

U.S. Government Better Utilizes IT to Improve Efficiency

The Federal Enterprise Architecture provides a platform for cross-agency collaboration and a discipline to guide IT investments, helping the federal government achieve its goals. BPMInstitute.org talked to Richard Burk, chief architect in the Office of Management and Budget, about the initiative.

BPMInstitute.org: What is the big picture associated with the Federal Enterprise Architecture effort?

Burk: We know that going forward, substantial additional resources for IT will be limited. The government is going to have to operate with increasingly limited resources. So the question arises - can we spend wiser, rather than more.

BPMInstitute.org: What is the answer?

Burk: A good business looks at their lines of business and differentiates between those that are back office operations or services that are essentially commodity items. It is wise to squeeze the costs out of those aspects of back office operations that can be standardized and commoditized and outsourced to shared service providers, and invest in the value differentiators - the things they must be excellent in to separate them from everyone else. We want agencies to do the same thing, to look at functions like human resources, financial management systems and information technology, those aspects of the back-office operations that can be outsourced, or invested in more wisely.

BPMInstitute.org: So what have you done?

Burk: Across the federal government, we have begun to consolidate in several areas that are already fairly standardized. So we selected five agencies that did

human resources very well and had the ability to scale up. Agencies have agreed that as they move forward, they would buy these services from one of the five service providers. There is competition but you need to make a choice. We did the same thing with financial management. There are four service providers that offer their fee for service to other agencies. And other agencies, instead of building their own system, buy it from one of these agencies. They will get a better quality product for less cost and the federal government will do a better job. In another case, the government went from 26 payroll systems to three. We have begun to work on grant processing. The federal government in almost all agencies, and much of grants processing, can be standardized. With that much standardization, you immediately ask if it can be commoditized and outsourced to drive down those costs and apply the savings to the core mission of the agency.

BPMInstitute.org: How did you select service providers?

Burk: For each line of business, the CIO Council identified a task force who put together a business case, an architecture, and an independent criteria for vetting candidates for consolidating service providers. These were initiated by OMB in consultation with the CIO Council. Interested agencies applied to be a common service provider.

BPMInstitute.org: What is the role of

the private sector in this effort?

Burk: In almost every case, the agencies that provide the service have partnered with private sector firms. And we have just opened this up to allow private sector firms to bid on their own if they meet certain criteria. This is a market-driven exercise for agencies to get good service and drive the cost down.

BPMInstitute.org: So what does this look like in practice?

Burk: When I was at the Department of Housing and