*

whether or not they accomplish these goals. So one of your big responsibilities coming in new is to decide whether these are the goals that you want them to focus their energies on accomplishing, and if not, what are the goals."

But without regard to what they are, there need to be very clearly defined outcomes that management can be held accountable for accomplishing, not because they'll be wayward if they're not held accountable, but because they want to be focused. They want to do a good job of serving the American people—they, the career employees. They're not afraid to be held accountable, but they want there to be good, clear agreement on what the definition of success is, and then they want to be given the resources necessary to accomplish those goals and have some input on what those goals are.

I would encourage the next president to think about management as being about effective government, not about large or small government. But whether you're Republican or Democrat, everybody should be interested in how effective the programs work, how effective our government is. ■

"Why are you asking us this?" "Because," they said, "we want to spend all of our oversight hearings focusing on these programs that don't work." Bingo! That's it. That's the thing. That's the answer.

On Institutionalizing Management Reform

We want to have all this work carry over to the next administration, because it's really not about Republican goals or Democratic goals. It's about goals, and having clearly defined outcome goals, and having a way to focus people's energies and attention on getting them accomplished in a reasonable period of time.

What I would advise any new administration to do—and what we're going to do with them when they come in—is to say: "Here are the goals that each agency and each program management team are being held accountable for accomplishing now. And their performance evaluations are tied and their bonuses and their salary increases are tied to
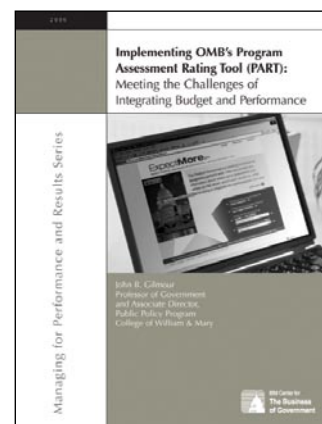
A Conversation with the Honorable Timothy M. Kaine Governor of the Commonwealth of Virginia

Governor Timothy Kaine shared with us his comprehensive approach to management improvements since he became governor of Virginia in early 2006. His strategic approach provides an interesting comparison and contrast to the federal initiatives described by Clay Johnson. Because Virginia's Constitution restricts its governors to a single four-year term, Governor Kaine and his predecessor have consciously attempted to build institutional mechanisms to sustain longer-term management reforms.

Governor Kaine inherited several mechanisms that were put into law by his predecessor. First, the Council on Virginia's Future, chaired by the governor, crafts a "roadmap" of long-term goals for the state. The Council then charters "results teams" around each goal and tracks progress via a website called "Virginia Performs."

Separate but related, the governor has a management scorecard, much like the federal scorecard, which tracks each agency head's performance toward specific managerial outcomes. Agencies also prepare their own strategic plans with annual performance reports, modeled after the federal Government Performance and Results Act. Governor Kaine has been personally involved with agencies' development of key measures to ensure they reflect the priorities of the roadmap, where possible. He also plans to link their performance and priorities to his upcoming budget submission to the state legislature in early 2008.

On His Leadership and Management Approach

Sometimes you hear about how some people will separate management and leadership. "Management" is doing things right, and "leadership" is doing the right things. And management is critical. We value *Governing* magazine's accolade a couple years ago—we're the best-managed state.

But we also want to be leaders. And leadership is a little bit different. I think leadership is often measured more by the effect that you have on the external world rather than just how you're managing your own little corner of the world. And so I want to make sure that we hold out before everybody in state government that we're really called to be leaders.

Governor Timothy Kaine

We do this in a whole lot of different ways. The way it starts is putting good leadership in place, and so, you know, I spent a lot of time when I came in as governor in January of '06 trying to put great people in leadership positions in the agency-head spots in the cabinet, secretary, and the governor's office. And by "great leaders," I tend to think of two main criteria. Not ever having had a management course, my fallback position is: Success is "goals plus relationships."

So I want people who know how to establish meaningful goals and then be willing to be held accountable and measured against those goals. And I also want people who know that to achieve goals you have got to collaborate and that there are some things that a leader can do just by virtue of saying "we're going to do this" and then it happens. But most things that you want to do really require relationships and collaboration.

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What Is the Council on Virginia's Future?

The Council's purpose is to advise the governor and the General Assembly on the implementation of the Roadmap for Virginia's Future process. The purpose encompasses several factors: providing a long-term focus on high-priority issues, creating an environment for improved policy and budget decision making, increasing government accountability and transparency, improving government performance, and engaging citizens in dialogue about Virginia's future.

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So trying to pick leaders who understand those two traits and can live them out—that is the most important thing I can do to try to keep pressure on for success and improvement.

On the Council on Virginia's Future
The Council on Virginia's Future is an organization that was created by legislative mandate with the support of then-Governor Mark Warner to bring together around a table key stakeholders who want Virginia to be successful, to really look at what are the elements that we really need to focus on to ensure long-term success, not short-term within an election cycle but long-term success.

The idea was that we didn't have in state government that kind of long-term planning; that there wasn't a clear bull's-eye for state government. You know, a business has a bull's-eye usually; and, bottom line, most organizations have a bull's-eye. But the state is so large and complex, with so many agencies trying to do so many things, what's the bull's-eye? What are we really trying to aim toward?

And so that realization, through the powerful lobbying of some private citizens who wanted Virginia to adopt these long-term management practices, led to the formation of the Council.

The Council is composed of private sector leaders from the nonprofit world, from the business world. The governor is always, you know, kind of the chair of the Council. And then there's key representation from the legislature as well. And that Council is a forum for dialogue, again about a couple of different things: What does it mean for us to be successful? How do we define success? How do we set long-term goals for success?

The Council also pushes us toward better accountability and trying to find efficiencies and improvements to government with private sector expertise around the table. They work to remind us in a very helpful way that success that you might see at the statewide level—such as the low unemployment rate—doesn't mean you can be complacent, because there are regions where the unemployment rate is too high. So the Council helps us remember that averages can mask some challenges.

On the Roadmap for Virginia's Future
Our Council on Virginia's Future has worked with us to come up with a roadmap for success, really focusing on continuous efforts to define long-term goals and then organize our effort around those goals.

So the roadmap is about trying to refine and set goals that really go out further than a governor's term or an election cycle so that we can then orient the activities of state government around those longer-term goals.

On the Council's Results Teams
The Council lists the goals that we think are the "big picture" goals that measure the state of the Commonwealth. The Council has been very key in choosing those goals, trying to summarize success on one page, basically the lead page of the Council's "Virginia Performs" website. But we're also aware that just setting a goal and saying "okay, let's see how we do against the goal" might not be enough to really make progress toward the goal.

So one of the things that the Council has done is create "results teams" around a few of the key indicators. So we might not put a results team together on all of them, but let's pick a few. I'm really fond of third-grade reading scores as a spectacular indicator, because it tells you something about today, but it also tells you something about tomorrow and what you're going to be experiencing down the road.

The idea of a results team would be to pull together, again, public and private sector resources around a key indicator like that and say if we really wanted to [set a stretch target for improvement, we could make a concerted effort]. When I began as governor [in January 2006], for example, 26 percent of Virginia third-graders had failed our third-grade reading exam in the prior year. Last year, that dropped to 17 percent, which was great. We're not sure whether that was just a one-year aberration or whether it's a meaningful trend. But I've told my superintendent of public instruction, "I want you to drop that to under 10 percent by the time I leave the governor's office," which is a huge thing to move that far.

The Roadmap for Virginia's Future

Review and update the Roadmap.

Assess progress against long-term quantifiable objectives, current service levels, and productivity improvement.

Establish aspirations and a high-level vision for the Commonwealth:
– High-Level Goals
– Societal Indicators
– Quantifiable Objectives
  (5 & 10 year targets)
– Citizen Engagement

Measure, evaluate and improve performance (Continuous Improvement).

Adjust funding based upon agency goals and results (Performance-Based Budgeting).

Establish strategic plans that link to long-term goals and the budget (Strategic Planning).

Executive Branch   **Council on Virginia's Future**

Source: Council on Virginia's Future, "Transforming Virginia: Overview of Virginia Performs," www.future.virginia.gov/docs/meetingmats_103006/ COVF_Part2.pdf

We're not going to be able to get from 26 percent to under 10 percent without some organized brainpower around just that issue: What do you do to really drive that number? That's the idea of results teams—pulling brainpower together around the real key indicators.

On the Virginia Scorecard and 'Virginia Performs'

The Virginia Scorecard is a report on the state [not just the state government]. And, again, let's go back to where we are or are not successful based on how hard we're working. We're successful based on what are the societal measures, such as the unemployment rate: Where's it gone in the last year? Tax burden: Where's it gone in the last year? Reading scores: Where have they gone? Our bond rating: Where's it gone?

So the scorecard really looks at these external measures that really show: Are we moving the needle in the real world? In that sense, that report card is incredibly valuable, because, again, we see areas where we are moving the needle and we feel good about that. We also see areas where we're not or maybe we're not to the degree that we want to, and then

those areas become kind of a magnet for our attention and, hopefully, [for] brainpower and resources.

"Virginia Performs" is [a web-based] effort to make all this information about whether we are succeeding or not—where are we weak, where are we strong, what are the goals we're shooting for—to make it all available to every citizen, every newspaper reporter, anybody writing a class report about performance in a public administration class on a campus, to make it all available and easy for citizens to understand.

It divides the functions of state government into seven categories. Within each category, there are a few data indicators that show why we think this is important. Here's what this particular measure will tell us. Here's where we are right now in each measure. It shows where Virginia is against surrounding states, where Virginia is against the leading state in the nation. The data then will separate Virginia into regions to show the disparities among regions in that particular area. And so it's a very, very powerful website in giving information about whether we're successful or not.
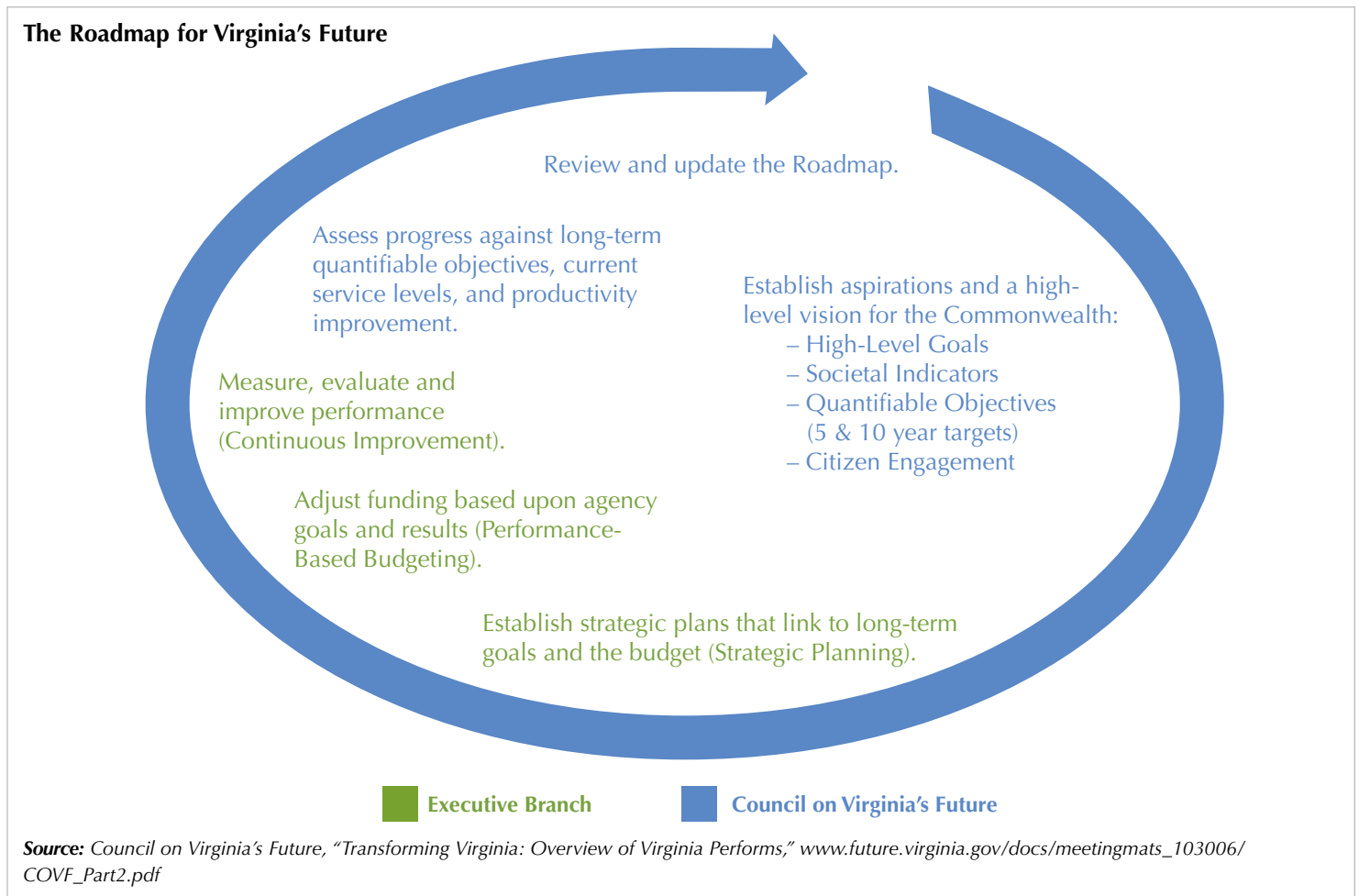
> "The roadmap [for Virginia's future] is about trying to refine and set goals that really go out further than a governor's term or an election cycle so that we can then orient the activities of state government around those longer-term goals."
>
> — *Timothy M. Kaine, Governor of the Commonwealth of Virginia*

The website also links into all the agency-level goals. So you want to know something about a particular agency, great. You can get into that agency, see what their goals are, see how they're doing. Say you don't know what the agencies' names are, but you want to know: Are there goals dealing with workforce development? You punch in "workforce development," and it will pull up the different agencies that do workforce development as part of their key goal and how they're doing.

So there's a variety of ways to search for information and get answers. But it's all designed to hold out this notion of "performance matters" to all citizens so that they can use it and they can hold us accountable.

On Setting Agency-Level Goals

When I was elected governor, I had a series of meetings with each cabinet secretary, and they brought all their agency heads in, and so we would sit around and we would talk about previous efforts to define goals. And at the time, there had been goal-setting efforts that weren't particularly linked

to budgeting; and also a weakness I thought of the goal-setting efforts was each agency had too many goals, and if you're trying to shoot at too many targets at once, it's hard to have the sustained progress for the ones that are most critical.

So I spent time with all of the agencies trying to get them to take the numerous goals and just give me—no more than five and hopefully no more than three—what you think are the key goals that express the core mission of your agency and what is the appropriate measure for that goal. Where are you now? Where do you want to be in three or four years?

That was enormously helpful because some agencies did that and did it very well. Some, frankly, would give me goals that were much more internal process goals rather than outcome goals. Some gave me goals that I would look at and think: "Well, gosh, I don't really think that's the core mission of your agency." I could see that you would have that as a goal, but if a citizen saw that goal, they wouldn't say that's the core mission of this or that agency.

Virgina Performs: How Well?

Virginia state government measures the performance of its agencies in two ways: Agency Performance Measures (program measures) and the Management Scorecard (administrative measures).

As part of its commitment to transparency in government, details on these measures are available online through Virginia Performs. Learn what objectives each state agency has set and view how agencies are measuring progress against those objectives. Learn also how state agencies are measuring up on key management criteria. Explore the data for yourself. Discover why Virginia has earned the title of best-managed state in America.

So it was a very helpful dialogue and an iterative process as we improved, adjusted, and modified their goals. But, again, the purpose of it all is to have each agency express its core mission and express it in a way where I can use it to manage, and the citizens can use it to determine some kind of accountability and how we're succeeding.

On the Governor's Management Scorecard

The Governor's Management Scorecard is another innovation that I've got to give credit to Governor Warner for, who came before me. His sense was, let's put, in a fairly clear format, standard expectations of agencies on what I would call the internal procedural goals: Are you managing your finances well? Do you have good human resources systems? How about other internal controls?

And so these are largely internal measures of the management of an agency. These are not the external measures, such as: Are you changing the third-grade reading scores? Are you reducing the recidivism rate? But it is: Are you managing these agencies in a smart way? So we assess each agency on these criteria, and use that, usually with quarterly data, to try to decide what agencies are doing well and where are the places where we need to come in and try to help.

On Linking Budget with Performance

The Virginia governorship is a little odd on budgeting. Virginia has a two-year budget.

When a governor gets elected, he comes into office and a two-year budget had just been prepared and presented to the legislature by his predecessor. So for my first two years in office, I'm basically dealing with a budget that was prepared by a predecessor, and I have the ability to suggest amendments, et cetera, but it's not really my budget.

Then, beginning in my third year in office, I prepare a two-year budget that is really fully mine, with my agency heads, to present to the legislature. And then I prepare one more two-year budget on my way out the door and hand it to the next guy.

So I am right now working on the only two-year budget that I will control. And I'm trying to do that in a way that really focuses upon these performance measures and goals that I've had the agencies work on in my first year plus in office.

I don't want to just take what we've done and then try to decide how much we should add or subtract to it based on how much revenue we have. I want my agency heads to tell me what they are doing in each programmatic area that advances the goals that they told me were the most important things about their agency. And if either they don't advance those goals or we're not moving the needle the right way, then we could hopefully redeploy resources to areas that will move the needle more toward the long-term goals that the Council and others are convinced is the right way for the state to go.
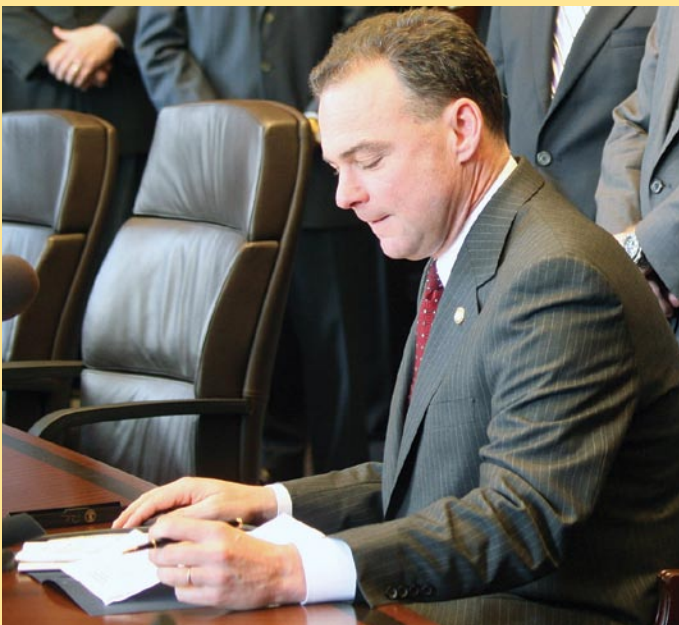
Photo courtesy of the Office of the Governor, Timothy M. Kaine

Photo courtesy of the Office of the Governor, Timothy M. Kaine

On Institutionalizing Management Reforms

We're the last state in the nation that does not allow a governor to run for re-election, so how do you institutionalize long-term management reforms?

Well, one, the Council on Virginia's Future is an institutional voice for long-term planning. The Council has the governor and has legislators, but it also has business sector and other leaders—private sector leaders—who are at the table demanding that we perform. And so the Council was maybe more needed in Virginia than other states because of the one-term governor to help us focus on the long term. That's one way to try to drive consistency and continuity.

The other way is everybody in a leadership position has the opportunity to do some things that people will see and say: "Wow, that's so good! Why would we ever do it any other way?"

And if what you do has merit, it will win the converts, who will make sure that you don't backslide. If it doesn't have enough merit to win converts, then there might be backsliding. But if it does have enough merit to get people on board,

then you won't backslide. And so that's what I hope to do as governor—just do some things that are so compelling that after they're done, people would look at it and say, "Why would we ever do it any differently?" ■

TO LEARN MORE

Staying the Course: The Use of Performance Measurement in State Governments
by Julia Melkers and Katherine Willoughby

Managing for Performance and Results Series

NOVEMBER 2004

Staying the Course: The Use of Performance Measurement in State Governments

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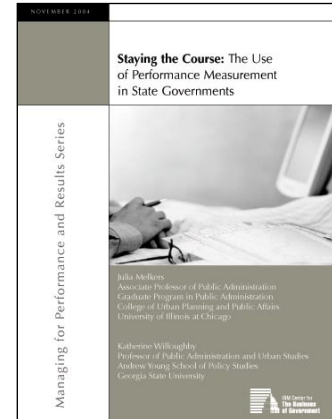
Jayson P. Ahern

Deputy Commissioner, U.S. Customs and Border Protection

U.S. Department of Homeland Security

By Michael J. Keegan

Balancing the Flow of Travel and Trade with Border Security

The U.S. Customs and Border Protection (CBP) protects our nation's borders from terrorism, human and drug smuggling, illegal migration, and agricultural pests while simultaneously facilitating the flow of lawful travel and trade. Its mission is vitally important for the protection of the country and the national economy. On a typical day in fiscal year 2006, CBP processed approximately 1 million passengers and pedestrians; 71,000 containers; 327,000 privately owned vehicles; and 85,000 shipments of goods approved for entry.

As CBP's deputy commissioner and its previous assistant commissioner for field operations, Jayson Ahern has played a significant role in shaping the identity of this new and evolving organization. "No agency in government has a greater responsibility for protecting the homeland from the introduction of a terrorist or a weapon of mass destruction or weapon of mass effect coming into this country than the men and women who work the front line for Customs and Border Protection," says Ahern. Operating at the nexus of national security and American economic security, CBP performs a delicate balancing act between securing the country and facilitating the free flow of commerce. "It's our twin pillars to make sure that we actually facilitate legitimate travel and trade as we cultivate and deploy our layered strategy for defense of the homeland. And if we don't do that accurately and do it effectively and come out with a well-thought-out strategy, stifling legitimate trade or legitimate travel would have such a negative impact on the economy of the country that the terrorist organizations would win in that fashion, so we can't let that happen," maintains Ahern.

Rethinking the way to manage the country's borders began in earnest in the aftermath of 9/11. For the first time, one U.S. agency is in a position to implement a comprehensive strategy for border security. "I think it's important to begin with talking about the layered strategy we put in place post-9/11," says Ahern. "We realized we needed to make sure that our ports of entry and the borders of the United States were not the first

> **CAREER HIGHLIGHTS**
>
> - Deputy Commissioner, U.S. Customs and Border Protection, U.S. Department of Homeland Security
> - Assistant Commissioner, Office of Field Operations, U.S. Customs and Border Protection, U.S. Department of Homeland Security
> - Director, Field Operations, San Diego, U.S. Customs Service
> - Port Director, Los Angeles, CA, and Miami, FL, U.S. Customs Service

opportunity for us to intercept either something or someone of concern who posed a risk to this country." As a result, CBP developed and implemented a multi-layered, risk-based strategy that seeks to extend the U.S border beyond simply its physical manifestation. At the heart of this strategy are five interconnected focus areas: requiring submission of advance information on both cargo and passengers; performing advanced target risk analysis; scoring collected information; using cutting-edge technology, such as non-intrusive inspection equipment, to detect radiation and other anomalies; and partnering with foreign governments and with the trade community to expand America's zone of security.

CBP requires advance electronic information on all cargo being shipped to the U.S. before it arrives at a U.S. port. For oceangoing cargo containers, that means advance manifest data 24 hours before they are loaded at overseas seaports on vessels headed for the U.S. "We crafted the Trade Act of 2002 that actually got us advance information for not only maritime cargo, but also for air and land," explains Ahern. "It gives us the information electronically for very specific elements that we can then run through our Automated Targeting System (ATS) to score for risk before containers can be put on a vessel destined to the United States." Receiving information in advance enables CBP to separate low-risk from

"No agency in government has a greater responsibility for protecting the homeland from the introduction of a terrorist or a weapon of mass destruction … than the men and women who work the front line for Customs and Border Protection."

high-risk shipments, allowing CBP to focus resources on those potentially high-risk areas. This capability goes beyond cargo. With the Advance Passenger Information System (APIS), CBP has the capability to identify dangerous individuals before they enter the country. This system receives biographical and official passport information on passengers arriving to and departing from the U.S. by air and sea, which the CBP can analyze to derive a risk-assessment model using ATS.

By using ATS, which is built on risk-assessment rules and algorithms based upon strategic intelligence about terrorist threats, CBP has the capability to detect anomalies and to red-flag potential high-risk cargo and individual passengers. "ATS is an exceptional system," observes Ahern. "We get 100 percent of all the manifest information … we then score it for risk. For passengers, we have a decision support tool for our frontline officers … we use some of that information that we're getting in advance…. The Automated Targeting System is flexible enough that we can write targeting rules using that advance passenger information … to see if there's any traits or characteristics that the system could identify and flag for the frontline officer, again, as a decision support tool."

To focus on this analysis, CBP established the National Targeting Center (NTC). "I think [it's] one of the greatest innovations that [we came] up with post-9/11," says Ahern. According to Ahern, right after the attacks on 9/11, CBP started bringing in some field experts to do centralized national targeting. "We now have the ability to have all the information on people and on cargo coming into the country run through the centralized location at the National Targeting Center…. It gives us ability to do centralized national targeting, so we can make uniform decisions throughout the country," he explains.

To complement its advance targeting capability, CBP relies on other technologies to secure the international supply chain. Over the last few years, non-intrusive inspection technology, such as X-ray and gamma-imaging and radiation-detection devices, has enabled CBP to facilitate the security review process and eliminate the need to physically examine high-security-risk containers bound for U.S. ports.

But to fully secure the international supply chain as well as expand America's zone of security beyond its borders, CBP has recognized the importance of collaboration with both foreign governments and the private sector. Partnering with other countries is best illustrated by CBP's Container Security Initiative (CSI), which calls for high-risk containers to undergo security inspection before being loaded onto a vessel destined for the U.S. "We now have over 200 officers placed at over 50 locations around the world, and these are [the] major shipping ports [to] the United States…. That accounts for 82 percent of the container traffic that comes to the United States," notes Ahern. "We've entered into declaration of principles with each one of the countries—we're basically out there without authority, but through the declaration of principles, we work collaboratively with the host country counterpart."

CBP has also partnered with industry through its Customs-Trade Partnership Against Terrorism (C-TPAT), which entails completion of a comprehensive security profile and a commitment to work with CBP to strengthen the supply chain. These efforts together form CBP's multi-layered border strategy, which seeks to extend security beyond the country's actual physical border and enable CBP to meet its twin mission of securing the border while facilitating legitimate trade and travel. "It's very clear that there are still individuals out there that want to cause harm to this country…. I think to be adaptive, we need to make sure that we're flexible to any emerging threats posed through the moving of people or things into this country," says Ahern. ■

To learn more about the U.S. Customs and Border Protection, go to www.cbp.gov.

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Major General Elder Granger

Deputy Director and Program Executive Officer, TRICARE Management Activity

U.S. Department of Defense

By Michael J. Keegan

Expanding Healthcare Services for the Military Community

As the deputy director and program executive officer of the U.S. Department of Defense (DoD)'s TRICARE Management Activity, Major General Elder Granger serves as the principal advisor on health plan policy to the assistant secretary of defense for health affairs, and provides oversight of its managed care program. With an annual budget of $11 billion, slightly less than half of a total $28.16 billion Defense Health Program, General Granger manages the operation and overall performance of this program, ensuring accessibility to high-quality healthcare for 9.1 million beneficiaries worldwide. As Granger explains, the mission of the military health system is "to provide world-class healthcare anywhere, anytime, to millions of beneficiaries scattered throughout the globe and around the world." TRICARE plays an integral role in the successful pursuit of DoD's healthcare mission.

A physician himself, Granger further emphasizes that "what [we] really want to do is make sure that we're training a medical force, making sure we're protecting that force that we deploy, and managing the health of our military communities." He explains that the military health system has three key components to do just this: "We have a direct care system, we have a purchase care system, and part of the system where we do other things with our managed care support contractors, [such as] pharmacy." Granger points out that TRICARE represents a buffer "whereby if we [can] not take care of you in our military treatment facility, called the direct care system, there is a robust TRICARE Network, and that consists of right now over 200,000 providers … 50,000 hospitals … over 55,000 pharmacies throughout the country—a coordinated, integrated healthcare system."

Over the years, the TRICARE program has expanded, continuing to enhance benefits at a time when the private sector is shifting more of its costs for providing medical care to its employee base. "If you look over time, we've brought

> **CAREER HIGHLIGHTS**
>
> - Deputy Director and Program Executive Officer, TRICARE Management Activity, U.S. Department of Defense
>
> - Commander, Task Force 44th Medical Command and Command Surgeon for the Multinational Corps Iraq
>
> - Commanding General and U.S. Army Europe Command Surgeon, Europe Regional Medical Command, Department of Defense
>
> - Chief of Medicine, 2nd General Hospital, Landstuhl, Germany, United States Army

on Remote TRICARE, Prime Remote, the TRICARE Reserve Select program, the TRICARE for Life program." At the same time, although the cost to the beneficiary is the same, the cost share paid by the beneficiary as a percentage of overall program costs has dropped over half.

This situation becomes even more challenging because as benefits have expanded, demand has increased. Over the past several years, TRICARE has seen an increasing influx of beneficiaries who have opted out of other health insurance for the more robust coverage afforded them under TRICARE. To meet this increased demand while sustaining the program for the future, the military health system, and in particular TRICARE, has focused on becoming more efficient and effective in its delivery and operation.

"The last two to four years, we worked aggressively on a military healthcare system strategic plan … looking at doing smarter contracting or buying of resources, putting systems into place to truly manage that," says Granger. As a result,

"What [we] really want to do is make sure that we're training a medical force, making sure we're protecting that force that we deploy, and managing the health of our military communities."

the program has changed its large managed care support contracts, pushed to get the best possible pricing for pharmaceuticals, and worked with other federal departments, such as the Veterans Administration, to share services where possible. "We have some short-term goals as well as some long-term goals in terms of how we do that…. We're putting more emphasis on getting truly performance-based type contracts, and we're looking at civilian models and best practices…. And the final challenge is making sure we [have] the right financial structure to sustain this great benefit," underscores Granger.

Granger points out that the military health system and its TRICARE program are in a fairly unique position to manage and influence the health of its members. "In our population, we have the opportunity to start managing or preventing different diseases [as we] actually go through the entire life cycle of healthcare or life in general with our military beneficiaries," notes Granger. Using preventive-care methods, rigorously pursuing disease management, and focusing on evidence-based medicine, the TRICARE program employs a patient-centered, patient-focused approach to health. He explains that "if a [condition is] going to be chronic, we manage it; we try to prevent the complications. And we do it in such a way that the patient has a role in terms of patient-centered care; educating our patients to also serve as a partner with us to help us do the right thing, to take care of them … giving them more responsibility in managing their care." He calls it "infotherapy"—information therapy— "giving patients information, allowing them to make healthy choices." With the advent of TRICARE Online, TRICARE has leveraged the web to further its efforts in infotherapy. "As we go forward, TRICARE Online is really going to be the portal into how our beneficiaries as well as providers continue to use [it] for patient information, in terms of information therapy, making appointments online, looking at lab, X-ray, and pharmacy information, as well as being able to order or refill medication," says Granger.

A major concern for the TRICARE system has been the sheer volume of information that it collects on clinical encounters on a daily basis, and how to best use this information for the patient. "[It] is trying to get all this clinical and administrative information into one electronic system, and that system we have right now is called AHLTA—it's our electronic healthcare record," says Granger. He adds that the challenge is: "How do we take all that information in our clinical data repository and truly make it useful?" The military health system, in concert with other federal departments, has worked toward understanding the proper use, application, and advances of the electronic health record. "I truly believe that the military healthcare system, working with the other fellow agencies in the nation, can truly have an ideal electronic healthcare record, so we can manage not only our DoD population but also set some benchmark for the private sector," says Granger.

Under Granger's stewardship, the TRICARE program continues to provide robust healthcare coverage to this country's service members and their families at a time when similar programs are reducing benefits and increasing premiums. It is making a difference and striving to provide high-quality healthcare that matters to Granger. "You want to be able to look back on life and say … I did make a difference. I gave something back in terms of touching the lives of not only a few but maybe many, but also serving my nation and serving my country, because at the end of the day, that's what life is all about." ■

To learn more about the TRICARE Management Activity, go to www.tricare.mil.

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Nina Rose Hatfield

Deputy Assistant Secretary for Business Management and Wildland Fire

U.S. Department of the Interior

By Shawn Gorman

Protecting the Nation's Natural Heritage

After seeing the Grand Canyon for the first time, President Theodore Roosevelt was inspired to say, "Keep it for your children, your children's children, and for all who come after you." Today, the U.S. Department of the Interior has evolved into the principal federal conservation agency, managing the protection of many of the nation's special natural, cultural, and historic places—its parks and wildlands. As deputy assistant secretary for business management and wildland fire at the Department of the Interior, Nina Rose Hatfield contributes to making Roosevelt's vision a reality. As Hatfield explains, she deals with the operational arm of Interior, focusing on its "budget, finance, property, acquisition, small and disadvantaged business … and, in addition to that, [I] work with the bureaus that are involved in wildfire protection."

Since 1849, the Department of the Interior has managed a number of broad missions, from the country's expansive park system to its critical fish and wildlife system. "We manage about 262 million acres of public lands that really create for the American public a wonderful conservation area for wildlife." Yet, Interior is not just parks and wildlife. Hatfield points out that "we also generate power." About a third of the energy that's used in this country is generated off of land under the department's purview. In addition, Interior "provides drinking water for about 31 million people in the West through the Bureau of Reclamation and the water systems [it] manages, and because of the water delivery systems that we have, we really provide water to farmers that generate over half of our nation's produce," explains Hatfield.

Furthermore, Interior manages the largest land trust in the world for Native Americans and is one of two federal agencies that operates an education system. "We educate about 48,000 Indian children across the nation … we have just an enormous opportunity [to] really impact the American public," notes Hatfield.

> **CAREER HIGHLIGHTS**
>
> - Deputy Assistant Secretary for Business Management and Wildland Fire, U.S. Department of the Interior
> - Deputy Director, Bureau of Land Management, Department of the Interior
> - Assistant Director of Business and Fiscal Resources, Bureau of Land Management, Department of the Interior

"We have … a lot of historic programs that have developed their own way of doing business, and along with their mission [programs] have developed different financial systems," says Hatfield. As a result, Interior "now is operating about 17 different financial systems." She realized that it wasn't just about making incremental improvements: "We really had to make significant improvement to be where we wanted to be with financial management.…" As part of this improvement effort, Hatfield is in the process of implementing the Financial Business and Management System (FBMS). "We call it the cornerstone to our future … the largest implementation of an enterprise system in the department…. When we are finished, we will have an integrated finance, property, budget, acquisition, financial assistance, and travel system in which we have all of those entities designed to work together for the first time in the history of the department." No small feat for a department with an annual budget of over $10 billion.

The FBMS is only one way that Hatfield has sought to strengthen and improve the department's financial management. "We also had the issue of a lot of material weaknesses that had not been addressed and cleaned up, and so we put together a transformation plan … we set goals, we actually formed up some teams, we started meeting very regularly to see where we were in progress, and we have just been very successful," she says. So far, Interior has seen

"We manage about 262 million acres of public lands that really create for the American public a wonderful conservation area for wildlife."

significant results in this area. For the fifth consecutive year, the department has received the Association of Government Accountants' Certificate of Excellence in Accountability Reporting, the CEAR Award. For Hatfield, the award "not only identifies how well we are doing in the financial arena, but it also identifies how well we've done against meeting our mission strategic goals. The CEAR Award, we think, is just enormously important to us because it has an outside entity looking at how well we did in terms of providing this information to the public, and it's been very good for us in terms of strengthening our reporting in the context of improving the way that we're actually reporting to the American public."

Along with managing its internal resources, the department is leveraging partnerships with state, federal, and local officials to secure the nation's natural resources. This collaboration with partners is evident in combating wildlife disasters, especially wildland fires. In 2006 alone, wildland fires totaled more than 96,000 incidents, which burned almost 10 million acres. Interior, working with other federal, state, and local partners, employs the Incident Command System (ICS) as a way of successfully handling wildland fires. The successful application of the ICS model is described by Professor Donald Moynihan in his recent IBM Center report, "From Forest Fires to Hurricane Katrina: Case Studies of the Incident Command System." Moynihan points out that "the ICS arose from an outbreak of wildfires in California … responders did not have a common language, management concepts, or communication systems, and often worked at cross-purposes … agencies met to decide how they could better prepare for coordination problems during future outbreaks." Born was the ICS model. For Hatfield, the "goal is to try to contain [these fires] so that they don't continue to grow at the rates that they have been growing."

She points out that along with the ICS: "We've spent a lot of effort … working with our local firefighters so that they have the equipment [while] building upon the skills and training

they already have." This way, those closest to the incident can be the first responders getting to the fires quickly. According to Hatfield, "about 6 percent of [wildland fires] use about 90 percent of the resources that we use, so [our goal is to] get to them quickly and not let them become enormous fires." Collaboration among various partners makes this possible.

Currently, the average age of employees at Interior is well over 45 years. Consequently, the department has begun a concerted effort to recruit and retain new employees. "It has been a challenge to try to encourage people to come into a government agency and to develop the leadership capacity we need … so we have been aggressive in terms of trying to develop leadership programs for all our people … trying to maintain a high-quality workforce," says Hatfield. She always encourages young people to pursue careers in public service. Hatfield believes that public service is essential for solving problems that enhance the public good. "They're not problems that individuals can necessarily solve, but they are problems that we in a larger community have to solve. And in public service, you have the opportunity to help the larger community." Hatfield believes that the Department of the Interior will leave "the land in a better position for the next generation, and the generation after that, and the generation after that." ■

To learn more about the U.S. Department of the Interior's Office of Policy, Management, and Budget, go to www.doi.gov/pmb.

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Michael P. Jackson

Deputy Secretary, U.S. Department of Homeland Security

By Michael J. Keegan

Responding to Ever-Changing Threats to Keep the Country Safe

Over four years ago, Congress and the president created a new department whose central mission would be to secure the homeland, integrating and aligning 22 separate governmental agencies into a single, cohesive department. For almost four years now, the Department of Homeland Security (DHS) has led a national effort to protect the country from all manner of threats. As deputy secretary of the Department of Homeland Security, Michael Jackson has played an integral role in managing the maturation of this fairly new department with an annual budget in the range of $50 billion.

"It's a large budget, very operational.… I'm the chief operating officer … of this new organization, which covers a large swath of activity. It has seven core operating components.… The job of chief operating officer is to make sure that we're moving in the directions we need to go. It's a job that includes close coordination with Congress, a lot of coordination [with the administration], and policy development work," explains Jackson. He works closely with the secretary of homeland security to focus DHS's strategic direction, build its core competencies, and allocate significant resources across its broad mission. It wouldn't be an overstatement to say that DHS has been charting new territory. "There's not a playbook for how to build this large organization and to decide the quality of focus that we need to bring to a particular issue," notes Jackson.

Though the particular issues facing DHS may be manifold, resources are not. Jackson reflects: "How do we rank the priorities that are before us, and make investments of time, of dollars, of energy, of focus, to be able to do the best we can?" He identifies some of DHS's key focus areas, which span securing the border and operating as an accountable and effectively managed organization. "We are focusing first to prevent bad people from coming into the country; second is to prevent bad things from coming into the country—bombs, explosives; third is to strengthen our critical infrastructure;

CAREER HIGHLIGHTS

- Deputy Secretary, U.S. Department of Homeland Security
- Chief Operating Officer, AECOM Technology Corporation
- Deputy Secretary, U.S. Department of Transportation

fourth is to make the preparedness capacity of the nation what we need it to be to prevent and protect from attacks and to respond and recover from attacks. And finally … we're focused very much on management discipline and efficiency so that we grow in maturity in our capacity to spend the taxpayers' investment in a wise and disciplined fashion," declares Jackson. He points out that "we're trying to do this from multiple different ways, and as a growing department, we're experimenting."

According to Jackson, DHS employs a risk-based approach to assessing threats and prioritizing resources. Risk management is fundamental to managing threats and resources; it guides the department's decision making as it examines how to best organize, prevent, respond, and recover from attacks or natural disasters. "What is the risk? It's the threat, the vulnerability, and the consequences. What sort of threat do we have out there? How vulnerable is that type of asset to the particular type of attack we're talking about? And what are the consequences to the nation and the economy and the world of that type of attack being successful? So if you take that risk score … you can say where [DHS] should put [its] time and energy," explains Jackson. DHS's strategy is, in essence, to manage in terms of these three variables—threat, vulnerability, and consequence. The department seeks to prioritize within each focus area according to these variables: to develop plans and allocate resources according to this matrix in a way that balances security and freedom.

"There's not a playbook for how to build this large organization and to decide the quality of focus that we need to bring to a particular issue."

"The Department of Homeland Security has to be nimble.... This is a place where you have to be responsive to an ever-changing threat. When the bad guys think that we have closed one gap, they will look for another gap."

"It's a balancing act, a prudential judgment," Jackson admits. "Sometimes the risk equation changes a little bit and you nudge the resources in a different direction, or a different type of threat."

A critical focus area for DHS is securing the border, both land and maritime, from terrorist threats and the flow of illegal migration and drugs. According to Jackson, this is about keeping dangerous people and things out of the country while keeping the flow of international commerce going. "It's really about the movement of people and cargo, and if you divide it in these ways, what we have to do is gain control of the border," notes Jackson. DHS has what it calls a three-legged strategy for securing the border. "We must be able to make sure that we can control entry and exit from our country and into our country. So that's mostly what the SBI, Secure Border Initiative, is all about. The second component is to enforce the laws that we have about immigration. This means businesses can't hire illegals.… But the third leg of this stool is to try somehow to figure out how to harmonize the demand and supply in our labor market … to promote this temporary worker program that the president is advocating," maintains Jackson.

"On the cargo side, we have to have better information in a more timely fashion, in a more deep and rich way, in order to be able to screen and understand what's moving in our direction," says Jackson. A core objective in establishing DHS was to strengthen the overall security capability of the nation's transit systems and maritime security. According to Jackson, DHS continues to implement a multi-layered defense strategy to keep the country's ports safe and secure. Employing the expertise of key DHS components—including the Coast Guard and Customs and Border Protection, state and local entities, and the private sector—DHS has made significant strides in implementing port security measures. "It's all about trying to push our borders out and leverage a different type of partnership with foreign partners, governments, and the business community, so that we can scan overseas for radiation signatures the cargo that's inbound to the United States," says Jackson. "So what we're going to do is take these very advanced tools to look for potential radioactive devices, and we'll scan them upon entry into a foreign port. We will then immediately transmit that data to the United States to do a risk analysis. If there's a problem, we'll work in a networked way instantly to evaluate that container overseas before it's loaded on a ship, before it comes our way."

On a basic level, DHS was not created simply to bring together different agencies under a single umbrella. It was fundamentally created to enable these agencies to secure the U.S. through joint, coordinated action. "DHS has to be nimble.... This is a place where you have to be responsive to an ever-changing threat. When the bad guys think that we have closed one gap, they will look for another gap. So the first thing about this place is it's a work in progress, but it's a work that will be ongoing," says Jackson. He continues: "The second thing is: Can we get our fundamentals in place and working and effectively aligned? We've made great progress, and we have more to do … under this president's watch. We will leave a strong, organized, disciplined department for the next president, the next cabinet secretary, to manage. Will it be perfect? No. It's a sprint, but it's a sprint with a noble purpose." ■

To learn more about the U.S. Department of Homeland Security, go to www.dhs.gov.

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Lieutenant General Michael W. Peterson

Chief of Warfighting Integration and Chief Information Officer

U.S. Air Force

By Michael J. Keegan

Connecting People, Systems, and Data in the 21st-Century Air Force

As the United States Air Force continues to transform its capabilities to meet emerging national security challenges, it is pursuing changes that will dramatically enhance its capabilities; perpetuate American air and space dominance; and, in a sense, redefine the nature of warfare in the 21st century. In pursuing this transformation, the Air Force has also sought to ensure the effective and efficient integration of technology, people, and processes to provide the warfighter and decision makers with timely and actionable information that can be shared across a worldwide platform.

Lieutenant General Michael W. Peterson, as chief of warfighting integration and chief information officer, leads the U.S. Air Force's efforts in this area. He does this while leading an operation that encompasses four directorates and four field operating agencies, consisting of 1,600 personnel, and managing an IT portfolio valued at $17 billion. "If you look at the history of the U.S. Air Force over the last dozen years as we really got into the Information Age, we built exquisite systems but they were independent systems," explains General Peterson. "So my job, and the job of my office, is to go back to our legacy systems, make them interoperate to deliver fused information to anyone who needs it, whether it's a commander or warfighter … but at the same time point a roadmap for the future, so that as we build out future systems, we don't go down the same path of independent, non-interoperable capability."

Peterson understands the importance of his mission and the challenges he faces: "My number one challenge is educating the Air Force on what the potential is for information technology.… My number two challenge is to bring all of [the] different functional entities together so we can be interoperable across functional areas, across command lines, and especially in the joint arena. And the final challenge has to do with security of the information—information assurance on a broader scale." His efforts are guided by the ultimate goal of realizing the Defense Department's broader vision of a fully integrated

> **CAREER HIGHLIGHTS**
>
> - Chief of Warfighting Integration and Chief Information Officer, U.S. Air Force
> - Director, Information, Services and Integration, Secretary of the Air Force Office of Warfighting Integration and Chief Information Officer
> - Director, Air Forces Strategic Command/Air Component Coordination Element, U.S. Strategic Command
> - Commander, Joint Functional Component Command for Space and Global Strike, U.S. Strategic Command

warfighter. Technology plays a critical role in realizing this vision as it touches almost every facet of the Air Force's operation. "It was clear to our leadership that it wasn't just business systems or support systems. [Warfighter integration involved] the entire arena of command and control, intelligence, surveillance reconnaissance, and all of the business and support systems that make our Air Force run … [and] included data links, command and control systems, the communications networks on which they all ride," says Peterson.

Peterson explains that having an integrated warfighter requires systems in place that can talk to each other. Action in Iraq and Afghanistan underscores the importance of having compatible systems in place. "For years, we operated in mission areas or functional areas, and each [area was] able to independently develop and build systems that met their requirements. That gave great capability, but it didn't give great interoperability," explains Peterson. He points out how critical it is to link "these warfighting systems together, so that … a joint force commander, for instance … has access to every single piece of information that we have—he needs a fused, real-time picture of what's happening…." DoD's concept of net-centricity

"For years, we operated in mission areas or functional areas, and each [area was] able to independently develop and build systems that met their requirements. That gave great capability, but it didn't give great interoperability."

lays out the roadmap in this area. It calls for moving beyond traditional disciplines and represents a historic shift from multiple platforms to interoperation within a seamless network.

To make this possible requires focusing on the data itself, rather than on proprietary applications and programs. Peterson recognizes that the way an organization views its data must evolve—to start thinking about data as an asset that has both value and utility. "It was really this emphasis that got us moving in the direction of our Air Force data strategy," explains Peterson. Those at the source of the data will be required to make it easy to find and use; they must jettison longstanding views of proprietary ownership. It is critical to make the data visible, accessible, and understandable, he points out. Such enterprise data transparency enables an organization to track any piece of data back to its source, and understand how the data has been transformed and manipulated along its path through the organization. It also fits in with the Air Force's adoption of service-oriented architecture (SOA), which provides flexibility and adaptability, especially for organizations as large as the U.S. Air Force. "The importance of a service-oriented architecture is that services—what we used to refer to as embedded applications or capabilities or tools—those services are now able to be shared across the enterprise—now I have interoperability," says Peterson.

Whether on the battlefield or flying sorties, taking action at the right time and place with the optimal amount of force requires a deliberate planning approach and, most of all, a focused investment strategy. "The key to all of this is an enterprise architecture, which starts with policies, rules, processes, and eventually it gets down to a roadmap and a technology description of where we need to go so you can make investment decisions," says Peterson. The Air Force started down this road in earnest about five years ago. "I could tell them how much money we had spent on building out the architecture, and then show them … in terms of investment, where for every dollar we had spent on architecture, there was $10 of cost avoidance in the outyears—the cost avoidance money ended up over the next five years to be $77 million—that we didn't have to spend those dollars because we made an early good decision based on architecture," observes Peterson.

For example, the cost of sustaining 19,000 legacy applications is staggering. "The legacy platforms are very expensive to sustain. [It] is mostly about keeping those legacy platforms or systems talking to or interoperating with sister systems. That's where about 80 percent of the dollars go," explains Peterson. The Air Force saves approximately $1 million for every legacy application retired or moved onto the Air Force enterprise portal. Modernizing its IT infrastructure and operations will provide the Air Force with the capability to invest in its other mission-critical infrastructure, such as its planes. "So to find dollars for recapitalization … we could embrace industry best practices … create our own recapitalization capital [without] taking away warfighting capability.… For instance, no one in industry would have a help desk at every Air Force base. We do. We're consolidating help desks…. The dollars that we would have spent, we will invest in the recapitalization of the Air Force," notes Peterson.

Peterson describes the next five years as critical. "Today, it is too hard for someone in the joint arena to access all the information they require to do their mission. So the decisions we make about net-centric enterprise, the decisions we make about data strategy, about protocols, will be very important," asserts Peterson. "We don't fight as services, we fight as a team. And that is the test of whether or not we will be successful is if some deployed soldier, sailor, airman, marine can get the information that he or she needs exactly when they need it." ◼

To learn more about the U.S. Air Force CIO, go to www.safxc.af.mil/.

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Dr. Jeff T. H. Pon

Chief Human Capital Officer

U.S. Department of Energy

By Lauren Kronthal

Redefining the Business of Human Resources

The U.S. Department of Energy (DOE) stands at the forefront of the nation's efforts to meet its energy, scientific, environmental, and national security goals of developing and deploying new energy technologies and reducing dependence on foreign energy sources. The success of such a critical mission rests on DOE's pursuit of an effective workforce strategy. As DOE's chief human capital officer (CHCO), Dr. Jeff Pon plays an integral role in building the department's critical resource: its workforce.

"I act as the principal advisor to the secretary and deputy secretary in all matters concerning our workforce, the development, retention, and recruitment of our workforce.… We're not only working as human resources people, but really as strategic business partners to our most-senior leadership," explains Pon. "My primary mission and goal [is] to make sure we have the right talent at the right time at the right place. My responsibility is to make sure that each and every one of our managers has the right information to make critical decisions. We make sure while we are recruiting, selecting, and retaining people that our workforce strategies are effective and in alignment with our priorities as an organization."

Pon offers a sense of the scope of the department. "We run a $24 billion business. We're the largest funder of the physical sciences.… We have about 14,000 federal people across the entire complex. We run 27 national laboratories, some of which you probably know: Lawrence Berkeley, Sandia National Laboratories, Argonne, and Fermi.… We pride ourselves on being at the forefront of scientific discovery. Where else in the whole entire world can you actually claim that you work for an organization that's trying to discover the meaning of the universe or mapping the human genome?" He points out that the Department of Energy is "really in the business of managing science [and] technology for energy security, national security, and American competitiveness in an environmentally responsible way—that's a huge portfolio."

Pon recounts a discussion he had with Energy Secretary Samuel Bodman. "I asked [Secretary Bodman], 'Are we one company, one corporation, with a leadership philosophy that's integrated across our organization, where the bar is set at a certain level and everybody follows it? Or are we a holding company with 24 or 27 different LLCs?' He answered me by saying, 'I believe that we are the latter, but striving to be the former.' And that's my job here—to make sure we manage effectively across the organization."

The Department of Energy has earned green status in human capital management on the President's Management Agenda scorecard. Pon identifies some of the challenges in getting the department to green and staying green: "It's making sure we have a strategic plan for the whole entire organization—a five-year strategic human capital plan that's integrated across our whole entire organization. It's making sure we're closing the gaps in mission-critical occupations…. It's really related to how we operate our business…. We're making sure that our human capital processes are in support of the program mission."

"I think we're one of the leaders in government trying to change the culture through the human capital plan," says Pon. "It's not just about checking the boxes. We want to make sure that these priorities are meaningful so that we have the right people in the right place at the right time.

"We make sure while we are recruiting, selecting, and retaining people that our workforce strategies are effective and in alignment with our priorities as an organization."

> "We [the Department of Energy] pride ourselves on being at the forefront of scientific discovery. Where else in the whole entire world can you actually claim that you work for an organization that's trying to discover the meaning of the universe or mapping the human genome?"

We're training and developing the best of the best, because we are the best of the best, and we want to remain that way as a nation in this global competitive environment."

Pon explains the prominence of a human capital strategy in the larger picture: "The president and secretary of energy have 10 priorities, one of which is the strategic management of human capital. Why is it so important? It's because human capital is something that has to be at the forefront of the conversation as opposed to human resources, as in the transactional nature of those things." He continues: "The strategic management of human capital is a wide brush of how we do things in the department—what do we find important in terms of knowledge skills, abilities, and experiences of our employees. But from there, you can actually define your recruitment strategies, hiring strategies, your development strategy and retention strategies…. This is central to running an effective organization, and the strategic plan actually reflects that: where are the hiring priorities, where are the development priorities, and actually managing it as one organization."

Prior to his role as CHCO, Pon served as the Office of Personnel Management's e-government deputy director, where he led the government-wide effort to implement the five e-government initiatives as well as the Human Resources Line of Business (HRLOB). With respect to DOE's plans to transition to an HR Line of Business, he says: "The Human Resources Line of Business is a very, very important effort across the government. It really has to do with what is the business of HR, defining what the business is, what are the different types of services HR provides, how do we keep track of this performance, what's the information that we track, and what's the technology. [In addition to that,] it's taking a look at the shape of HR and what we do now…. HRLOB, along with the e-government initiatives, is really taking a look at how do we go from a paper-based human resources function to a digital function. I think that's a very important aspect, because it's the on-demand data that you

have that I don't have right now…. The ready use of data is so important to making critical, timely decisions…. Technology offers that to us."

Pon believes workforce planning is vital to helping leadership draw a clear picture of current and future human resource decisions. "Workforce planning is central to human capital management. It's a contract between the programmatic manager and human resources. With a workforce plan, you actually have a forecast and model on what the priorities are, who they're going to be recruiting, what the next 100 hires are going to be, and who they're developing."

Looking ahead, Pon reflects: "I think our challenge is to get out of transactional administration and move towards a more strategic one. It's really about working directly with the businesses. Instead of just processing the blue paper or the 52s and the 50s—that's HR speak for the paper process—we really need to get in front of that and take a look at the mission of an organization. How are they meeting the challenges of the next one, three, five years? What are their areas of growth or decline? How are they going to identify the right vocations within that skill set in the next one, three, and five years? That should all be teed up by a human capital professional." ■

To learn more about the U.S. Department of Energy, go to www.doe.gov.

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Dr. Ronald P. Sanders

Associate Director of National Intelligence for Human Capital

Office of the Director of National Intelligence

By Lauren Kronthal

Creating a Culture of Collaboration in the Intelligence Community

Dr. Ronald Sanders, the associate director of national intelligence for human capital in the Office of the Director of National Intelligence, recounts the origins of the office after September 11, 2001. "In its aftermath, there were several commissions—one sponsored by the Congress, another sponsored by the president—that looked at the structure of the intelligence community, otherwise known as IC. And in a phrase that's become almost a cliché, the 9/11 Commission said there was a 'failure to connect the dots.'… So they set about to fix that. That led to the Intelligence Reform and Terrorism Prevention Act of 2004, which established the Office of the Director of National Intelligence."

According to Sanders, its mission is to bring about much greater integration in the intelligence community. "What Congress and the president did was take that community in its six separate cabinet departments, plus the Central Intelligence Agency, and said, 'We want you to act like a community … but without classic chain of command authority.' The director of national intelligence [DNI] does not have chain of command authority over the intelligence agencies," explains Sanders. "He has power of the purse and some personnel authorities, but the challenge is to bring about integration through other means."

Sanders sees his role "as having strategic responsibility, not tactical or operational. In that respect, I'm department-like and I've tried to organize my office the way a cabinet department would organize its human capital office—at 50,000 feet, not 5,000 feet. While I may help design how human resource services are delivered, we will not actually deliver services."

Sanders outlines the areas under his purview, "… the full scope of human capital, human resource functions: workforce planning, recruiting, and hiring competencies and standards that drive training, development, career

> **CAREER HIGHLIGHTS**
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> - Associate Director of National Intelligence for Human Capital, Office of the Director of National Intelligence
> - Chief Human Resources Officer, Internal Revenue Service
> - Associate Director for Strategic Human Resources Policy, Office of Personnel Management
> - Director, Civil Personnel, Department of Defense

management—a whole range of policy, personnel policies and programs including compensation benefits, insurance programs, you name it. The anomaly here is that unlike my counterparts in Homeland Security or Defense, I don't have chain of command authority. So we have to bring about consensus and move forward in a different way."

According to Sanders, he faces three main challenges. "First, it's integration: having the intelligence community act like a community, bound together by a common mission, common values, common ethos, but still providing enough independence and flexibility for different agencies with different missions…. Second, institution building: The Office of the DNI is a brand-new agency created in the 21st century. It presides over a network of intelligence agencies … [and is] trying to establish an institutional identity."

"And lastly, and most important," says Sanders, "it's recovery and renewal: In the '90s, the intelligence community was gutted. By design or default, we were downsized dramatically. We lost bone and muscle. The demographic profile of our workforce is now bimodal…. The classic bulge on one end—people who look like me and who are ready to retire. So that's one hump. On the other hand, an extremely large percentage of our workforce has five years or less of service.
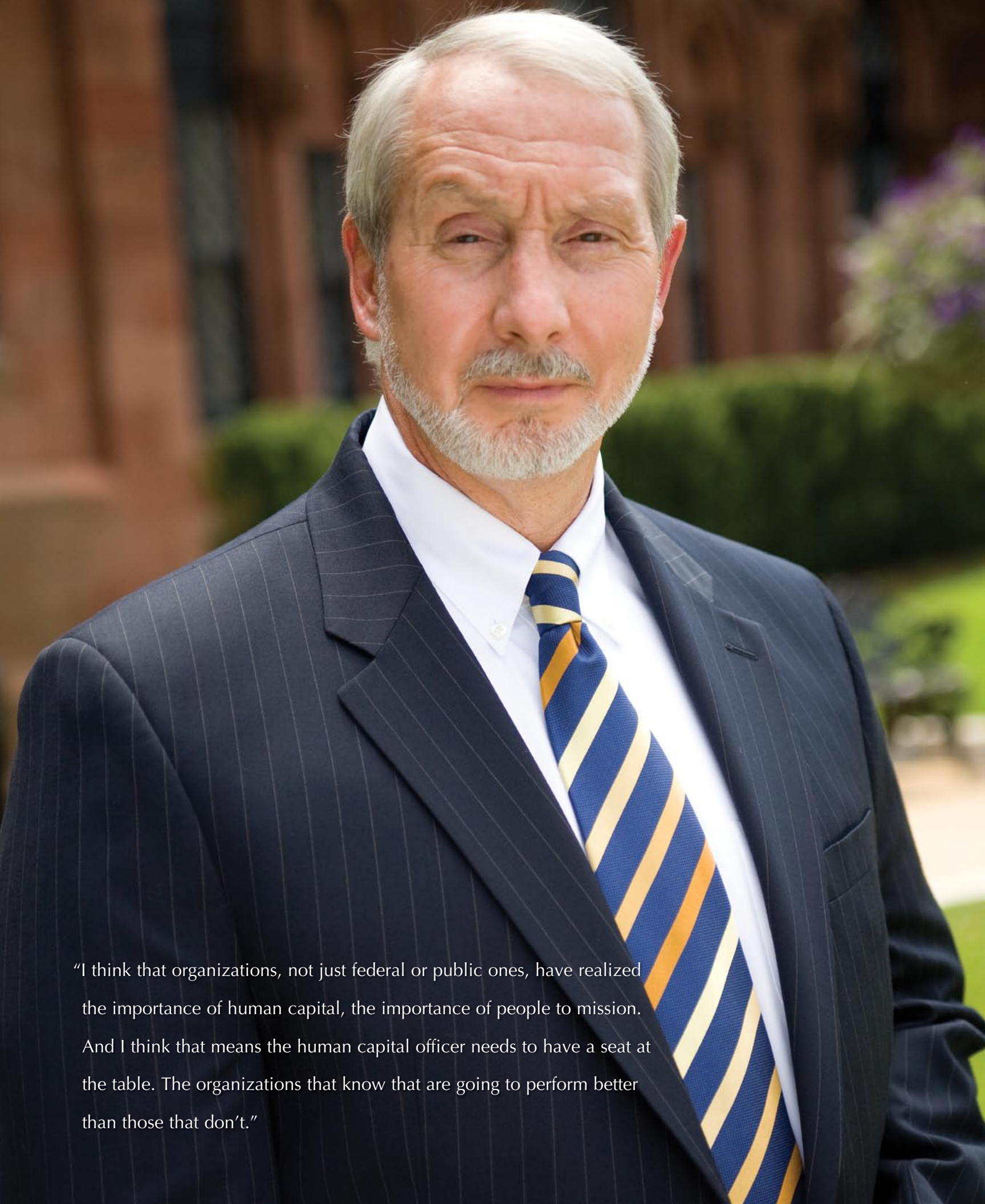
"I think that organizations, not just federal or public ones, have realized the importance of human capital, the importance of people to mission. And I think that means the human capital officer needs to have a seat at the table. The organizations that know that are going to perform better than those that don't."

Here's where we're blessed. In many agencies they don't have two humps; they just have one, the retirement bulge.... We are approaching 40 percent of our workforce with five years or less of service. That brings with it a whole other set of challenges. This is a 21st-century organization with a 21st-century workforce. And there are all sorts of generational issues that we're going to have to confront. We have to assimilate these new people, train them, inculcate our core values into them, deploy them, and hopefully motivate and retain them. This is a long-term project."

Sanders' five-year human capital strategy guides his efforts in meeting these challenges. "We've tried to be true to one of the IC's core values, and that's collaboration.... One of the most powerful integrating mechanisms we have at our disposal is the commitment to mission. When we brought all of my counterparts in the intelligence community together, everyone agreed we had to recover and renew our workforce … and bring about more integration," notes Sanders. Recently the DNI released its *100 Day Plan for Integration and Collaboration*. According to Sanders, "One of Director [Mike] McConnell's top priorities is building a culture of collaboration. That's back to this theme of connecting the dots, of sharing information.... He talks about our responsibility to provide information to each other. You know, it's not charity, it's [an] obligation. It's that culture of collaboration that's the first focus area in the 100 Day Plan."

Sanders identifies three goals that will enable him to achieve his strategic vision: "One, build an agile all-source workforce. How do we find the right mix and integrate military, civilian, and core contractors to achieve the mission through workforce planning, information systems, other things? The second goal is classic strategic human capital planning—win the war for talent. In our case, that war is a very high-stakes war. We need the smartest people in the world on some of the most esoteric subjects.... We are blessed in that our mission attracts the best and brightest even at government salaries, but we still have to be pretty creative about it.... That's where pay for performance comes in—what we call "pay modernization"—to move away from the General Schedule to something far more nimble, far more market-sensitive,

and far more performance-sensitive. And then lastly, build leadership at all levels. That's the [softest] of the three goals. It's the hardest and it may be the most important. That's where you bring all of this together and try to create a common culture. That's where joint duty is.... To be a leader in the intelligence community you're going to have at least one tour in another part of the intelligence community or in a combatant command or with some other federal agency."

Sanders sees the IC's human capital needs evolving over the next three to five years. "We'll continue to hire, but I think our challenge is to ensure we retain those people—that they are motivated, that they have career opportunities, training and development opportunities, and career growth." He underscores the need "to put in place new programs and systems that reflect their values, the way they look at the world...."

"I think that organizations, not just federal or public ones, have realized the importance of human capital, the importance of people to mission. And I think that means the human capital officer needs to have a seat at the table. The organizations that know that are going to perform better than those that don't," maintains Sanders. "This is my philosophy. I don't think I sit at the table as a consultant or an advisor. I think I have something to add to the strategic direction of the organization." ■

To learn more about the Office of the Director of National Intelligence, visit www.dni.gov.

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Jonathan "Jock" Scharfen

Deputy Director, U.S. Citizenship and Immigration Services

U.S. Department of Homeland Security

By Michael J. Keegan

Building an Immigration Service for the 21st Century

As the deputy director of the U.S. Citizenship and Immigration Services (USCIS), Jonathan "Jock" Scharfen serves as the chief operating officer of an organization with an annual budget of roughly $2 billion, with 250 offices throughout the country and 15,000 employees. USCIS adjudicates benefits requests and petitions for individuals seeking to become citizens of the United States or to study, live, or work in this country. "To give you a sense of the scale of our operations, we end up processing about 6 to 8 million immigration applications a year," explains Scharfen. On a daily basis alone, USCIS conducts 135,000 security background checks, takes 8,000 fingerprints, and welcomes about 2,100 new citizens to this country.

In a post-9/11 world, USCIS plays an integral role in the national security of the nation. Its mandate is to administer the citizenship and immigration services of the United States: processing all immigrant and most non-immigrant benefits. It is a very challenging mission for an organization that receives no specific federal appropriation. "Most of [our budget is] derived from fees … not from appropriated monies," explains Scharfen. About 99 percent of its $2.6 billion budget request for FY 2008 will be funded through the fees USCIS collects from immigration benefit applications and petitions.

To operate more efficiently and in line with actual operational costs, USCIS has sought to adjust the fees it collects from various petitions and immigration benefit applications. Scharfen underscores that the new fees (which became effective on July 30) will ensure appropriate funding to meet national security requirements, improve customer service, and allow the agency to modernize an outdated infrastructure. According to Scharfen, a number of factors prompted the fee review and a new fee structure. First, the Government Accountability Office (GAO) issued a report that concluded that the agency's last major fee restructuring, implemented in 1998, did not fully recover USCIS's costs. "In other words, we were operating in

the red every year because the fee was inadequate to cover our operations, and the GAO recommended that we do a new fee study to make sure that the fees covered operational costs," notes Scharfen. He also points to the Chief Financial Officers Act of 1990, which began to apply to the Department of Homeland Security in 2004; it requires fee-based agencies to have a fee review every two years. "But really what's driving this, the reality of this, is that we are not covering our current costs," declares Scharfen. The previous fee schedule would have generated about $1.25 billion in revenue, leaving USCIS about $1 billion short.

Scharfen also notes that the previous fee structure factored into the dramatic increase in application backlogs. "The backlog numbered up to 3.4 million just back in 2004," says Scharfen. "That backlog was building because we did not have the fees coming in to be able to pay for both the processes and the manpower to work out those applications in a timely fashion." Also, in the post-9/11 threat environment, USCIS has to follow new security requirements. Scharfen points out that "the last major fee study was back in 1998. So in between the last major study, we had 9/11 and the

"The different pieces of our transformation initiative involve digitization, moving from a paper-based system to a computer-based system. It also involves moving to a person-centric process from a form-centric process."

requirement of all these national security measures, and they're unfunded."

With the new fee structure, USCIS has the ability to modernize its business infrastructure and build an immigration service for the 21st century. It enables applicants to pay a one-time fee instead of having to pay multiple fees depending on application and status. "One of our major challenges would be the efficient delivery of immigration services. In other words, we've got to be good and efficient at the job we do," says Scharfen. He points out: "Just recently, [USCIS] cleared a 3.4 million application backlog … it took a lot of energy, leadership, and hard work to dig out from under that backlog." He envisions avoiding future backlogs and improving services through an agency-wide organizational and business transformation initiative.

In 2006, USCIS refocused its previous modernization efforts and embarked on an effort to transform its business processes and technology to improve customer service and achieve operational efficiency. "The different pieces of our transformation initiative involve digitization, moving from a paper-based system to a computer-based system. It also involves moving to a person-centric process from a form-centric process," observes Scharfen. "We want to … have a person-centric system.… That's more efficient.… Another thing that we want to do with this transformation program is to have our records and our applications put into electronic form." Shifting USCIS's current, largely paper-based system, which focuses on forms or application processing, to a system that is completely electronic and that focuses on the actual applicant rather than the application is critical to building an immigration service for the 21st century, according to Scharfen.

USCIS may also face significant increases in workload, which may further burden its operations, should a guest worker program be legislated—as was proposed earlier this year. Scharfen admits "it will not be an insignificant management and leadership challenge.… We've been

planning for this day for some time." He points out that "the administration and USCIS have been working very carefully with the different committees on the Hill to make sure that we're communicating what's operationally feasible should an immigration reform bill ultimately become reality." No matter what, Scharfen recognizes, "it will be a big lift." Still, he believes that if the challenge comes, it's one which he's confident the agency can meet.

Another top challenge for USCIS is managing a fair and equitable immigration system while not compromising public safety and securing the homeland. "We've emphasized to our employees that national security is important, and I think that that can't be overemphasized.… We know that terrorists continue to want to take advantage of our immigration laws, and so we have to remain vigilant to ensure that our people are trained and that they understand the threats that are out there." For Scharfen, Director Emilio Gonzalez's leadership has set the right tone. "I think the principles and the mission emphasis made by the director are very important, and people pick up on that. They want to do what the director has laid out, and he has made it very clear that national security is a central goal of his. He likes to say there's a reason that USCIS is in the Department of Homeland Security—and that's because of national security." ■

To learn more about the USCIS, go to www.uscis.gov.

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David M. Wennergren

Deputy Assistant Secretary of Defense for Information Management and

Technology, and Deputy Chief Information Officer

U.S. Department of Defense

By Michael J. Keegan

Sharing Knowledge Across the Joint Services and Around the Globe

The U.S. Department of Defense (DoD) is transforming to become a network-centric force. This transformation hinges on the recognition that information is power and requires a fundamental change in processes, policy, and culture. Changing these areas will provide the necessary speed, accuracy, and quality of decision making critical to DoD's success. As deputy assistant secretary of defense for information management and technology, and deputy chief information officer (CIO), David Wennergren plays a critical role in achieving this transformation.

Wennergren has the critical responsibility of managing the vast array of DoD's information technology portfolio: a portfolio that surpasses the largest private sector organizations and with a complexity uniquely its own. "The Department of Defense, like all large organizations, has functioned very effectively as a very decentralized organization—lots of chains of commands with the thought that local organizations develop local solutions to meet local needs. But the Internet Age happened, and so now we're in a world where it makes much more sense to band together to develop enterprise-wide solutions. So as the CIO team, you're in a sense responsible for charting the course, to do what we call our transformation to network-centric operations. It's the idea that, together, we could share knowledge instantaneously around the world to be more effective in our role as the national defense for our nation," explains Wennergren.

Information sharing with collaboration across command elements and national boundaries, coupled with increasing speed, accuracy, and efficiency, characterize this DoD's 21st-century network-centric environment. "Net-centric operations, or net-centricity, is the buzzword du jour for the Department of Defense, and sometimes I think it can sound a little bit jargony," says Wennergren. He likes to tell a story about Tinkertoys and plasma balls, because he believes it illustrates perfectly the concept of net-centricity and makes it understandable.

> **CAREER HIGHLIGHTS**
>
> - Deputy Assistant Secretary of Defense for Information Management and Technology, and Deputy Chief Information Officer, U.S. Department of Defense
>
> - Vice Chair of the U.S. Government's Federal CIO Council
>
> - Chief Information Officer, Office of the Secretary of the Navy, U.S. Department of the Navy

"In the old days, people developed point-to-point solutions, communications systems and networks, and it was much like building with Tinkertoys. And I'd build one and then I'd have to connect to you … you grow and grow in terms of nodes on the network, [and] interconnections become unwieldy. And so much like a Tinkertoy tower that's been built too tall, it begins to crumble. The idea of net-centricity is much more like the plasma balls that we've all seen, where energy—or, in this case, knowledge—is in the center of the plasma ball, and wherever I touch the outside of the globe, the energy gets to me. So no matter where I am in the organization, I can plug into the global information grid, which is basically our network and data structure, and get the knowledge that I need. It's really all about the flow of knowledge and enhancing the flow of knowledge across the organization," describes Wennergren. He puts it into more practical terms: "If you're a naval reservist stationed with Marines in Fallujah and you need to reach back to an Army system to get the knowledge that you need, you'll be able to do it in a network-centric world."

How you make this integrated, seamless world a reality is for Wennergren the most important challenge and the most satisfying task. It requires a focused data strategy, an enterprise-wide approach, a secure operating environment, and, most importantly, collaboration and teamwork among disparate groups. No small task given the size and scale of DoD's IT portfolio.

"If you're a naval reservist stationed with Marines in Fallujah and you need to reach back to an Army system to get the knowledge that you need, you'll be able to do it in a network-centric world."

"It really is all about the data, making data visible…. If you could make data visible, accessible, and understandable, then you could share knowledge quickly," says Wennergren. He explains that it's about harvesting the wealth of knowledge that resides in an organization—more specifically, on all the local C drives in that organization—and making it available using such technology as extensible markup language (XML) to create a common platform for everyone to understand. However, getting your hands around the data requires the DoD to operate more as one large enterprise rather than multiple isolated silos. DoD's enterprise portal strategy, the cornerstone in making information accessible in the net-centric environment, best illustrates DoD's idea of enterprise alignment. "The beauty of moving to the web, the beauty of having enterprise portals, the beauty of web services is that they allow us to move from the world of local solutions to the world of functioning as an enterprise," explains Wennergren.

DoD's adoption of service-oriented architecture (SOA) also furthers this effort. It represents "a fascinating philosophical change.… For years, we've had this systems view of the world. It's the way programs are designed, it's the way architectures are built, but the world really is now all about services ... it's service-oriented rather than stand-alone monolithic systems of the past," says Wennergren. He also points to another example of DoD's movement to an enterprise view. "The DoD Enterprise Software Initiative is another wonderful example…. It focuses on leveraging our buying power and being aligned in what we do. And so it's a great example about moving to an enterprise."

Operating over a secure network is critical. The threats and attacks to networks grow by the day, putting at risk information that the nation needs to defend itself. "We are spending a lot of time focusing on the security of our network and information assurance … as we move away from the legacy networks, we move away from the networks that are less secure. And so the new solutions are improving security," explains Wennergren. He points out that with "portals, service-oriented architecture, and web services, the security

portfolio will continue to be a growth industry for us. We've made a big difference with Common Access Card and Public Key Infrastructure (PKI)." The challenge is "how do you balance information sharing and information security … that's what's driving the set of security solutions and secure collaboration solutions that we're looking at now," says Wennergren.

Yet, he recognizes more needs to be done. Doing more, whether in securing the environment or defining the data, requires collaboration and a rigorous team effort. For Wennergren, "I think the 'C' in CIO actually should stand for *change*, because a majority of my time … I spend focusing on cultural change issues." In this Information Age, the cultural change issues often center on being open and able to rely on those outside your immediate command and control. Wennergren believes very strongly in the need for effective teamwork, so much so that when he was deputy CIO for the Navy he co-authored a book called *The Power of Team*. He points out "it was geared to help organizations create effective CIO organizations, and the only way to have an effective CIO organization is to have an effective team. And so this idea about being a positive force for change and being able to work with rather than work against others is hugely important. It doesn't have to be a case of my victories at the expense of your defeat. We really can find ways if we work together." ■

To learn more about the Defense Department's Chief Information Office, visit www.defenselink.mil/cio-nii.

To hear *The Business of Government Hour's* interview with David Wennergren, go to the Center's website at www.businessofgovernment.org.

To download the show as a podcast on your computer or MP3 player, from the Center's website at www.businessofgovernment.org, right click on an audio segment, select Save Target As, and save the file.

To read the full transcript of *The Business of Government Hour's* interview with David Wennergren, visit the Center's website at www.businessofgovernment.org.

By G. Martin Wagner, Forum Editor

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Forum Introduction: Five Management Challenges in an Internet-Enabled World

The Internet, along with its enabling technologies, has transformed the world and the way we live. It bridges distance, fosters civic engagement, and transforms how institutions operate. Like all transformations, it brings with it unique management challenges. These challenges arise from the fact that the changes are not just in degree but in kind. Yes, we do some things faster, but, more important, we are doing new things in new ways.

Organizations that use a vertically integrated command-and-control structure need to adjust to more open and horizontal business processes. Organizations that have traditionally performed functions internally or contracted for services find that cross-organizational collaboration can be more effective. New technologies like blogs short-circuit traditional information flows. Other new technologies offer new opportunities for service delivery and can even lead to new roles for government. Finally, new technologies leave some people behind, creating a digital divide between new "haves" and "have-nots" that calls for the development of mitigation strategies. This forum examines these five management challenges and suggests some approaches to overcoming them.

Challenge 1: Managing Horizontally Across Organizational Silos

The organizational structure of today's governments, particularly the federal government, reflects the structure of the large corporation of the 20th-century. It tends to be vertical, with many management layers. It puts a strong emphasis on command and control and rigorous adherence to process and procedure. It made excellent sense in a 20th-century economy, but in many ways is in conflict with current best management practice. Today, effective organizations have changed their structures to meet the demands and opportunities presented in the current environment. Effective organizations have become flatter, operate more horizontally, and farm out support functions to specialized groups with specific expertise. This new alignment enables such organizations to capture the efficiencies brought about by technological advances and changes in the workforce. One of the most difficult management challenges is how to operate more horizontally in an organizational structure that still emphasizes the vertical. Though difficult for private sector companies, it is doubly difficult for government agencies—agencies that operate in a framework of laws not easily updated and constrained by a wide range of stakeholders.

Challenge 2: Managing Collaboration Across Organizations

In "The E-Government Collaboration Challenge: Lessons from Five Case Studies," authors Fedorowicz, Gogan, and Williams survey five case studies in which governmental organizations have collaborated with other organizations to achieve a public policy objective. The report looks at the political, administrative, and technical challenges; examines how these challenges were overcome; and outlines recommendations on how to manage in this environment. This is important since, increasingly, cross-organizational partnerships enabled by information technology are more effective than "do it yourself" approaches.

Successful strategies for managing across organizational boundaries have more in common with politics and entrepreneurial behavior than classical business management. They also must be grounded in the specifics of what technology can do today and where it is going.

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Five Management Challenges:

1. Managing horizontally across organizational silos
2. Managing collaboration across organizations
3. Managing new collaborative technologies
4. Managing the introduction of new services
5. Managing the digital divide

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Challenge 3: Managing New Collaborative Technologies

In "The Blogging Revolution: Government in the Age of Web 2.0," author David Wyld looks at the rise of blogging. Weblogs, or blogs, enable individuals to communicate with a wide audience—allowing users to quickly generate and disseminate content via the Internet. As a communication platform, blogs afford an open medium for the exchange of content and ideas. In most instances, participating in a blog takes almost no technical skills, making participation easy. The result can be a highly interactive and fast exchange of information with many more participants than has been the case in the past.

As a collaborative technology, blogging fosters connection and, in some cases, disruption. It facilitates communication in different directions; it seems to articulate an alternative approach to the flow of information in contrast to the "controlled" nature of the flow of communication emblematic of large bureaucracies. Within an organization, blogging has the potential to short-circuit established ways of doing business. Arguably, blogging represents an open and horizontal approach to communication erupting in organizations known for centrally controlled vertical information flows. As a result, blogs and the other technologies of Web 2.0 offer much promise, but not without risk. It is critical to leverage the fruits of this technology's promise, while being mindful and vigilant about its risks.

Challenge 4: Managing the Introduction of New Services

In "Can Governments Create Universal Internet Access? The Philadelphia Municipal Wireless Network Story," authors Jain, Mandviwalla, and Banker examine what happens when government intervenes in a new market rather than waiting for that market to evolve. A confluence of factors has recently made municipal wireless networks (MWNs) a potentially feasible option for municipal governments seeking to promote more equitable and universal access to the Internet within their communities. The city of Philadelphia was looking to make itself more attractive to business, to enhance its residential appeal, and to mitigate the so-called "digital divide." This report describes the drivers and inhibitors to municipal wireless networks such as the effort in Philadelphia. The authors describe how municipal government can be a catalyst for the adoption of technology with the goal of promoting social and economic change as well. The Philadelphia story offers important lessons and insights for other municipalities and governments.

Challenge 5: Managing the Digital Divide

In "Bridging the Digital Divide for Hard-to-Reach Groups," authors Boeltzig and Pilling survey the effectiveness of programs to address the digital divide. As the Internet becomes pervasive, its universality is not as apparent: It still does not reach everybody. In some cases, it may not reach those who might benefit most from its capabilities. Boeltzig and Pilling identified specific groups of people who typically are not connected to the Internet and examined the circumstances of each: rural, poor, disabled, seniors, and ethnic minorities. Recommendations are aimed at increasing access for these targeted groups. The authors also provide valuable recommendations aimed at service or application providers, who have a major role in increasing both access and accessibility. ■

Challenge 1: Managing Horizontally Across Organizational Silos

By G. Martin Wagner

Insights on the first management challenge draw primarily on the federal government's electronic government efforts. To a large degree, these involve taking business processes managed at the agency level, optimizing them, and pursuing a government-wide citizen-centric approach. Agencies must change their processes to become dependent on other organizations, and adjust their programs to recognize that citizens often deal with multiple agencies and seek more consistency from government programs.

The 20th-century organizational model adopted by most private sector corporations and governments of the time was rigidly hierarchical as well as vertically integrated. Such a model rested on a "command and control" approach with a strict adherence to process and procedures. It came into being as a means of delivering economies of scale while minimizing transaction costs and facilitating the control of information among specific hierarchical managerial layers. To some extent, such an approach reflected the economic realities of the day.

At the time, it made sense to do things in-house rather than depending on outside resources. In this model, it made sense to impose onerous procedures to ensure that organizations manufactured the right product. It made sense to have layers of approval to justify and leverage the effectiveness of more expensive staff. It made sense to package information and flow it up and down the hierarchy to facilitate decision making. It was easier to control information and protect trade secrets.

New Economic and Technological Realities: Changing How Work Is Done

Today is different. What made sense then may not make sense now.

- Decades of economic growth mean people's time is more expensive as economic growth becomes manifest in incomes and labor costs.

- Decades of improvements in production efficiency mean that goods and services have gotten relatively cheaper.
- The growth of the knowledge economy and other changes in society mean that people are better educated.

One result of this changing dynamic is placing more emphasis on worker productivity, even at the price of paying a bit more for the tools workers use. To illustrate: Thirty years ago, faxing a document meant taking it to an organization maintaining expensive, temperamental fax machines. Fifteen years ago, offices had their own fax machines. Currently, faxing tends to be an individual capability, and some think the days of faxes are numbered. We went from spending staff time to keep the fax machine busy to using a fax to make staff time more productive.

Advances in information technology have driven as well as enabled the evolving organizational model. Five trends have changed the economic landscape, thus resulting in the necessitated transformation of business models. They are:

- The plummeting cost and improving reliability of computers
- The plummeting cost of reliably storing information
- The plummeting cost of reliably connecting computer processing and information between any two places on earth
- The slower rate of improvement in writing and managing software
- The increasing difficulty of getting and keeping skilled people

These trends have triggered changes in how and where work gets done. Today's world calls for a more horizontal set of business processes than in the past. These economic and technological advances have led to substantial changes in how private sector corporations are organized; the federal government, however, has experienced fewer changes in its overall structure and has remained largely vertical in its organizational model.

For a government agency to fulfill its mission, it involves many non-core business processes that support the agency

and its programs. In today's environment, however, these business processes may be approached separately and managed as components. Certain non-core business processes may be managed more effectively by a recognized third-party specialist at a significant cost saving to the government agency. Fielding out non-core business support processes to a third party requires careful attention to the roles and responsibilities of both the third-party managers of the process and those in the agency that depend on program results. This requires careful selection of metrics and a governance process for all parties.

The private sector has implemented management changes along these lines and provides a good reference model for what the federal government has been attempting to do with electronic government (i.e., e-government). In fact, much of the progress to date has been for functions that are common to the public and private sectors—for example, travel management, acquisition, and payroll.

The Appeal of the Status Quo

Although it is extremely difficult to move to a horizontal business model, none of the reasons are technical. The following are the most important hurdles to be overcome in moving to the new operational model:

- People are comfortable with existing processes. They don't want to change. Costs are either built into budget baselines or are simply unknown.
- Entrenched incumbent companies delivering services to the government resist the threat of additional competition. They find ways to slow things down or trigger political concerns.
- Agencies are understandably loath to surrender control to a third party. Earlier rounds of consolidation in the name of cutting costs have not always been successful. Agencies find ways to slow the process down.
- The entire budgeting, management, and oversight process through the Office of Management and Budget to the Congress is built around an agency view. Joint development of a multi-agency solution is viewed as in conflict with the management and control apparatus of government. Management efficiency is in conflict with authority and control.

Given these concerns, it is surprising how much progress has been made.

A Strategy for Achieving the Electronic Government Value Proposition

At its core, the value proposition for electronic government is simple. Embracing a technologically enabled horizontal

business model improves efficiency and effectiveness. More important, it forces the government to evaluate its programs from a "customer" standpoint rather than having each agency look at its own program. This "outside in" perspective forces different program managers to recognize that multiple parts of the government talking to the same people in different ways detracts from program effectiveness. Being consistent with other agencies dealing with the same citizens helps program effectiveness and citizen satisfaction.

However, most agency managers are quite comfortable following traditional processes, and appeals to theoretical improvements are often unwelcome. In addition, many individuals and organizations, both inside and outside government, have a vested interest in maintaining the status quo. Finally, a transition from one way of operating to another requires an investment. Funding that investment generates extensive debate over who will pay for it. The problem of externalities exists in federal budgeting as well as the overall economy. So how has the federal government approached the problem? There are seven elements to the strategy:

Securing leadership buy-in. Senior members of the administration have pursued this as a management priority. Although often handled as a technology matter, it is also handled as part of agency management priorities, thereby helping to ensure senior management attention rather than being delegated to the "techies."

Developing a vision collaboratively (but not too collaboratively). The electronic government initiatives were jointly developed with interagency teams that helped develop the initiatives and were in a position to address the real impediments to success. The input from the working level was strong enough to make adjustments, but the final decisions to proceed were very much at the leadership level.

Implementing incrementally. The vision led to plans with incremental deliverables, so each quarter it was possible to see if real progress was being made rather than simply a plan to do yet another plan.

Leveraging change agents. Every organization has individuals who understand the value proposition as a new way of operating and who possess the talents to make progress. The electronic government program encouraged, protected, and leveraged these people.

Enforcing progress. Progress against milestones was enforced through the budget process and with color-coded ratings of agency progress. Agencies were ranked on their progress as green (good), yellow (some issues), and red (poor). A simple

color scheme had the virtue of netting out technology specifics to enable the right conversations at senior agency levels.

Being program driven, not technology driven. Initiatives were designed around program results rather than enhancing a technology capability.

Aligning around technology trends and enforcing technology standards. Initiatives were designed to be consistent with technology trends and scaled to support the whole government.

Progress

The federal government looked at many of the operational processes within each agency, found common elements, designated some agencies to perform those common elements on behalf of other agencies, and instituted a process to resolve issues between the sharing agencies. Almost every one of the strategies involved taking a business process existing in several agencies and forcing a more common approach across the government as a whole. In addition, the e-government program uses a business

architecture for the entire federal government that explicitly looks for commonality of business processes across agencies. Common elements are then candidates for a common approach. The vertical meets the horizontal.

Table 1 shows the number of organizations involved in the core electronic government initiatives. It shows that most involve multiple agencies performing related functions. Organizations can be departments or bureaus, but in all cases they involve working jointly and horizontally.

In general, the goal is consistent with best management practice in the United States today. Nonetheless, it is difficult to execute organizationally. Each agency has a tradition of doing for itself what it is now being asked to share. Although there are many common elements, there are many differences that need to be addressed. Each agency is a vertical management silo that could gain by sharing a horizontal business process, but getting there is difficult. The complete transition will take many years. ■

Table 1: Number of Organizations Involved in Implementing Electronic Government Initiatives

Government to Citizens		Government to Business	
Initiatives	**Number of Organizations**	**Initiatives**	**Number of Organizations**
GovBenefits.gov	76	E-Rulemaking	160
Recreation One-Stop	11	Expanding Electronic Tax Products for Business	1
IRS Free File	1	Federal Asset Sales	25
GovLoans.gov	6	International Trade Process Streamlining	11
USA Services	32	Business Gateway	34
		Consolidated Health Informatics	22

Government to Government		Internal Efficiency and Effectiveness	
Initiatives	**Number of Organizations**	**Initiatives**	**Number of Organizations**
Geospatial One Stop	26	E-Training	13
Disaster Management	32	Recruitment One-Stop	112
SAFECOM	11	Enterprise HR Integration	12
E-Vital	1	E-Clearance	30
Grants.gov	26	E-Payroll	26
		E-Gov Travel	24
		Integrated Acquisition Environment	All
		E-Records Management	All

Source: www.whitehouse.gov/omb/egov.

Challenge 2: Managing Collaboration Across Organizations

By Jane Fedorowicz, Janis L. Gogan, and Christine B. Williams

Insights on the second management challenge are adapted from the Center report "The E-Government Collaboration Challenge: Lessons from Five Case Studies," by Jane Fedorowicz, Janis L. Gogan, and Christine B. Williams (Washington, D.C.: IBM Center for The Business of Government, 2007). The report examines approaches for overcoming the management challenges that arise when agencies collaborate across organizational boundaries to accomplish objectives.

Governments at all levels are increasingly turning to cross-organizational collaboration to achieve joint outcomes, and information technology is an important enabler for shared data and processes. This report examines five cases of e-government collaboration:

- California Franchise Tax Board: Integrated Nonfiler Compliance Program
- U.S. Treasury: Internet Payment Platform
- Capital Wireless Integrated Network
- U.S. Centers for Disease Control and Prevention: Bioterror/Rapid Syndromic Surveillance Initiative, "BioSense"
- Wisconsin Livestock Identification Consortium

These cases provide a wide variety of collaborative efforts between agencies, levels of government, and public-private sectors.

The report finds that public managers face similar challenges in using a common technology platform—such as the Internet or compatible radio frequencies—to drive and enable collaboration, and that there are common lessons learned and recommendations for others who may want to attempt similar efforts.

The case studies examined political, administrative, and technical challenges, and we conclude with recommendations for public managers interested in using technology to both drive and enable interorganizational collaboration. The case studies are summarized in Table 1.

In each example, public sector organizations identified a common problem and came together to design and implement a solution through collaboration and data sharing using an IT platform.

These five case studies represent a range of collaborations:

- Different combinations of public and private sector collaboration
- Different governance models (i.e., a third-party consortium versus control by an initiating public sector participant)
- Different cross-jurisdictional boundary spanning (i.e., by level—federal, state, local—by jurisdiction, or by agency function)

Challenges to Collaborating via Common Technology

The case studies we examined revealed three sets of challenges that interagency collaboration initiatives face when using technology to support the collaborative effort. The cases we studied addressed these challenges in a variety of ways with varying outcomes, and yield several important lessons learned.

Political Challenges
- Challenges from the external environment: What are the catalysts and constraints that inspire the effort?
- The challenge of shared goals: How does the project team meet varied expectations?
- The challenge of getting and keeping support: What roles do champions play?

Administrative Challenges
- The challenge of governance: How does the leadership group exercise—and agency participants delegate—control over the collaboration?
- The challenge of implementation: What is needed to make it work?
- The challenge of financing: How can a viable business plan be achieved?

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Table 1: Summary of the Five Case Studies

	California Franchise Tax Board's INC Program	U.S. Treasury's Internet Payment Platform	Capital Wireless Integrated Network	U.S. Centers for Disease Control and Prevention's BioSense	Wisconsin Livestock Identification Consortium
Focus/Goal	Identify people who underreport income	Streamline procurement and payment processes	Improve first-responder effectiveness	Identify and respond to bioterror or disease outbreaks	Track infected and potentially infected livestock
Collaborators	City, county, state, and federal agencies	Federal agencies and private sector vendors	City, county, state, and federal agencies	City, county, state, and federal agencies, and private sector businesses	State agencies, private sector businesses, and industry associations
Functions	Tax administration, licensing boards	Procurement, accounting	Police, fire, EMS, park services, transportation	Hospitals, laboratories, public health	Farmers, hobbyists, public health, USDA
Governance	Central control by state agency	Central control by federal agency	Consortium; compact not yet ratified	Central control by federal agency	Consortium of business and government leaders
Project stage	Fully operational	Time-bound pilot test	In rollout	Early in rollout	Early in rollout
Timeliness of data exchange	Monthly/annual sharing	Weekly sharing	Real time	Daily	Daily

Technical Challenges

- The challenge of data: How are data shared effectively?
- The challenge of legacy systems: What are the technical roadblocks?
- The challenge of standards and sourcing: How can the system best employ available building blocks?

Recommendations for Successful E-Government Collaboration

Collaboration across agency boundaries is hard; there is no guaranteed recipe for success. These initiatives face challenges from within participating organizations, from within the governing organization, and from sources completely outside of the initiative. Decisions made about one aspect of an interagency initiative will affect its design or use in unexpected ways. Political enablers and constraints compete with

administrative practices, organizational processes, and technological opportunities, resulting in complicated and sometimes sub-optimal design decisions for the technologies and processes participants will use. Although there is no one best way to design an interorganizational collaboration, we can offer some helpful hints that should improve the likelihood of success. We conclude with 10 recommendations for managers involved in e-government collaborations.

Recommendation 1: Create opportunities for collaboration out of crises and other precipitating events.

Where a need exists, an effective leader can emerge and articulate a case for action. To articulate that need, effective leaders should be constantly vigilant for indications in the environment that point toward new needs and new solutions. The business press can help government leaders

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Key Lessons Learned

Political

1. Compelling events do not necessarily succeed in galvanizing interagency initiatives. Effective leaders do not wait for a crisis before they issue their call to action.

2. Legislative and regulatory requirements can act as a catalyst or impose constraints. Requirements may be contradictory and will compete for time, attention, and resources.

3. Long-term viability depends on achieving a critical mass of participants, but increasing their number and diversity can bring pressure to add or revise goals.

4. Interorganizational systems require multiple champions at multiple levels, and these needs and roles change over time.

Administrative

1. Governance structures need to accommodate representation of key participating organizations—and these change over time, requiring reorganization or expansion of their boards.

2. An initiative may falter or even fail if its leaders make unwarranted assumptions about the level of readiness of the organizations that should participate. Participants should anticipate making accommodations to implement and support the collaboration.

3. Project managers often fail to adequately plan for staffing and retraining. Consulting participants and proceeding according to a series of announced steps or with a phased-in timetable helps.

4. Adoption depends on achieving both financial and operational value for all stakeholders in excess of their costs and risks. It is difficult to obtain financial commitment when benefits accrue more to the common good than to individual participating agencies. Expanding system functionality or adjusting the technical requirements to achieve buy-in will increase costs and risks for the collaboration.

Technical

1. Participants will share data far more readily than they will cede ownership of or control over access to the data.

2. Data-sharing issues are easier to address when data are owned, retained, and maintained by the originators.

3. Retaining data in a single location controlled by a single organization increases their accuracy and timeliness.

4. Tie-ins to legacy systems place limits on system architecture and on the ability to adopt state-of-the-art solutions.

5. Standards decisions can affect the ability of agencies or business partners to participate in a collaboration. Organizations that actively participated in standards development organizations were better able to weigh the trade-offs between customized versus standardized solutions.

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identify business solutions that could potentially be adapted
to e-government needs. Technical publications can help
leaders become aware of potentially useful tools to support
collaboration solutions. And stakeholders in each leader's
community are often excellent sources of information about
problems, opportunities, and innovations. Don't wait for the
crisis to unfold; find a way to make the case that an inter-
agency collaboration can help to avoid a crisis or capitalize
on an opportunity.

Recommendation 2: Establish a shared under-
standing of goals and objectives.

Some collaborators come together to solve one problem
and subsequently choose to address other problems or
needs. While this can improve stakeholder buy-in, it also
can raise the costs of participation. The purpose of an
initiative and specific project goals should be re-assessed
frequently to ensure that consensus still exists. Although a
solid working relationship built on mutual trust is essential,
it is also necessary to formalize relationships among partici-
pants through contractual agreements and a representative
governing board or entity. The governance structure may
need to expand over time to include new stakeholders, and
agreements may need to be renegotiated or amended.

Recommendation 3: Cultivate a team of champions.

Interagency collaborations are fragile entities; at any turn, a
roadblock may emerge and events can rapidly spiral down-
ward when many different stakeholders are all attempting to
achieve something together. An interagency initiative needs
multiple champions—for the overall collaboration, for each of
the participating organizations, and for the different levels of
involvement and the different challenges that occur over time.

Recommendation 4: Assess readiness and facili-
tate participation in the collaboration.

A small town sheriff's office and a large metropolitan police
force are worlds apart in their internal information systems,
employees, controls, and organizational histories, yet both
may have reason and ability to participate in interagency

initiatives. It is not always disastrous if one potential par-
ticipant opts out of the collaboration, but sometimes one
reluctant participant could be the missing link that renders
an interorganizational system ineffective. If system success
hinges on attaining a critical mass of participating users,
then the collaboration leaders need to find efficient ways
of qualifying participants or providing them with the training
and resources needed to come on board.

Recommendation 5: Leverage opportunities to
combine data from multiple sources within the
boundaries of social expectations.

Great value can be created when data from multiple sources
are combined. However, combining sensitive data sources
may trigger citizens' fears that government is invading their
privacy. Cross-boundary access methods are far more difficult
to administer than in-house ones. It is imperative that inter-
agency collaborations establish appropriate controls to protect
access to the data and prevent misuse. Conduct audits of an
interorganizational system on a regular basis to ensure that its
controls are effective. The penalties for data misuse should be
widely publicized and systematically enforced.

Recommendation 6: Develop a business model
for long-term viability.

The arguments and evidence that persuaded funders to con-
tribute to a unique initiative in the immediate aftermath of
a crisis or mandate may be much less persuasive later on,
particularly when critics question why the initiative still is
not self-supporting. To paraphrase strategic management
consultant Michael Porter, find your path to profitability and
march on down it. In practical terms, this means fully identi-
fying all of the costs: to initially design and develop a work-
ing system; to maintain and enhance it over time; and to
fund the ongoing operational costs once that critical mass
of users is on board. It also involves identifying an initial set
of benefits that can be realistically achieved, followed by
continuous monitoring of actual usage to uncover hidden
benefits, and then helping participants get and see those
benefits so they will be willing to share the operating costs.

Recommendation 7: Understand—in detail!—how data are to be exchanged and used.

If data need to be acted upon within minutes, they are managed differently than if data are needed once a month. Security and privacy constraints often dictate what can be shared and with whom. Collaborators need to recognize that there are always trade-offs among the competing data qualities of timeliness, accuracy, and completeness. It is necessary to clearly specify who will retain stewardship of the authoritative version of various databases, what steps will be taken to protect the data, and what remedies and penalties will be put in place should parties fail to comply with these requirements.

Recommendation 8: Consider leading-edge technologies, but accept the legacy reality.

Every IT manager wants to use the latest and greatest technologies, because they open the door to faster, more flexible, and more data-rich collaboration. However, given that it is so expensive to retire a legacy system, it may be easier to provide manual workarounds or to write special data-sharing translators. The translator option is preferable, unless the initiative is a short-term pilot test or the manual workaround is a one-time event (such as when archived data are supplied by one organization to another).

Recommendation 9: Solicit many informed opinions on what software tools to use, and choose them carefully.

Open-source software is an appropriate choice for organizations that have adequate technical depth, but it can be a disastrous decision if the choice is based merely on the initial cost of the software. Software or tools that are donated by vendors may not be all they seem or may not be adequate to the tasks at hand. Obtain outside expertise to walk through the total-cost-of-ownership issues before selecting hardware and software. An interorganizational system is harder to manage when its architecture is not coherent.

Recommendation 10: Adhere to standards and, if possible, help set them.

Project leaders should consider the short- and long-term implications of adopting particular standards. Initiatives will be more successful if standards already exist in use or are agreed to by participants. If different participants support competing standards, challenges increase. The collaboration may choose to impose a single standard on its users, or choose to expend resources on the development of middleware to translate among them. Furthermore, adopters must be prepared for the evolution or replacement of standards. If possible, the development team should include standards experts on the team. The next best choice is to obtain outside expertise to review standards-related issues across all of the hardware, software, and communications technologies that are proposed or in use. Do not leave standards decisions to either general managers or programmers, who may not fully understand the implications of their choices. ■

TO LEARN MORE

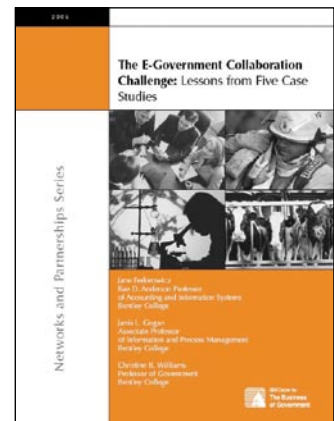**The E-Government Collaboration Challenge:** Lessons from Five Case Studies
by Jane Fedorowicz, Janis L. Gogan, and Christine B. Williams

The report can be obtained:
- In .pdf (Acrobat) format at the Center website, www.businessofgovernment.org
- By e-mailing the Center at businessofgovernment@us.ibm.com
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Challenge 3: Managing New Collaborative Technologies

By David C. Wyld

Insights on the third management challenge are adapted from the Center report "The Blogging Revolution: Government in the Age of Web 2.0" by David C. Wyld (Washington, D.C.: IBM Center for The Business of Government, 2007). It examines the rising impact of a new collaborative technology that can have a profound impact on both internal operations and interactions with external stakeholders. Blogging is an example of a technology that can completely change what people do, not just another way to do the same things more effectively. The report suggests some approaches for managing in a rapidly evolving environment in which the future is unclear.

There can be no doubt that the Internet has profoundly changed our work, our lives, our entertainment, and our politics. Now the Internet itself is undergoing perhaps its most radical change ever, as we are seeing what many experts have coined the development of "Web 2.0."

With Web 2.0, there is a sea change occurring wherein the web has become a truly participatory media; instead of going on the web to read static content, we can more easily create and share our own ideas and creations. The rise of what has been alternately referred to as consumer- or user-generated media (content) has been hailed as being truly groundbreaking in nature. This ability to create web content by simply typing words and pointing and clicking, without having to know *anything* about computer programming, has been touted by Tim Berners-Lee, the developer of the World Wide Web, as being much more in line with the original vision of what the web should be.

As of 2007, we are still likely in the early stages of the development of what will become Web 2.0. However, blogging is certainly at the forefront of Web 2.0 technologies. In a nutshell, a blog can be differentiated from a website in that it is a web vehicle that is easier to create and update, typically by simply typing into a preprogrammed interface. From a definitional perspective, a blog refers to an online journal that can be updated regularly, with entries typically displayed in chronological order. While blogs now encompass not only text but video and audio as well, it is generally accepted that

if the individual posts, items, or articles cannot be linked to separately via a permalink (rather than just linking to the whole site), then the site in question is not a blog. Blogs are also commonly referred to as a weblog or web log, with *blog* used as the short form of these terms. *Blog* is also a verb, meaning to write an article on such an online journal.

As detailed in this report, blogging is an activity that is increasingly moving from the fringes to the mainstream, with intense interest in both corporate America and public offices as to how to join the conversation. There are currently 60 million blogs in existence as of April 2007, and the blogosphere (the sum of all blogs) is growing at a rapid rate, with everyone from teenagers, CEOs, and, yes, politicians—from the halls of Congress to city halls across America—joining in the conversation.

In the first part of the report, the state of blogging across the American public sector is examined, seeing how pioneering leaders (let's call them "blogoneers") in the public sector are making use of this new technology to foster improved communications both with their constituencies and within their organizations. Blogging is fast becoming a new tool for promoting online *and* offline engagement.

Just as in the private sector, public officials are finding blogging to be an excellent way to communicate both within their organizations and with their wider constituencies. This is exemplified by the rapid growth of blogs created and maintained by public officials in the United States and abroad. The author provides a comprehensive assessment to date of the blogging activities found across all levels of government, including blogs from:

• Members of Congress
• Congressional committees and caucuses
• Governors and lieutenant governors
• State legislators
• City managers and mayors
• Police and fire departments
• College and university presidents

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This report includes a case study of the experience of the U.S. Strategic Command (STRATCOM), which has led the way in using blogging to transform the culture and flow of information, prompted by the need for speed in fighting today's challenges.

STRATCOM is now at the forefront of the military's attempts to revamp to fight the War on Terror in the Information Age. In response to the threat of a rapidly evolving enemy that can sense and decide quickly, STRATCOM is seeking to implement 24-hour, real-time, secure communications from generals to warfighters (Kelly, 2006). The centerpiece of the effort is the Strategic Knowledge Integration (SKI-web). Part of STRATCOM's classified network, SKI-web is nothing less than a 24/7/365 virtual intelligence meeting, with blogging and chat as essential parts of the operation. Blogging is central to the efforts of Marine Corps General James E. Cartwright, commander of STRATCOM, to transform the culture and information flow. Everyone, from generals to frontline warfighters, is encouraged to blog. Lieutenant General Robert Kehler, the deputy commander of STRATCOM, observed that on SKI-web: "We expect and encourage everyone to blog. In fact, you buy your way into the blog with the value you add, not the rank you hold. We have a command chain in STRATCOM, not an information chain, an infosphere, if you will, within which command is exercised" (Rogin, 2006, n.p.). Inside STRATCOM, the non-hierarchical, free flow of information in blogs is proving to be nothing less than "an enormous cultural change" (Kelly, 2006).

Public officials are encouraged to engage in blogging in the honest, open, and consistent manner that is required to promote civic and organizational engagement—and ultimately to succeed—in this exciting time in the history of our democracy. To facilitate this for the reader, the report examines the lessons learned by these blogoneers and presents a series of tips for public sector bloggers, based on an analysis of the best practices available today.

In the second part of this report, the rise of blogging and user-generated media is examined as a wider social phenomenon, which many are now commonly referring to as Web 2.0. In Blogging 101, an overview of the history of blogs and the growth and diversity of the blogosphere is presented. The report then examines how blogging has taken hold in the corporate realm, and how leading firms and innovative executives and companies are entering the blogosphere. Blogging is also examined as an effective mechanism for improving internal communications and for managing knowledge, projects, shifts, and even the corporate culture. The potential downsides of blogging, in terms of both the personal productivity and employment issues as well as the security and liability concerns, are examined. The importance of monitoring the blogosphere for what is being said about you and your organization is discussed.

10 Tips for Blogging by Public Sector Executives

Based on an analysis of the best practices and advice for public officials, as well as private sector executives, here is a brief "cheat sheet" of tips for entering the blogosphere.

Tip 1: Define yourself and your purpose. In 1992, Ross Perot's running mate was Vice Admiral James Stockdale, a Vietnam War hero and former prisoner of war. At the vice presidential debate, he infamously began with the rhetorical questions: "Who am I? Why am I here?" (Holmes, 2005). While these questions didn't lead to victory for Stockdale, they can for you. You should, at least mentally but perhaps in your first post, state the reasons you are starting your blog, what you hope to do with it, who you hope will read it, and so on.

Tip 2: Do it yourself! Do not have someone else write your blog. While you may enlist assistance for any technical aspects that you feel uncomfortable with (and with the blogging tools available today, this really should not be an issue), you must be the author to make it authentic and interesting to your audience.

Tip 3: Make a time commitment. Before you begin your blog, know that you must make a personal commitment to have the time available to not only regularly post to your blog, but to read and respond to comments made on it. And if the comment section is managed, you or perhaps a subordinate must make decisions on which comments will be posted on the blog and which will not. You should work blog writing and reading time into your regular schedule, and if you know you will be unavailable for a period of time, invite a guest blogger(s) to fill your virtual shoes. Remember, in the blogosphere, 10 days without posts could mean the death of your blog, as readers will be drawn elsewhere in virtual space.

Tip 4: Be regular. While related to the first two tips, the need to regularly post to your blog merits particular attention. In short, if you do not regularly post updated material to your blog—*interesting material*—whatever readership you have will quickly fade away.

Tip 5: Be generous. If your blog is nothing but an exercise in self-centeredness and self-congratulation (or links to organizations congratulating you), then your readership will tire of it. Use your blog as a platform for your jurisdiction, your staff, your family (to an extent), and so on. Take the opportunity to highlight special people in your district or community, and let your blog be a channel for spotlighting your area, not just yourself. Provide praise, applaud unsung heroes, and point out people in need of special help. In short, do good works with your words.

Tip 6: Have a "hard hide." You cannot have a thin skin and engage in blogging. You will receive comments that range from the thoughtful and insightful to the unwarranted and the unprintable. You will also surely be praised by some tech-savvy constituents for using a new communications medium, while others will call your office or write a "snail mail" letter to ask what's wrong with the more established forms of communication.

Tip 7: Spell-check. This almost goes without saying, but it is surprising how many blog posts have spelling and/or grammatical errors. When spotted, such mistakes can generate satirical comments, spawn bad publicity in traditional and non-traditional media, and detract from your message. As the saying goes, "That's why God made a spell-checker!"

Tip 8: Don't give too much information. While it is great to be honest and open in your blog, you can do it to the extreme. Let the blog be a window into your thoughts, your work, and your travels, but remember the blunt admonition of the anonymous (2003) author of *The Blogger Manifesto*, "Nobody gives a [expletive] about what you had for breakfast" (n.p.).

Tip 9: Consider multimedia. While you must concentrate on providing timely updates to your blog, making them interesting and well written, having good content is not enough. It is crucial that you have an easy-to-navigate, visually appealing layout to your blog. In today's environment, there is a ratcheting up of blog standards, and in a short time it will be almost expected that video and audio elements be included on blogs. While you must learn to walk before you run, you should seek out links to audio/video sources to go multimedia at no cost. Then you can begin to consider recording and producing your own audio/video content to offer as posts or podcasts on your blog.

Tip 10: Be a student of blogging. You should make it a regular habit to spend time each day being exposed to

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blogs other than your own. Find favorite blogs (political and non-political) and subscribe to them using a news reader or aggregator program (using RSS or Atom feeds). With these tools, you can view updates from your favorites in one place, without having to surf to multiple sites. Finally, check out the top-ranked blogs (according to Technorati or ComScore), and use this as an opportunity to benchmark the best of the best.

Conclusion

In *Wikinomics: How Mass Collaboration Changes Everything*, Don Tapscott and Anthony Williams (2006) propose that we are seeing the development of a new economic model whereby the whole notion of organizations and companies may be being revised and upended by mass collaboration capabilities. Using the wiki model that underlies Wikipedia, permanent, temporary, or one-time collaboration between individuals and companies of all sizes, outside the boundaries of traditional hierarchies and located anywhere on the planet, can join forces to produce content, goods, and services.

And now, with the advent of a whole host of technological advances, we are not just surfing the web, we are engaging it. We can create and control our own content through user-generated media technologies, which allow us to do so without sophisticated computer programming knowledge. In fact,

it only takes one finger at a time to type, and typing is the foundation of blogging, the foremost technology of what is being hailed as the "Web 2.0 revolution." By exercising our fingers and our minds, blogging will provide unique opportunities for promoting engagement and "managing by wandering around" in the digital age. ■

TO LEARN MORE

The Blogging Revolution: Government in the Age of Web 2.0
by David C. Wyld

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Challenge 4: Managing the Introduction of New Services

By Abhijit Jain, Munir Mandviwalla, and Rajiv D. Banker

In "Can Governments Create Universal Internet Access? The Philadelphia Municipal Wireless Network Story," authors Jain, Mandviwalla, and Banker examine what happens when government intervenes in a new market rather than waiting for that market to evolve. A confluence of factors has recently made municipal wireless networks (MWNs) a potentially feasible option for municipal governments seeking to promote more equitable and universal access to the Internet within their communities. The city of Philadelphia was looking to make itself more attractive to business, to enhance its residential appeal, and to mitigate the so-called "digital divide." This report describes the drivers and inhibitors to municipal wireless networks such as the effort in Philadelphia. The authors describe how municipal government can be a catalyst for the adoption of technology with the goal of promoting social and economic change as well. The Philadelphia story offers important lessons and insights for other municipalities and governments considering similar initiatives.

As the Internet becomes an increasingly indispensable component of the global economy, Internet access is an increasingly important arbiter of which societies and peoples will have access to the tools and information necessary to adequately exploit social, economic, and educational opportunities. However, due to various reasons, around the world certain geographical areas and populations lag behind others in terms of Internet access.

The case of the Philadelphia municipal wireless network (MWN) provides an example of government acting as a catalyst for the introduction of technology—with the intention of promoting social and economic change. The case also provides important lessons for municipalities and governments contemplating similar roles in developing MWNs.

Role of Governments

According to Gillett et al. (2004), there are four nonexclusive ways in which government can intervene to act as a catalyst to encourage growth in Internet penetration and adoption. It can act as (1) a consumer of Internet services, (2) a rule maker or regulator, (3) a financier, and (4) an infrastructure developer (see Figure 1). Table 1 on page 58 lists the elements of this framework and provides relevant examples.

Government interventions are advisable mainly under conditions of unacceptable degrees of market failure; i.e., when free-market entities are uninterested in or incapable of providing desirable levels of infrastructure or services in free-market conditions. There is broad consensus that monopolistic and quasi-monopolistic conditions can be problematic, and that governments should try to create market conditions where monopolies are discouraged and competition is encouraged. If government interventions result in certain technologies or entities achieving monopolistic stature, governments may again need to intervene to ensure that such monopolistic conditions do not stifle the adoption of new and risky technology, and that service offerings continue to grow in the future.

Lessons Learned & Recommendations

The Philadelphia initiative is one of the largest and most ambitious wireless projects in the world, and the city was one of the first to announce and start working on an MWN. Governments have great power to act as catalysts for introducing changes in society. The city government of Philadelphia intervened to accelerate the availability of low-cost, reliable wireless Internet access throughout the city. This may be

Figure 1: Catalyzing Roles for Government

Consumer of Internet Services

Rule maker or regulator

Financier

Infrastructure developer

→ Growth in Internet penetration and adoption
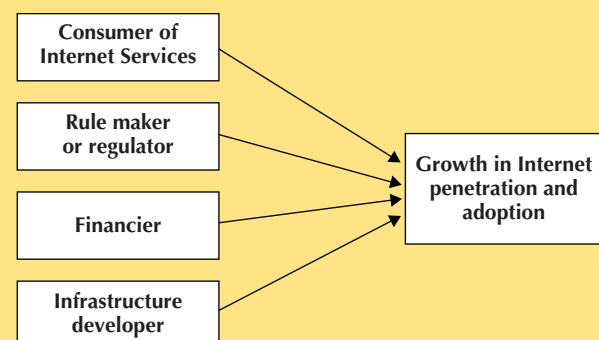
Source: Gillett et al., 2004.

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Table 1: Examples of Government Roles

Government Role	Example of Government Action
Consumer	Introduce e-government, use e-mail for internal communications.
Rule maker or regulator	Introduce laws to regulate subscription fees charged by ISPs or to encourage competition among ISPs. Provide access to government-owned assets and properties, such as rights-of-way assets, that may be needed for installation of network components. Require government-funded libraries to offer Internet access to the public.
Financier	Offer tax incentives or subsidies for developing Internet access infrastructure in neglected areas. Support fundamental research into new Internet access technologies via research grants.
Infrastructure developer	Act directly to create access infrastructure by laying down a network and offering services, as happens in the case of government-owned utility companies.

Source: Based on Gillett et al., 2004.

considered a low-level goal, a means to an end, but there was also a much higher-level goal. The city government's intervention can be framed as the use of technology by government to promote social change and reduce disparity.

When the city government of Philadelphia announced its wireless initiative, it faced strong opposition from stakeholders who objected on the grounds that the city was in poor financial condition and that such projects were better addressed by the private sector. Nevertheless, the city was undeterred; it succeeded in acting as a catalyst among various stakeholders and in engaging citizen support to help solve a major public challenge. The city government acted as a catalyst by taking on various roles, such as champion, facilitator, steering committee, policy maker, partner, coordinator, consultant, project manager, referee, regulator, and capacity builder. It

removed barriers to resources and provided incentives and a legislative framework to give stability to the new infrastructure. In summary, the Philadelphia case demonstrates that government's role as catalyst can indeed work. However, municipalities will continue to face challenges and barriers similar to the ones faced by Philadelphia. The following discussion of short-term recommendations and longer-term sustainability considerations should prove helpful to municipalities contemplating an MWN.

Short-Term Planning and Implementation Recommendations

1. A strong champion is required.

From 2004 to about the middle of 2006, the original champion of the project was Dianah Neff, CIO of Philadelphia. Since the summer of 2006, Greg Goldman, CEO of Wireless Philadelphia, has taken on a leadership role. Both Neff and Goldman championed the MWN in the media and in the community, and when it was needed they mounted a vigorous defense of the project. They had to work extremely hard to rationalize competing visions and maintain public interest, while simultaneously staying current with technological developments. The champion of a project of this nature is subject to a large number of external and internal forces and competing claims; the champion must handle pressure from different constituents while remaining conscious of the socio-political context and complexity.

2. Diverse stakeholder interests must be managed.

The city government had to manage the demands and challenges of different stakeholders, including telecommunications companies, civic leaders, community groups, the media, the state government, city politicians, and the public. For instance, when both Verizon and state legislators appeared to be against MWNs, the city government coordinated a solution whereby Philadelphia could be excluded from anti-MWN legislation. To put pressure on them to exclude Philadelphia, the city government facilitated communications by various activist groups and NGOs to communicate the message that the digital divide problem in Philadelphia could not be addressed solely through private sector efforts.

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Short-Term Planning and Implementation Recommendations

1. A strong champion is required.

2. Diverse stakeholder interests must be managed.

3. Private and public interests will need to be balanced.

4. The "application" of the municipal wireless network must be identified.

Long-Term Sustainability Considerations

1. The digital divide is a tenable justification over the short term but faces long-term challenges.

2. Municipal wireless networks need insulation from unpredictable, large-scale external forces.

3. The technology of municipal wireless networks will change.

3. Private and public interests will need to be balanced.

With planning and creative thinking it is possible to create structures that can optimize the interests of both the public and private sectors. In Philadelphia, a nonprofit organization (Wireless Philadelphia) will lead the social consciousness goals of the project, while a large, well-known for-profit organization (Earthlink) will lead the technical and management aspects of the project.

By creating a nonprofit with the mission to lead the digital divide elements of the city's vision—and by providing the nonprofit with the authority and sustainable funding to take action—Philadelphia seems to have at least, in the short term, created a viable structure for realizing its social consciousness goals. By partnering with Earthlink to build the network, the city has avoided involvement in activities where it had little experience and credibility. It has also, to some extent, made moot the philosophical and political challenges to the role of government in building MWNs.

4. The "application" of the municipal wireless network must be identified.

A question that has been asked of MWNs is, "If you build them, will they come?" Setting up the infrastructure will not guarantee success, and enabling access is not synonymous with adoption or an effective application. In Philadelphia, the decision was to focus on Internet access as the main "application"; other cities have focused on more tangible applications such as wireless meter reading. Yet even with simple Internet access, Philadelphia will face challenges in ensuring adoption and effective use. The current efforts of Wireless Philadelphia to connect with and use existing community groups to distribute the $9.95 digital inclusion accounts is one positive first step to ensure adoption.

Long-Term Sustainability Considerations

1. The digital divide is a tenable justification over the short term but faces long-term challenges.

The principal method by which Philadelphia was able to minimize opposition to the MWN project was by calling attention to Philadelphia's considerable digital divide. This indicates that government involvement with MWNs may not be advisable in the absence of a compelling social rationale. The existence of such a rationale gives government the moral confidence to pursue radical measures and encourages stakeholders to support these measures. However, the danger is that projects based on the digital divide may not be able to deliver measurable success.

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2. Municipal wireless networks need insulation from unpredictable, large-scale external forces.

MWN projects are subject to unpredictable and large-scale social and political forces. For instance, in the U.S., most projects are vulnerable to the four-year election cycle. If the process of building an MWN is currently under way, and new community leadership is elected, there is no telling how the new leadership may choose to act with regard to the MWN.

3. The technology of municipal wireless networks will change.

A recent new development, called Broadband over Power Lines (BPL), allows Internet access to be supplied via power connections. Because buildings are typically already wired for power, this technology could remove the cost advantages of deploying wireless networks. In addition, approximately 90 percent of the telephone lines in the U.S. are currently DSL capable (Hearn, 2006). DSL prices are falling rapidly, with a connection currently available at around $15 per month. Lower-income consumers are typically more price conscious, and if the cost of DSL falls below the cost of wireless connectivity, consumers will likely go with the cheaper solution. A change in technology does not necessarily remove the underlying rationale for MWNs. Future projects will need to plan around such developments and create structures that are focused on the underlying need of the municipality rather than the capabilities of the specific technology. It is unclear if the structures created in Philadelphia would survive a change in technology and if Wi-Fi-based wireless technologies will be in use 10 years from today.

Final Reflections

In this final section, we reflect on three basic questions: Was the wireless project in Philadelphia a good idea? Did Philadelphia do a good job? Should other cities consider similar projects?

The answer to all three questions is yes. The project was a good idea for the city because the digital divide issue is real, the technology is feasible and cost-effective, and the private

sector was not moving fast enough. The project also seems to have improved the image and civic pride of the city. We expect that the imperatives in other municipalities will be different given different geographic, demographic, political, and historical contexts. Overall, the city did do a good job in getting the project approved and implemented.

The digital divide perspective was the right perspective for Philadelphia and, to its credit, the project has remained true to that original orientation. However, the project took much longer than expected to start implementation. We expect planning and implementation to go much faster in other municipalities.

Finally, we strongly believe that other municipalities should consider similar projects. The time is right, the technology works, and even though the issues that Philadelphia faced will be different for other cities, the possibility for meaningful social and economic impact remains. ■

TO LEARN MORE

**Can Governments Create Universal Internet Access?**
The Philadelphia Municipal Wireless Network Story
by Abhijit Jain, Munir Mandviwalla, and Rajiv D. Banker

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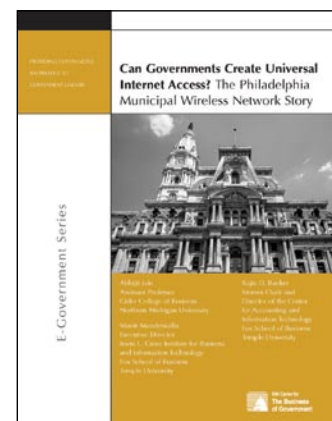
Challenge 5: Managing the Digital Divide

By Heike Boeltzig and Doria Pilling

Insights on the fifth management challenge are adapted from the Center report "Bridging the Digital Divide for Hard-to-Reach Groups," by Heike Boeltzig and Doria Pilling (Washington, D.C.: IBM Center for The Business of Government, 2007). The report addresses strategies to meet the challenges of reaching those left behind by evolving technology.

In both the United States and the United Kingdom, considerable emphasis has been placed on government information and services being online, and increasingly on the possibility of carrying out online transactions (e-government). The intention has been to deliver better quality, more convenient services to individuals, and also to increase efficiency and cut costs. While both countries are well on the way to Internet delivery of government services, this does not necessarily mean that all citizens are equally able to access them. *In both countries, those who have most to gain from e-government may have least access to it*—people on low incomes, older people, people with disabilities—thus providing evidence of a continuing digital divide.

In both countries, a number of initiatives have been set up that are intended to address the disadvantage of being "unconnected" for people with the most potential gain from e-government. The barriers include lack of Internet access, affordability, lack of basic technology skills, fear of technology, and lack of perceived need for Internet access. And in the case of some people with disabilities, these barriers include the lack of assistive devices to use computers and problems in accessing websites using such devices.

Highlighted in this report are 12 initiatives, six from the United States and six from the United Kingdom, that have been effective in terms of engaging targeted non-users in Internet use and, to some extent, online government services. We conducted in-depth case studies of three initiatives in each country. In the United States, these were the Computers for Homebound and Isolated Persons (CHIPS) Program in Knoxville, Tennessee; eRutherford in Rutherford County, North Carolina; and the Foundation for Successful Solutions–

Project T.E.C.H. in Los Angeles, California. The initiatives in the United Kingdom were CareOnLine in Leicestershire; Leeds Libraries IT Learning; and the Leicester Disability Information Network (LDICN). These projects particularly targeted efforts at certain groups of people.

Information on the other initiatives was obtained by interviews with program managers and documentary research. In the United States, these initiatives were Computers for Families (CFF) in Santa Barbara, California; Digital Sisters in Washington, D.C.; and Housing Works in Boston, Massachusetts. In the United Kingdom, they were Carpenters Connect RegenTV, London Borough of Newham; Cascade, Nottingham; and Community Heritage Store, West Norfolk.

Through this research, we developed 10 recommendations that we believe will be effective in encouraging Internet access and use of e-government services. The recommendations, with some best practice advice, are aimed at both practitioners and policy makers, with the goal of moving forward with developing e-government services that meet the needs of *all* citizens.

Recommendations Aimed at Increasing *Access* to Targeted Groups

Recommendation 1: Offer free computer and Internet access to targeted groups.

In the United Kingdom, according to the Office of National Statistics, the cost of equipment and online access were the third (14 percent) and fourth (11 percent) most common reasons for not having home Internet access.

Best practice advice to practitioners: Projects should take into account people's needs for long-term computer and Internet access if new users' interest and use is to be sustained. The full benefits of Internet access cannot be realized without home access, and this is particularly the case for older people and people with disabilities.

Best practice advice to policy makers: Policy makers should consider various options for providing free or affordable Internet access to low-income groups, older people, and people with disabilities.

Recommendation 2: Provide long-term support to organizations seeking to reach targeted groups.

Program staff across the two countries highlighted the importance of providing help with Internet access and support on a long-term basis as a means of encouraging participants to use the Internet and possibly online government services.

Best practice advice to practitioners: Projects should help users plan their next steps after completing the training. Providing long-term access and support increases participants' confidence, is likely to assist them in increasing the range of their Internet activities, and often has a positive impact on their learning progress.

Recommendations Aimed at Increasing *Access* to Targeted Groups

1. Offer free computer and Internet access to targeted groups.

2. Provide long-term support to organizations seeking to reach targeted groups.

3. Create partnerships with other organizations to share resources and expertise.

4. Create strategies for long-term project sustainability.

Recommendations Aimed at Increasing *Use* by Individuals in Targeted Groups

5. Engage individuals in targeted groups by starting with what interests and concerns them.

6. Raise awareness of the benefits and encourage use of e-government services among targeted users.

7. Improve usability of the Internet and e-government services to targeted individuals and groups.

8. Improve computer and Internet "accessibility" for people in targeted groups.

9. Create a comfortable learning environment and provide informal training opportunities to targeted users.

10. Involve targeted users by constant consultation.

Best practice advice to policy makers: Getting more people—especially those with low incomes, older people, and people with disabilities—to use the Internet and possibly online government services requires long-term policy commitment and support.

Recommendation 3: Create partnerships with other organizations to share resources and expertise.

Program staff across the two countries highlighted the importance of building partnerships to share resources and expertise and to exchange information and experiences.

Best practice advice to practitioners: Projects should build partnerships with other organizations to share expertise and resources and to provide complementary activities.

Best practice advice to policy makers: Fostering a closer relationship between government organizations that offer technology access and training is one way in which policy makers can promote access to the Internet and to e-government particularly.

Recommendation 4: Create strategies for long-term project sustainability.

However effective initiative strategies are, and however successful they are in encouraging marginalized people to use the Internet and online government services, this can make only a limited impact if the initiative is not sustained.

Best practice advice to practitioners: Projects should build in strategies for project sustainability from the beginning.

Best practice advice to policy makers and funders: Funding should be made available both on the basis of track record and on the basis of need.

Recommendations Aimed at Increasing *Use* by Individuals in Targeted Groups

Recommendation 5: Engage individuals in targeted groups by starting with what interests and concerns them.

Our study suggests that lack of interest and lack of *perceived* need are often due to lack of awareness of what the Internet can offer.

Best practice advice to practitioners: Projects aimed at encouraging non-Internet users to use the Internet should gear publicity or organize events to the interests and concerns of particular groups, rather than simply focusing on the availability of Internet facilities or training.

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Best practice advice to policy makers: Policy makers should continue efforts to bridge the digital divide by increasing awareness of the Internet's benefits to non-users, as well as taking measures to overcome barriers for specific groups.

Recommendation 6: Raise awareness of the benefits and encourage use of e-government services among targeted users.

The whole basis for the research project reported here is that those who could benefit most from using government online services are less likely to use these services.

Best practice advice to practitioners: Projects should find ways of publicizing the concrete benefits of using e-government services in terms of convenience—time saved, 24/7 availability—for services that are relevant to particular groups of people.

Best practice advice to policy makers: Initiate campaigns through the media demonstrating the concrete benefits of using online government services directed toward non-users.

Recommendation 7: Improve usability of the Internet and e-government services to targeted individuals and groups.

Government websites continue to be less user-friendly and publicly accessible than they ought to be.

Best practice advice to practitioners: Projects should provide guides to government websites and find ways to make them easier to use.

Best practice advice to policy makers: Policy makers, in addition to enforcing existing standards and guidelines for accessibility of government websites, should provide incentives to government organizations to make their online services as user-friendly as possible by obtaining feedback from service users.

Recommendation 8: Improve computer and Internet "accessibility" for people in targeted groups.

Studies indicate that many people with disabilities need assistive technology to use a computer and the Internet.

Best practice advice to practitioners: Managers of projects to provide Internet access should be aware of the assistive technology needs of people with disabilities, and know where people's needs can be identified, assistive technology obtained, and training given in its use when they are unable to do so themselves.

Best practice advice for policy makers: Adequate funding should be available so that the assistive technology needs of people with disabilities can be identified, their cost can be met, and adequate training in their use provided.

Recommendation 9: Create a comfortable learning environment and provide informal training opportunities to targeted users.

Many users in the projects in our study, especially seniors, thought that they were incapable of using a computer and the Internet or felt uncomfortable using technology. This often became a barrier to technology learning.

Best practice advice to practitioners: Projects should aim to provide comfortable learning environments, suited to the needs of their particular user groups.

Best practice advice to policy makers and funders: Policy makers should fund informal as well as formal learning, using "soft outcomes" and "distance traveled" as measures of achievement.

Recommendation 10: Involve targeted users by constant consultation.

Involving users in the design and implementation of the initiative was important for making sure that users' needs were met and continued to be met.

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Best practice advice to practitioners: Feedback mechanisms should be built into project design from the beginning.

Best practice advice to policy makers: Policy makers should provide incentives to government departments to actively involve consumers, or different groups of consumers, from the beginning in the design and implementation of government websites.

Conclusion

E-government is becoming the new face of governments in the United States and the United Kingdom. There is evidence that the Internet can improve government service delivery, making it more effective, efficient, and responsive to peoples' needs. Yet there is considerable evidence that those who are most reliant on government services, and could benefit most from the convenience of online services—people on low incomes, older people, and people with disabilities— are less likely to use them. There is no indication that this situation is substantially changing.

In this project we identified a number of initiatives in both countries that have found effective ways of addressing and, to a certain extent, overcoming barriers to Internet and e-government usage by these groups. We then clustered those strategies that were common to many of the initiatives into 10 recommendations. We described and illustrated these recommendations, and suggested ways in which policy makers can assist the development and maintenance of such initiatives.

One of the main barriers tackled by these initiatives is convincing people that the Internet, particularly online government, is relevant to their needs and concerns. Overcoming people's fears that they lack the skills and confidence to use the Internet was another obstacle that the initiatives tried to address by providing informal training in an environment in which people feel comfortable. Another barrier is affordability, particularly for some people with disabilities who need assistive technology to use a computer and the Internet. All the initiatives identified provided free or affordable Internet access for varying lengths of time, and many tried to meet people's assistive technology needs.

The other major barriers are the websites themselves. They often not only present problems for people with disabilities and those using various assistive technologies, but also are complex and difficult to navigate, and may not contain the content people most want. Several of the initiatives tried in different ways to provide guidance to make the Internet easier to use, with some working with local governments to improve the user-friendliness of their websites. Engaging users in the design and implementation of the initiative was likely to make it more effective.

We hope that the 10 recommendations identified in this research and the best practice advice will guide practitioners and policy makers in their efforts to increase access to and use of the Internet and online government services. ■

TO LEARN MORE

Bridging the Digital Divide for Hard-to-Reach Groups
by Heike Boeltzig and Doria Pilling

The report can be obtained:
- In .pdf (Acrobat) format at the Center website, www.businessofgovernment.org
- By e-mailing the Center at businessofgovernment@us.ibm.com
- By calling the Center at (202) 515-4504
- By faxing the Center at (202) 515-4375
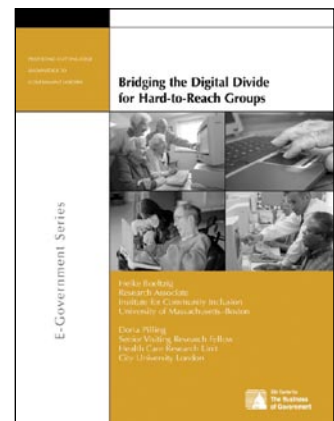
By Solly Thomas

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Introduction: Challenging the Way Managers and Employers Think About Performance Management

Public sector organizations face increasing pressure to ensure that programs are well managed and results-oriented, and meet the needs of their constituents—namely, the American public. Citizens expect and deserve quality services in return for their investment (i.e., tax dollars) whether they are receiving Social Security checks, undergoing medical treatment at veterans' hospitals, obtaining assistance in response to natural disasters, visiting national parks, or receiving any other government services at the federal, state, or local level.

As a result, after decades of relative stability, human capital practices, including the federal personnel system, are undergoing profound changes—notably in the way employees are managed, developed, rewarded, and compensated. To be successful, governments must embrace human capital management principles that allow for more flexible management, greater workforce development, and increased resiliency in adjusting to new demands and problems. Navigating the move from the old to the new—while retaining a core commitment to the enduring values and merit-system principles of effective public service—is a formidable challenge.

Public sector organizations, like their private sector counterparts, are designing and implementing human capital strategies related to the management of individual and organizational performance. The key to their success lies not just in the underlying principles and goals of these performance management programs, but also in the way these programs are designed and implemented. Ultimately what is required is a cultural shift throughout the agency. It is not good enough to just change processes and systems; what needs to change is the way public sector managers and employees think about performance management.

Despite the widespread attention to performance management in the federal community, the record confirms there are continuing problems. The U.S. Office of Personnel Management (OPM) recently released the 2006 Federal Human Capital Survey, which shows a high level of satisfaction with federal jobs, with immediate supervisors, and with most aspects of federal employment. However, the survey recorded the highest levels of dissatisfaction on questions related to performance and performance appraisal ratings— for example, promotions, recognition, and rewards. The survey results suggest performance is not seen as a priority, which is evidence that many organizations are not ready for pay for performance.

If you asked public sector employees—and certainly the American taxpayer—if pay should be based on performance instead of longevity, they would overwhelmingly agree: Performance, not length of time, should define pay. Almost all would agree that public sector employees have to earn their pay. Yet, as noted above, there is widespread dissatisfaction expressed with pay for performance by public sector employees and even by supervisors, managers, and senior executives. Why is that? Because many organizations implement systems that are well designed on paper, but these same organizations are unsuccessful at making the cultural shifts necessary to make significant change and results.

> **"Many organizations implement [pay-for-performance] systems that are well designed on paper, but these same organizations are unsuccessful at making the cultural shifts necessary to make significant change and results."**

Getting the most from people and building a workplace that promotes top performance is one of the biggest challenges for public sector managers. Ensuring that employees are managed, developed, recognized, and rewarded is a full-time job for the line manager. Managers need to clearly and regularly communicate performance expectations; create an environment that encourages and enables the employees to succeed; develop their employees in order to maximize performance over the long run; hold employees accountable for results; and differentiate between high and low levels of performance. And, equally important, managers must be held accountable for these responsibilities. Similarly, employees need to make sure they clearly understand what is expected of them and how this relates to the overall organizational goals; pursue a path of continual learning; regularly communicate with their supervisor; and hold themselves accountable and responsible for their actions.

Two recent IBM Center reports address key human capital management issues: "Managing for Better Performance: Enhancing Federal Performance Management Practices" by Howard Risher and Charles H. Fay, and "Designing and Implementing Performance-Oriented Payband Systems" by James R. Thompson. Both reports offer insights and lessons learned when implementing pay and performance management reform. Both reports also emphasize the cultural shifts that are needed to successfully implement performance management reform, including the roles and responsibilities of managers and employees necessary to change the way employees are managed.

The report by Risher and Fay discusses how the government's performance management process needs to change to make it credible. The authors emphasize that a good performance management system is a valuable tool to help managers improve the performance of their employees and, in doing so, achieve their organization's performance goals. Risher and Fay also suggest eight management practices that contribute to a strong performance culture, all of which require a high degree of transparency and communication between managers and their employees.

The Thompson report concludes that the preponderance of data on performance-oriented payband systems throughout the federal government shows that these systems have achieved high levels of employee acceptance after the initial implementation period. There is also an increased awareness among participating employees that their pay is linked more closely to performance than is the case under the federal General Schedule. However, the author emphasizes, *the degree of success seems to vary, depending on how the systems were designed and implemented.*

Together these two new reports inform the debate and the effort to ensure that the federal service of the future has the flexibility, the resiliency, and the commitment to be effective. ■

Managing for Better Performance: Enhancing Federal Performance Management Practices

By Howard Risher and Charles H. Fay

This article is adapted from Howard Risher and Charles H. Fay, "Managing for Better Performance: Enhancing Federal Performance Management Practices" (Washington, D.C.: IBM Center for the Business of Government, 2007).

A worldwide movement toward the use of performance management in both the public and private sectors has been occurring, especially over the past decade. "Performance management" focuses on planned performance and improvement over time. It applies to both organizations and individuals in the organization. This report reviews some of the conceptual challenges that have stymied more rapid acceptance and implementation of performance management practices in the federal government. It reviews similar attempts—both successful and unsuccessful—and derives some lessons learned. Based on this, the report offers advice on some immediate next steps as well as a set of longer-term recommendations that the federal government might undertake to broaden and deepen its efforts to put in place an effective approach to better managing performance.

A key conceptual challenge to date has been the interchangeable use of the terms "performance appraisal" and "performance management." Even human resource specialists often use the two phrases interchangeably. However, the distinction is critical. *Performance appraisals* focus on the year-end rating made by a manager of an employee who reports directly to him or her. Performance appraisals are based on judgment. They are an "event," generally "conducted" once a year. And they are backward looking. They are not designed to improve performance. In contrast, *performance management* is a broader, more comprehensive process that is future-oriented. It starts with performance planning discussions and focuses on planned performance, with a goal of improvement over the prior year. Appraisals are still a part of the process, but a natural step in the usual year-end review of organization performance.

A good performance management system is a tool to help managers improve the performance of their employees and,

in so doing, achieve their organization's performance goals. In a good performance management system, an employee should be able to track how well he or she is doing as the year unfolds, take corrective action if needed to resolve performance weaknesses, and possibly renegotiate performance goals as circumstances change.

In contrast to the traditional performance appraisal approach, why is performance management potentially important? The reason is that the process is intended to clarify what employees are expected to accomplish and to help them understand how their efforts contribute to the organization's mission. Second, when the performance dimensions are job specific, it gives an employee and his or her supervisor a basis for objectively discussing performance, for coaching, and for modifying performance plans as circumstances change. Both can track how the employee is performing; there should be no surprises when the year-end appraisal evaluation is completed.

Performance management also gives the employee a basis for assessing his or her personal strengths and weaknesses, and provides a basis for individual development planning. And, of course, since the evaluation is specific to planned accomplishments, when the ratings are used in personnel decisions—such as pay increases, promotions, and terminations—they should satisfy legal requirements; they should be defensible.

The Bush administration's efforts to move to a pay-for-performance system met with resistance from some employees and federal unions. This reflects a lack of trust that they will be treated fairly within their own organization and treated equitably with employees in other organizations. In the 2006 Federal Human Capital Survey, less than 30 percent of the respondents thought their performance was recognized in a meaningful way. The majority also did not believe promotions are based on merit. Their resistance is a clear indication that they are not confident they will be treated fairly. Pay increases, of course, will depend on performance evaluation ratings, which suggests the emphasis should be placed first on putting effective performance management practices in place.

The 2006 survey suggested that 40 percent of frontline employees do not believe recognition and rewards are linked to their performance. Conversely, over 80 percent of those in the Senior Executive Service (SES) believe it is linked. Until that gap can be bridged, moving to performance pay may be difficult. That is why the authors believe the emphasis should be placed first on putting effective performance management practices in place.

Simply stated, the management of people needs to be a core responsibility of every manager. The management of performance is not a duty that can be handled by simply completing a performance appraisal form at the end of the year. The Office of Personnel Management (OPM) has stated that managers need "to make distinctions in performance and link individual performance to agency goal and mission accomplishment." That is only possible if managers embrace effective performance management approaches.

Near-Term Action Steps

Based on the lessons learned from prior governmental performance management efforts and the recent experiences of private industry, the authors have identified six immediate steps the federal government might take to improve performance management practices.

Action Step 1: Develop greater clarity about what constitutes performance management.

It is hard to reach consensus on the solution to a problem if the people involved do not share a common language, especially if they are from different professional disciplines. A clearer definition of performance management will clarify that the key players are the executives and frontline managers, not the human capital officer, and that managers will need to be held accountable for actively managing the performance of their employees.

Action Step 2: Ensure the prerequisites for good performance management are in place.

As the leadership at the Department of Homeland Security came to understand, an organization has to be ready to embrace performance management practices, and managers need to be ready to make tough but honest decisions about the performance of their employees. The authors offer eight practices that contribute to a performance culture. An organization's leadership has to be willing to embrace these practices as prerequisites to moving toward more effective performance management.

Near-Term Action Steps to Improve Performance Management Practices

1. Develop greater clarity about what constitutes performance management.

2. Ensure the prerequisites for good performance management are in place.

3. Involve employees in defining "successful performance."

4. Start small.

5. Create a Program Management Office for performance management initiatives.

6. Add incentives for middle management.

Action Step 3: Involve employees in defining "successful performance."

One of the lessons from the failures of past performance management efforts was the importance of defining what successful or outstanding performance looks like. Employees want to be successful; it is essential that they be clear as to what the criteria for success looks like. Both managers and employees must accept the criteria as credible and realistic. When people play an active role in goal setting, they are far more likely to be committed to the goals. And the people that best know what constitutes success are those on the front line. After all, they know their jobs better than anyone.

Action Step 4: Start small.

In both the public and private sectors, there have been numerous success stories of performance management. The most common thread among them, though, is that they were all relatively small in scale. It is much easier to gain acceptance to the introduction of performance management—and its ultimate link to performance pay—in smaller organizations. Changes that affect careers and working relationships are best addressed at the local level. High performance depends on the buy-in of frontline managers and employees. It cannot be mandated or controlled from a distance.

Action Step 5: Create a Program Management Office for performance management initiatives.

It would be advantageous to create a Program Management Office (PMO) that brings together the specialized, functional expertise from across the organization. The role of the PMO is to provide leadership, internal coaching and consulting, training, coordination, and project-related resources. Almost more important than the technical expertise, it

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raises the prominence of the initiative and stamps it as an organizational priority. The initiative is less likely to have the support it needs if it is managed as a human resources/human capital project. The Department of Defense created a PMO to manage the National Security Personnel System, and it has proven its value.

Action Step 6: Add incentives for middle management.

When federal performance management practices are compared with corporate practices, one of the differences is the absence of incentives for managers below the SES level. Since they have primary responsibility for managing employee performance, they should be a primary focus of any initiatives to improve performance. Current cash award practices are inadequate for that group. The new program should be based primarily on the achievement of performance goals and flow from the SES program. The notion of cascading goals is central to performance planning and has been used widely for decades. Tying cash awards to achieving the goals can be a powerful incentive.

Longer-Term Recommendations

The following set of longer-term recommendations for improving performance management practices in the federal government is based on an extensive literature review, selected interviews, and the authors' previous research on performance management practices.

Based on the past experiences of organizations attempting to put in place effective performance management practices, the authors found it often takes years. For example, the Government Accountability Office (GAO) began its efforts in the late 1980s and only recently has been seen as reaching full implementation.

Recommendation 1: The federal government should continue moving toward improved performance management practices for both organizations and individuals.

A key challenge facing both the current administration and future administrations will be linking or integrating the practices used to manage employee performance with those used to manage agency performance. Now they are essentially separate and disconnected. Research has shown that employees are more productive when there is a "line of sight" showing how their work efforts contribute to the success of their employer. Employee performance planning cannot be effective if it is not linked to organizational performance plans.

Recommendation 2: During the remainder of its term, the Bush administration should continue to fine-tune ongoing performance management practices and encourage new initiatives.

The Senior Executive Service pay and performance system should be the capstone for performance planning and management at lower levels. Until the SES system is seen as effective, it is unlikely that lower-level systems will be successful. Likewise, the lessons learned at the SES level should be the basis for developing similar practices for frontline managers and supervisors. Frontline managers need to be treated more like their counterparts in industry and expected to assume responsibility for the performance of their units. That should be reflected in the way they are compensated.

The "beta" demonstration projects now in place to test new performance management systems should be continued. This approach is consistent with the finding that the success stories are typically based in smaller work groups. New systems and practices should conform to an overarching set of principles, but "locally grown" performance plans will serve managers better than anything dictated from headquarters.

Each agency should also invest in training to develop the skills executives and frontline managers need to manage performance effectively. Effective performance management involves a redefinition of the way some managers see their roles. They will need time to develop the necessary competencies and to make the transition. Starting now will help to ensure they are ready.

Eight Management Practices That Contribute to a Performance Culture

- **Leaders as champions.** Leaders across the organization need to explain, in most cases repeatedly, why the new practices are necessary, how they are expected to benefit the organization, and how they are expected to affect employees. This is a walk-the-talk, beat-the-drums mission to convince people that change is necessary.

- **Linkage of work to mission.** Employees want to feel their work efforts are contributing to the success of their organization. That means they need to understand the mission and to have a "line of sight" that enables them to see how their work output is linked to the achievement of goals. Cascading goals help to solidify that linkage.

- **Performance tracking and dialogue.** The common practice in a goal-based environment is to track performance over time, to take corrective action when necessary, and to communicate the results widely. Employees want to know how their employer is performing, and regular communication keeps employees involved. The TQM movement prompted employers to post performance data so everyone could keep track of how well they were doing. Practices like that reinforce the focus on performance.

- **Cascading goals.** This argument has been in management textbooks for decades. Each level of an organization defines goals that are linked to the goals above and below. It may be difficult to define performance goals at lower levels, but even the lowest-level employees will be more engaged if they see the cascading goals.

- **Investment in talent.** Organizations that want to perform at high levels need well-qualified people. They need to invest in the development of individual skills, and they need to ensure that the most qualified people are promoted. Organizations that commit to talent management send the message that performance is important.

- **Recognition and rewards.** It may be difficult to gain adequate support for pay for performance, but every organization has a reasonably long list of ways that employees are recognized and rewarded. Recognition and reward practices should be evaluated occasionally to decide if they are serving the needs of the organization. One purpose is to recognize that high-performing employees and their accomplishments are to be celebrated.

- **Manager accountability.** Managers should be held accountable for managing the performance of their people. That has to be a primary role for frontline managers, and that is reinforced when their pay increases (and other rewards) depend on how well they perform this role. That should be a theme throughout their training. They need to understand the performance management process, but even more important is their commitment to help their people improve. They need to provide guidance and coaching advice, and those competencies should be a priority.

- **Employee engagement.** Finally, we know from research by The Gallup Organization that employee engagement is associated with significantly better performance. A survey to learn how employees feel about their organization, their jobs, and their supervisors will provide a picture related to employee engagement.

The Business of Government

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Recommendation 3: Each government organization should conduct a readiness assessment to determine if more rigorous performance management practices can be successfully integrated into its management process.

This report offers a series of building blocks or prerequisites that contribute to making the commitment to performance a shared priority. The results of the assessment may highlight current practices that may inadvertently send a message that performance in the organization is not a priority. If that is the shared sense across the organization, work needs to be done before a new performance system is implemented.

Recommendation 4: In planning and implementing new performance management practices, agencies should put in place several key practices before introducing pay for performance.

- Involve executives and frontline managers and employees in planning and implementing the system.
- Define performance expectations using "the what and the how" logic where the what encompasses planned results and the how describes the way results are achieved.
- Require periodic meetings throughout the year to discuss progress and problems.
- Use appropriate software to facilitate the management of the process.
- Create a "calibration committee" that will help to improve consistency across the organization and keep managers honest.
- Hold off implementing pay for performance until these elements are in place. Pay for performance should be the final step in the process. The linkage between performance and pay is essential. It helps to ensure managers and employees across a large organization take performance seriously. However, attempting to introduce this link too early typically leads to resistance that can result in the failure of the effort.

Longer-Term Recommendations for Improving Federal Performance Management Practices

1. The federal government should continue moving toward improved performance management practices for both organizations and individuals.

2. During the remainder of its term, the Bush administration should continue to fine-tune ongoing performance management practices and encourage new initiatives.

3. Each government organization should conduct a readiness assessment to determine if more rigorous performance management practices can be successfully integrated into its management process.

4. In planning and implementing new performance management practices, agencies should put in place several key practices before introducing pay for performance.

5. As organizations enhance their performance management practices, the responsibility for making the transition a success must rest squarely on the shoulders of executives and frontline managers.

Recommendation 5: As organizations enhance their performance management practices, the responsibility for making the transition a success must rest squarely on the shoulders of executives and frontline managers.

Increased responsibility must be placed on executives and frontline managers if performance management is to succeed in government.

Taken together, these performance management practices should contribute substantially to a more results-oriented government that can more effectively address the management challenges of the 21st century.

Final Thoughts

This is not a simple problem. If there were a straightforward, "silver bullet" solution, this report would not be necessary. The solution will not be found in the format of the traditional form used to appraise an employee's performance. Nor will it be suddenly discovered if pay-for-performance is implemented. As this report has tried to point out, it is a far more complex problem.

It is particularly important for managers to accept any new practice that they will be expected to use in managing their people. Performance management is or should be an ongoing process, so any system needs to be credible and easy to use. As the project moves forward, opportunities for input from managers are essential. ■

TO LEARN MORE

Managing for Better Performance: Enhancing Federal Performance Management Practices *by Howard Risher and Charles H. Fay*
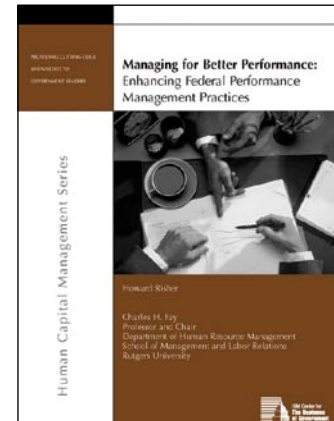
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Designing and Implementing Performance-Oriented Payband Systems

By James R. Thompson

This article is adapted from James R. Thompson, "Designing and Implementing Performance-Oriented Payband Systems" (Washington, D.C.: IBM Center for The Business of Government, 2007).

The preponderance of data on performance-oriented payband systems throughout the federal government shows that these systems have achieved high levels of employee acceptance after the initial implementation period. There is also an increased awareness among participating employees that their pay is linked more closely to performance than is the case under the General Schedule. However, the degree of success seems to vary, depending on how the systems were designed and implemented.

Designing a Performance-Based Payband System

Phase I of the design process should include a determination of the general principles that will guide the process. Three such principles are identified here: the degree of performance orientation, the extent of discretion provided managers in administering the system, and whether or not the system will be market-based. Phase II decisions involve design specifics.

Phase I Decisions: Coming to Agreement on Fundamental Principles

Three high-level design issues relating to payband system design are, (1) how performance-oriented the system will be, (2) how "hardwired" the system will be, and (3) how closely pay will be tied to the market.

Phase II Decisions: Coming to Agreement on the Specifics of the System

Most of the Phase I design issues identified above are cross-cutting in nature; each involves decisions about individual system elements. In this section, some of those same elements are addressed individually. The discussion is framed according to the same decision categories depicted in Table 1 on page 74:

1. Determine payband structure.
2. Determine performance criteria.
3. Determine rating system.
4. Determine funding availability.
5. Determine pay increases.
6. Determine elements of review process.

Recommendations

The following six recommendations provide a framework to assist you in the design and implementation of a new pay and performance system in your organization.

Recommendation 1: Determine system objectives.

The design of a pay system requires that trade-offs be made among three competing objectives: efficiency, equity, and employee acceptance. In linking pay more closely to performance, paybanding promotes the objectives of efficiency and effectiveness but potentially at the cost of both internal equity and employee acceptance. Designers need to have a clear sense of what their objectives are and of the relative priority assigned to each objective.

The personnel reforms at the Government Accountability Office (GAO) serve as an example in this regard. GAO has placed a high priority on the objectives of efficiency and effectiveness and has hence designed a highly performance-oriented payband system. GAO allocates a higher proportion of total funds available for annual pay increases on the basis of performance than do other agencies. However, elements of the system have not been well received by some GAO employees accustomed to working under the General Schedule rules, where both the general pay increase and step increases are virtually guaranteed.

Recommendation 2: Determine the principles that will guide pay system design prior to deciding pay system specifics.

Once you have defined your objective, you then should clarify and make known your design principles. In agencies that have previously developed paybanding systems, three issues seem to
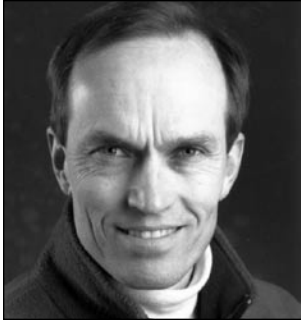
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Decisions to Be Made in Designing a Performance-Oriented Payband System

Phase I Decisions: Coming to Agreement on Fundamental Principles

- Degree of performance orientation
- Degree of managerial discretion
- Should the system be market-based?

Phase II Decisions: Coming to Agreement on the Specifics of the System

- Determine payband structure
- Determine performance criteria
- Determine rating system
- Determine funding availability
- Determine pay increases
- Determine elements of review process

drive the principles you may choose to consider when designing system specifics: (1) the degree to which the system will be performance-oriented, (2) the degree to which lower-level managers will be given discretion in administering the system, and (3) whether or not the system will be market-based.

Although a major advantage of performance-oriented payband systems is that they enable a closer link between pay and performance, these systems can be more or less performance-oriented depending on the features incorporated. This report discusses a number of features that have implications for performance orientation.

The extent to which lower-level managers are allowed to exercise discretion in the pay-setting process has a number of implications for pay system operations. At GAO, supervisors assign a rating for each pre-determined rating element. The pay increase granted each employee is then

Table 1: Performance-Oriented Payband System Design Issues

Determine Payband Structure	Determine Performance Criteria	Determine Rating System	Determine Funding Availability	Determine Pay Increases	Determine Elements of Review Process
Determine career groups	Determine performance elements	Determine rating levels	How will pay increase costs be limited?	Determine how rating levels translate into pay increases	What individuals/ groups are involved in the process?
Determine paybands	Are the rating elements common across the organization?	Does overall performance get rated?	Determine how general pay increase monies will be allocated	Is current salary taken into account in the pay-setting process?	Will employees do a self-assessment?
On what basis will bands be adjusted?	Should the elements be weighted?	Should there be constraints on number/proportion of high ratings?	Determine basis for base pay increase vs. bonus pool split	Is organizational performance taken into account in the pay-setting process?	What degree of transparency will be provided?
Will the bands include steps and/ or control points?	Determine relative focus on objectives vs. competencies	Does the same rating translate into the same pay increase across the pay pool or organization?			

determined by formula. At the Department of Commerce, in contrast, supervisors have the discretion to decide the rating elements, the weight given each element, the rating, and the pay increase associated with the rating.

There are advantages to both approaches. A "hardwired" system such as that at GAO tends to be more performance-oriented; managers have less discretion to modify pay decisions, for example, to lessen disparities among employees in the interest of work unit harmony. On the other hand, there is also less opportunity for managers to take into account factors that impact organizational outcomes but which are not formally rated.

Closely related to the issue of managerial discretion is that of rating integrity. For a system to be accepted as fair by employees, performance standards must be widely understood and accepted. This implies that they remain constant both from unit to unit and from year to year. A danger in systems where a specific rating translates into a specific pay increase is that ratings may have to be adjusted to accommodate budgetary constraints. This can compromise rating system integrity. To best accommodate the need to hold down costs, the system should allow for adjustments at the system level rather than at the individual manager level. At GAO, the comptroller general exercises discretion over both the "annual adjustment" and the "budget factor," which figure prominently in the pay-setting formula. A trade-off, however, is that employees do not know from year to year how large a raise will be associated with a particular rating.

In a market-based system, external equity will be given priority over internal equity. External equity means that a position is fairly compensated relative to similar positions in the private sector. The traditional federal pay and classification system is based on internal equity, which means that a position is fairly compensated relative to other positions in the federal government. Of the systems reviewed in this report, only GAO's is market-based. The National Security Personnel System at the Department of Defense includes provisions that allow for market-based adjustments to pay in the future. A key advantage of market-based systems is that the agency pays no more than is necessary to procure needed talent in a specific geographical area.

Recommendation 3: Decide the extent to which cost control is an objective.

Early evaluations showed that paybanding resulted in higher pay costs at both the Navy China Lake Demonstration Project and at the National Institute of Standards and Technology (NIST). It may therefore appear contradictory to argue that

paybanding can offer cost advantages. This is the case, however, because with paybanding the cost of yearly pay increases can be scaled to accommodate budget realities. For example, at NIST, the size of the pay increment, which is a central feature of the payband system, can be adjusted each year based on funding availability. At GAO, both the annual adjustment and budget factor are set annually by the comptroller general also on the basis of funding availability. Concerned that the costs associated with the General Schedule are not sustainable over the long term, GAO officials developed a system that provides for flexibility in the face of fluctuating resource levels.

Recommendation 4: Take contextual factors into account.

The adoption of a payband system would allow your organization to move from the "one size fits all" General Schedule to a system that can be tailored to your organization's context. Several of the early adopters of payband systems were research organizations with a high proportion of scientists and engineers. Paybanding has provided these organizations recruitment advantages by allowing the salaries of new employees to be set above the minimum.

Payband systems need to be tailored to organizational realities including, for example, whether the workforce is unionized. The Federal Deposit Insurance Corporation (FDIC)—which has to negotiate its payband system for bargaining unit employees with the National Treasury Employees Union—has incorporated structural features into its non-managerial payband system that help guard against excessive costs.

The size of the workforce to be covered by a payband system also has implications for system design and implementation. One reason for the success of the Navy Demonstration Project and the NIST payband system is that the workforces at these agencies are relatively small and homogeneous.

The communication between frontline employees and lower management, as well as between lower and upper management, that is crucial to system success is more difficult in large and diverse organizations such as the Departments of Defense (DoD) and Homeland Security. Also top officials in such large agencies are less able to give pay system implementation the degree of attention that is possible in the smaller units. One solution is to phase the system in, as is being done at DoD. Another is to require that units demonstrate readiness for paybanding—for example, by requiring certification or training of lower-level managers in performance-oriented payband system administration.

Recommendation 5: Attend to the cultural aspects of performance-oriented payband systems.

Performance-oriented payband systems are often promoted on the basis that they contribute to the creation of a performance-oriented culture. The creation of such a culture is contingent on the "hard" as well as the "soft" elements of the system. Hard elements relate to specific design features such as number of rating levels. Soft elements relate more to process issues such as whether and to what extent the system engenders communication around performance matters. Systems that foster such communication and that allow a high degree of transparency with regard to system operation are more likely to gain employee acceptance and support.

One means of promoting communication between employees and supervisors is to require or encourage employees to complete a self-assessment prior to the supervisor making an assessment. This helps ensure that the conversation that occurs between employee and supervisor is more than a perfunctory, "Here is your rating; see you next year."

Some systems, such as the one developed at the Air Force Research Laboratory, require extensive communication among managers at different levels over rating standards. The ostensible purpose is to ensure rating consistency across units, but just the fact that the conversations occur conveys a sense among managers that, "This matters; I'd better pay attention to it."

Recommendation 6: Train managers in performance-oriented payband system administration.

One of the greatest threats to performance-oriented payband system success is that managers and supervisors are not provided sufficient training in system administration. Such training should take two forms. One is the technical training about pay system operation, including topics such as how to set performance objectives. The other is leadership training, which includes, for example, how to convey performance expectations to subordinates, how to help subordinates develop into high performers, and how to deal with the conflict that inevitably arises as individuals are told that they will be receiving a lower pay increase than their peers.

The supervisory level warrants particular attention. Federal supervisors have traditionally been selected primarily on the basis of their technical expertise rather than their leadership

abilities. This is less of a problem under the General Schedule than with paybanding, where the supervisor is at the center of the pay-setting process and has to deal with the human dynamics associated with granting some employees higher pay raises than others.

This report provides many more specifics on these issues. Descriptions of nine different performance-oriented payband systems that have been in operation—in some cases, for more than two decades—are provided. Apparent from the discussion is that successful designs are those that: (1) achieve a balance between efficiency, equity, and employee acceptance; (2) acknowledge the importance of soft as well as hard design features; and (3) fit the organization's context.

Conclusion

The most important conclusion from this study is simply that virtually every payband system design choice involves trade-offs between objectives. The key challenge for designers is to develop a mix of design elements that both accommodates the organization's objectives and is internally consistent. For purposes of employee acceptance and system effectiveness, it is important that the integrity of the rating process be protected. ■

TO LEARN MORE

Designing and Implementing Performance-Oriented Payband Systems
by James R. Thompson
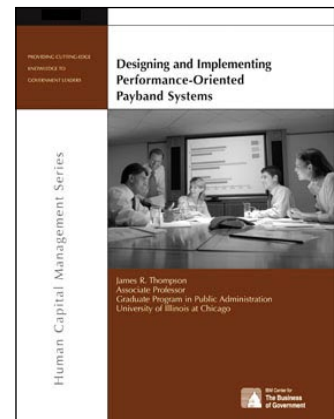
The report can be obtained:
- In .pdf (Acrobat) format at the Center website, www.businessofgovernment.org
- By e-mailing the Center at businessofgovernment@us.ibm.com
- By calling the Center at (202) 515-4504
- By faxing the Center at (202) 515-4375

Releasing the Strategic Potential of Human Resources Shared Services

By Kathryn Gould and Amit Magdieli

The federal government continues to embrace shared services as a way to increase efficiencies, be more effective, and lower costs. To date, the areas of financial management and human resources (HR) have provided the greatest promise of near-term benefits. These areas offer not only significant potential cost reductions, but also great strategic benefit.

To look deeper into how to achieve this strategic transformation through shared services, this article focuses on the federal human resources environment. Specifically, it addresses three main areas:

• Defining the future HR environment
• Planning for a shrinking workforce
• Attracting and retaining the right workforce

Shared services can be a significant enabler to implementing solutions in each of these three areas.

Defining the Future HR Environment

Within the private sector, the human resource function is quickly moving from an administrative and transaction-focused function to a frontline role as a key part of an organization's overall business strategy. Several years ago, the Hackett Group reported that "highly qualified HR professionals spend the bulk of their time on lower value-added, routine activities," and further that "[HR professionals] spend less than three hours a day helping to acquire, develop, and plan the optimal workforce." The private sector has worked to transform its HR operations over the past decade, as a large number of corporations have outsourced HR activities considered not central to sustaining business success. As a result, many HR functions were moved to vendors with the intent of reducing cost and improving customer service. This action has enabled HR professionals to focus on the value-added activities that directly inform their organization's human capital needs, while shedding transaction-oriented activities to outside entities best equipped to manage such processes more efficiently and at lower costs.

Unlike the private sector, the federal government has continued to operate HR organizations in an antiquated, transaction-focused manner, which retains a much higher cost per employee. However, over the last few years, with the introduction of first the Chief Human Capital Officers (CHCO) Council and then the Human Resources Line of Business (HRLOB), the federal HR community has joined together to analyze the current environment and develop a future vision that includes the metrics necessary to measure the success of this transition.

During the initial years, the HRLOB has established two complementary approaches: shared services and standardized business processes. The concept of shared services delivery was established when five public providers were designated to service the federal community. These public providers will continue competing with designated private sector providers. Additionally, the HR community has pursued the creation of an HR standard business process model that identifies specific key functions and sub-functions. This effort has also identified best practices and standardized methodologies, creating functions that can be, potentially, supported by common providers. This would result in a more robust, cost-effective environment, and possibly a better return on taxpayer investment.

Planning for a Shrinking Workforce

According to the Government Accountability Office (GAO), it is projected that from 2006 to 2011 approximately 300,000 federal employees, or 16 percent of the workforce, will retire, with thousands more reaching their eligibility period during that period. (For further information, see: www.opm.gov/feddata/retire/rs2004.pdf.) Led by the Office of Personnel Management (OPM), the U.S. federal government has recognized the human capital implications of this situation and has been working hard to find innovative ways to reshape the government workforce. New approaches have included the development of more efficient future workforce models, succession planning, and knowledge sharing and transfer approaches.

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Shared services will provide the efficiencies necessary for agencies to continue operations while experiencing such workforce changes. When fully rolled out, shared services will enable more efficient and effective HR transaction processing with a consolidated and highly leveraged model. This, in turn, will enable a smaller HR workforce to serve in a strategic advisory role supporting senior leadership.

Attracting and Retaining the Right Workforce

HR policies play an integral role in attracting and retaining the right workforce. Human resource organizations need to serve as strategic partners to government program managers in their efforts to build the best possible workforce. HR professionals can work closely with government program managers during the identification and hiring processes as well as with retention and staff development initiatives.

To do this, the federal HR community must define the skills and competencies federal agencies will need in the future, perform current workforce skills assessments, and then compare future skill needs with current skills to discern on which skill areas to focus recruitment resources. According to Norm Enger, the former OPM director of the HRLOB, the government has made significant strides attracting employees by the establishment of an online jobs database and application entry capability. USAjobs.gov is a world-class website, which receives over 300,000 site hits daily by job seekers, and where on any given day there are between 20,000 and 30,000 jobs listed. Though this represents a move in the right direction, more needs to be done in this area. The federal government has significantly lagged behind the private sector in its processing of job applications and in the length of time it takes to hire employees.

The federal government has a proven track record in providing training opportunities to its employees. However, in most instances, a metric or plan to determine the value of the training and whether it complements an employee's job responsibility or translates into improved performance or

professional growth seems lacking. The provision of training is only part of the equation. Providing the right training to the right people at the right time is the full equation. The federal government faces another training opportunity as a result of the projected retirement wave. Many federal employees will transition out of the workforce, taking with them valuable institutional knowledge and potentially leaving their unseasoned replacements ill-prepared to navigate an often complex environment. This challenge requires the development of formal knowledge-transfer initiatives in which seasoned employees transfer knowledge to newer, younger staff as a necessary training component.

How does this fit into the shared services model? Shared services will allow organizations to alleviate strains on the workforce by consolidating duplicative labor-intensive activities into one area, which in turn allows programs to focus on training valuable current employees geared toward mission-critical activities. Hence, shared services will play a big role in determining the skills needed in the future and will allow managers to focus on hiring and retraining staff for program work as opposed to low-value transactional activities. ■

# New from the Center: Recently Published Reports

E-Government Series

**The Blogging Revolution:** Government in the Age of Web 2.0
David C. Wyld

In this report, Dr. Wyld examines the phenomenon of blogging in the context of the larger forces at play in the development of the second-generation Internet (Web 2.0). He observes that blogging is growing as a tool for promoting both online and offline engagement of citizens and public servants. He examines the broader phenomenon of online social networks and how they affect not only government but also corporate interactions with their customers and citizens alike. The report describes blogging activities by members of Congress, governors, city mayors, and police and fire departments, and provides background on how blogging is being used within agencies to improve internal communications and speed the flow of information. The report also outlines a set of lessons learned and a checklist of best practices for public managers.
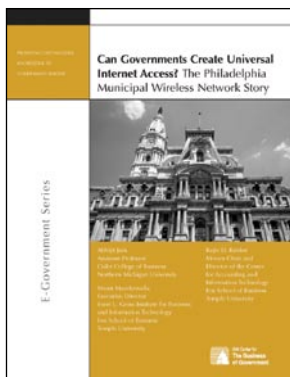
Can Governments Create Universal Internet Access? The Philadelphia Municipal Wireless Network Story
Abhijit Jain, Munir Mandviwalla, and Rajiv D. Banker

A confluence of factors has recently made municipal wireless networks (MWNs) an increasingly feasible and attractive option for municipal governments seeking to promote more equitable and universal access to the Internet within their communities. In this report, the authors describe the drivers and inhibitors to MWNs. Their insights are drawn from a case study of the city of Philadelphia municipal wireless network, which illustrates the practical application of the MWN concept and offers specific lessons learned from Philadelphia's experience. The authors also explain how municipal governments can act as catalysts for the adoption of technology while also promoting social and economic change. The Philadelphia story offers important lessons and insights for other municipalities and governments considering similar initiatives.
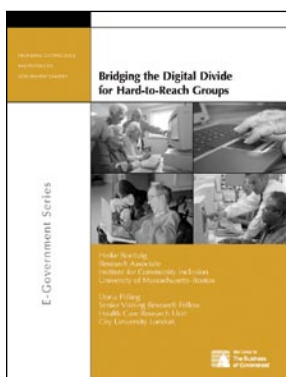
Bridging the Digital Divide for Hard-to-Reach Groups
Heike Boeltzig and Doria Pilling

The electronic revolution brought about by the Internet is connecting the world for businesses, governments, and people alike. However, even in the most technologically advanced nations, there are groups of people that cannot access a computer, let alone connect to the Internet. In this report, the authors identify specific groups who typically have no access to the Internet (rural, poor, disabled, seniors, and ethnic minorities) and examine the circumstances of each group. The report investigates how these groups could benefit by using online government services. It also identifies technical as well as social barriers that limit access. The recommendations outlined aim at increasing access; they provide valuable insights for service or application providers, who play a major role in increasing both access and accessibility. Through several case studies, the authors provide practical and useful guides to practitioners and policy makers at every level of government.

Financial Management Series
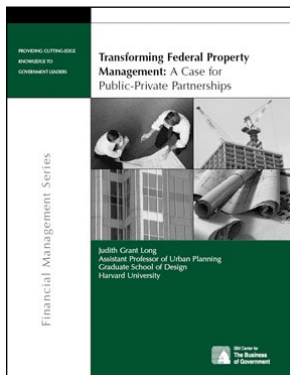
Transforming Federal Property Management: A Case for Public-Private Partnerships
Judith Grant Long

This report considers the potential for public-private partnerships as a response to federal property management issues. Though considered the largest landlord with holdings estimated to be worth $328 billion, the federal government, unlike many state and local governments, has been largely restricted from making use of public-private partnerships (PPPs) in the property management area. The author attempts to assess how PPPs might be used to resolve such problems as excess and underutilized property, deteriorating facilities, and reliance on costly leasing. All of these issues pose significant challenges to federal property management; the use of PPPs, contends the author, has the potential to effectively respond to them. The report concludes with a series of recommendations to successfully implement PPPs in the federal government.

Human Capital Management Series
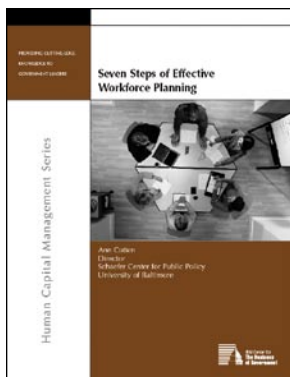
Seven Steps of Effective Workforce Planning
Ann Cotten

Successful private and public sector organizations must have robust human capital strategies in order to meet current and future business needs. Perhaps the most critical of these strategies is workforce planning. Workforce planning tells an organization what types of skills are needed to get the job done. It helps to ensure that the organization has the right people with the right skills in the right job at the right time. In this report, the author introduces a Seven-Step Workforce Planning Model, which provides a sound framework for understanding the basic elements of workforce planning. The model incorporates workforce planning concepts from two organizations: the International Public Management Association for Human Resources and the Office of Personnel Management. The report walks the reader through the steps involved in workforce planning, including defining the organization's strategic direction; identifying current and future workforce needs; determining gaps; implementing strategies to close these gaps; and monitoring, evaluating, and revising the gap-closing strategies.
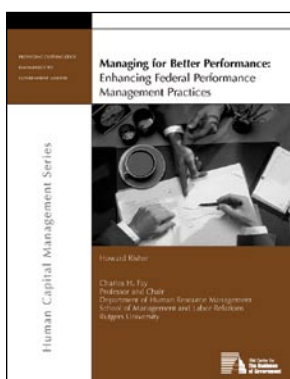
Managing for Better Performance: Enhancing Federal Performance Management Practices
Howard Risher and Charles H. Fay

This report reviews the history of performance management efforts within the federal government and describes the successes, challenges, and failures over the years. In addition, the report offers insights from other performance management experiences in both public and private sector organizations. The authors describe differences between private and public sector performance management practices as well as present a comparative analysis of corporate and non-corporate use of good management practices. Finally, the authors—with more than 50 years of experience between them—offer advice on immediate and long-term steps that the federal government might undertake to improve performance management practices.

Managing for Performance and Results Series
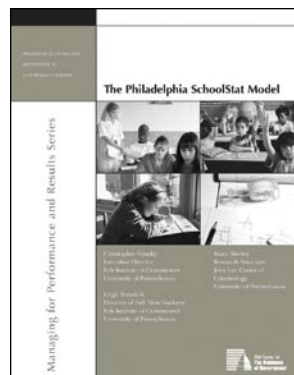
The Philadelphia SchoolStat Model

*Christopher Patusky, Leigh Botwinik, and Mary Shelley*

Philadelphia's SchoolStat is a case study of the adaptation of a successful management model, CompStat, which was developed over a decade ago by New York City's Police Department. The model has since been adapted by various city agencies within New York; by other cities, such as Baltimore's CitiStat; as well as by state governments, such as Maryland's new StateStat. The Philadelphia school district is one of the most prominent early efforts to adapt this model to improving the management and performance of schools. The objective of the various "-stat" models is to make decision making by managers more fact- and data-driven. The authors of this report describe how the model was adapted for a school district, what improvements occurred in the performance of the Philadelphia school district after it was implemented, and which features of the approach seemed to be the greatest contributors to improvement.

What All Mayors Would Like to Know About Baltimore's CitiStat Performance Strategy

Robert D. Behn

Baltimore's CitiStat program is an exemplar of managing for performance in government. As the CitiStat program received increased attention, Baltimore became a frequent destination for mayors from across the United States and the world to see how the program worked. Based on these visits and ongoing discussions with CitiStat staff, Dr. Behn prepared this report to summarize and present the questions most frequently posed to CitiStat staff and to then-Mayor Martin O'Malley. In January 2007, O'Malley was sworn in as governor of Maryland and quickly began implementing a StateStat program. The new mayor of Baltimore, Sheila Dixon, has continued the CitiStat program. While most mayors were impressed with CitiStat and aspired to replicate the program, many were not sure how to proceed. This report explains how CitiStat should be viewed as a leadership strategy rather than a management system. When viewed in this way, Behn argues, the program can be replicated and customized to each mayor's individual needs and priorities.
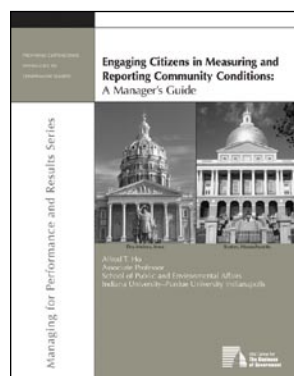
Engaging Citizens in Measuring and Reporting Community Conditions: A Manager's Guide

Alfred T. Ho

In this report, the author examines "how government officials can engage the public more directly in performance measurement and reporting efforts and how they can communicate more effectively about the efforts and accomplishments of public policies and programs." The goal, he notes, is to "make performance measurement and reporting more relevant and meaningful to taxpayers." The report specifically addresses how citizens can become involved in measuring government performance. It contains valuable insights that can be extended to other local communities considering engaging citizens in performance measurement, as well as to the national level, where the Key National Indicators Initiative is beginning to attract increased attention. The author presents two case studies—one from Des Moines, Iowa; the other from Boston, Massachusetts—where these trends converge. While each of these cases reflects different strategic approaches, they both attempt to bring together what government does and what citizens see as being important in their community.

2008 Presidential Transition Series
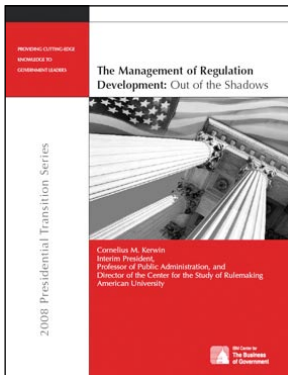
The Management of Regulation Development: Out of the Shadows

Cornelius M. Kerwin

In this report, Dr. Kerwin contends that the greatest challenge facing the management of regulation development is its obscurity. In most federal mission areas, from low-income housing to food safety to higher-education assistance, national goals are achieved through the use of various policy tools, such as direct spending, grants, loans and loan guarantees, insurance, tax preferences, and regulations. Although policy tools have proliferated in recent decades, knowledge of how to design and manage the federal policy tool set has not kept pace. Policy makers need a better understanding of how individual policy tools such as regulation operate, how to measure the performance and effectiveness of regulations, which actors participate in implementing regulations, and what characteristics are necessary to ensure accountability. The author illustrates important steps to bringing regulation development into a new light as well as raising its management to a level of prominence befitting its impact on public policy.

# Strategy and Transformation Series

Improving Service Delivery in Government with Lean Six Sigma

John Maleyeff

Dr. Maleyeff's report is a comprehensive review of how public sector managers can use Lean Six Sigma to improve the execution and delivery of results for the general public, written in an easily understood format intended for practitioners at all levels. The report highlights the need to translate the Lean Six Sigma methods from applications in manufacturing to the service-oriented environment of the public sector. The author sets forth specific actions that public sector managers can take in starting and implementing Lean Six Sigma projects, and provides the reader with a description of the Lean Six Sigma deployment process from program development to project implementation. Furthermore, the report cites several examples of successful implementation and application of Lean Six Sigma as well as enumerates key success factors and potential pitfalls.

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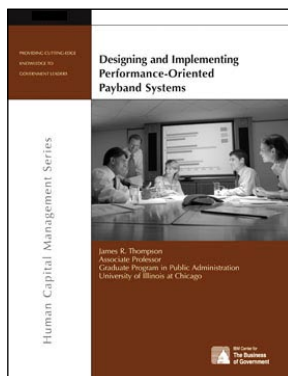
Benchmarkng Procurement Practices in Higher Education

Richard R. Young, Kusumal Ruamsook, and Susan B. Purdum

The focus of this report is the procurement function within higher education. Universities and colleges have only recently begun to apply strategic focus to the procurement function over the last five to 10 years. The authors capture some of the initial spend management techniques that a number of early adopters have implemented to better control their institutional spend. The report provides both a benchmark and a source of ideas about specific procurement practices that a college or university may consider adopting in the future. This benchmarking study reflects the efforts of a unique collaborative partnership consisting of the IBM Center for The Business of Government, the IBM Public Sector Procurement Consulting Practice, SciQuest, and the Penn State Center for Supply Chain Research.

The IBM Center for The Business of Government Book Series
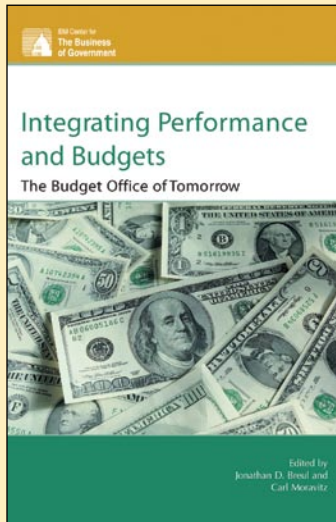
## Integrating Performance and Budgets: The Budget Office of Tomorrow
Edited by Jonathan D. Breul and Carl Moravitz
Published by Rowman & Littlefield Publishers, November 2006

Governments are under increasing pressure to produce—and to demonstrate—results in terms of their mission. Over the last decade, countries around the world have undertaken reforms with the aim of improving the relevance and effectiveness of public services and the quality of public sector management. *Integrating Performance and Budgets* showcases attempts by federal and state governments, as well as a mix of developed and developing countries, to introduce performance or results-oriented budgeting and management as a means to support better decision making and accountability. (*www.rowmanlittlefield.com*)

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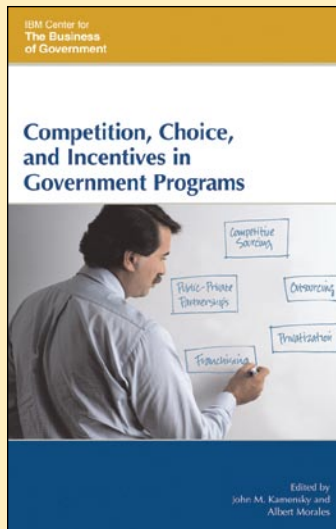
Competition, Choice, and Incentives in Government Programs
Edited by John M. Kamensky and Albert Morales
Published by Rowman & Littlefield Publishers, May 2006

Since the 1980s, the language used around market-based government has muddied its meaning and polarized its proponents and critics, making the topic politicized and controversial. *Competition, Choice, and Incentives in Government Programs* hopes to reframe competing views of market-based government so it is seen not as an ideology but rather as a fact-based set of approaches for managing government services and programs more efficiently and effectively. (*www.rowmanlittlefield.com*)

List of Contributors
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Supply Chain Management
Jacques S. Gansler and
Robert E. Luby, Jr., editors

By Jonathan D. Breul

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Did You Know …

Since its creation in 1998, the Center has awarded over 246 stipends to leading public management researchers in the academic and nonprofit communities that have resulted in 184 reports and books focusing on the major issues facing all governments today. In addition to publications, we have interviewed 277 government executives on our weekly radio show, *The Business of Government Hour*, who are changing the way government does business. We also host periodic thought leadership events and forums to bring together those in government striving to bring innovation to the front lines.

Thought leadership is most valuable when it provides public officials leading-edge thinking and practical insight on critical public management issues. For this reason, the Center and its Senior Fellows not only stimulate a wide range of public management research, but also actively facilitate discussions at all levels of government on new approaches to improving the effectiveness of government at the federal, state, local, and international levels. We provide senior policy and career officials with trusted advice and insight on critical public management issues and then incorporate their issues and concerns into our research agenda going forward.

This last year, we competitively awarded about 30 research stipends to leading researchers in the academic and nonprofit communities. We also published a dozen reports on key management topics; a book, *Integrating Performance and Budgets;* and two issues of this magazine, *The Business of Government*, which include summaries of our top reports, recent forums, and radio show guest interviews, as well as timely articles on current topics.

Currently, the top five most popular downloaded reports are:

1. "Working with Career Executives to Manage for Results" by Dana Michael Harsell
2. "Using Activity-Based Costing to Manage More Effectively" by Michael H. Granof, David H. Platt, and Igor Vaysman
3. "Performance Leadership" by Robert D. Behn
4. "Six Trends Transforming Government" by Mark A. Abramson, Jonathan D. Breul, and John M. Kamensky
5. "Public Deliberation" by Carolyn J. Lukensmeyer and Lars Hasselblad Torres

The Center's Managing Partner, Albert Morales, hosts *The Business of Government Hour.* The weekly radio show is a conversation about management with a government executive who is changing the way government does business. Each year, we interview approximately 40 government leaders; guests have included Coast Guard Commandant Thad Allen, Department of Homeland Security Deputy Secretary Michael Jackson, and Virginia Governor Tim Kaine. Tune in on Saturdays from 9 to 10 a.m. on Washington, D.C.'s WJFK FM 106.7. Or you can listen via MP3. All of our interview transcripts can be found at **businessofgovernment.org.**

Periodically, we sponsor events such as breakfast seminars, luncheons with speakers, and off-site functions. They provide an opportunity to hear firsthand from high-level government officials about their points of view, challenges, and goals.

The Center's website provides free access to all of its research products. In 2006, we had a 56 percent increase in downloaded reports, totaling almost 870,000 downloads. The site makes available over 170 reports, 20 issues of the Center's magazine, more than 260 radio transcripts, radio interview audio files, and executive summaries of our more recent reports.

Looking ahead to the 2008 election, the IBM Center has begun an online dialogue on management challenges facing the next president. We hope this dialogue informs our research agenda and provides a vehicle for interaction on future management issues facing the next administration. You are invited to read the essays and comment on them on our blog. You can also suggest additional discussion areas. This blog will be updated weekly with new questions each Monday. Join us at **businessofgovernment.org/transition2008/.**

Finally, it is with great pleasure that we welcome Marty Wagner as a new Senior Fellow with the IBM Center. He joins the Center after 31 years of public service, most recently with the U.S. General Services Administration's Federal Acquisition Service—the largest government organization delivering acquisition, technology, and management services to federal agencies. As GSA's chief policy official, he brought best private sector management practices to the federal government and was an initiator or facilitator for most of the federal government's management improvement initiatives. ■

Join Us in the 2008 Presidential Transition Initiative

Interactive Forum on the Future of Government Management

What management issues will the new president face in 2009? What should he or she do about them? The IBM Center for The Business of Government would like your insights. These insights will be used to inform the Center's research efforts up to the election as well as to inform the transition team of the new president.

We will start with a forum on a thought-provoking paper, "Reflections on 21st Century Government Management," containing essays by two distinguished public administration academics, Professors Donald F. Kettl, University of Pennsylvania, and Steven Kelman, Harvard University.

How to Participate

You are invited to read the essays and comment on them on our blog. You can also suggest additional discussion areas. Simply go to **http://www.businessofgovernment.org/transition2008/**.

We would like you to share your reactions to the insights contained in the essays by Professors Kettl and Kelman by telling us:
- Do you think Professors Kettl and Kelman got it "right" in their essays?
- Are there other new trends that Professors Kettl and Kelman did not identify in their essays that you would like to add to the discussion?
- On what topics or subjects do you think the IBM Center for The Business of Government should commission research reports during the coming months?

This blog will be updated weekly with new questions each Monday. After the discussion period, there will be an opportunity to help prioritize the issues via a survey. The results of the discussions and surveys will contribute to the development of the IBM Center's research agenda later this year.

Who's Who at the Center

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2007-2008 Call for Research Proposals

The IBM Center for The Business of Government seeks proposals to examine new approaches to improving the effectiveness of government. The Center is looking for thoughtful and insightful research to assist public sector executives at all levels of government in effectively responding to the mission and management challenges facing them. We encourage you to examine our research areas closely, including our topics of special interest, in selecting a topic on which to prepare a proposal.

Individuals working in universities, nonprofit organizations and journalism are eligible to apply for $20,000 research stipends. Details on the research areas, and instructions on submitting a proposal, are included in our 2007-2008 Research Announcement which can be found on The Center's site at: businessofgovernment.org.

Proposal Deadline – Now Open!

There are two funding cycles with deadlines of: October 1, 2007 and March 3, 2008. Applications must be received online by midnight EST or postmarked by the mentioned dates. Applicants will be informed of a decision regarding their proposal no later than eight weeks after the deadline.

IBM Center for **The Business of Government**

About the IBM Center for The Business of Government

Through research stipends and events, the IBM Center for The Business of Government stimulates research and facilitates discussion of new approaches to improving the effectiveness of government at the federal, state, local, and international levels.

The Center is one of the ways that IBM seeks to advance knowledge on how to improve public sector effectiveness. The IBM Center focuses on the future of the operation and management of the public sector.

For more information, visit: **businessofgovernment.org**

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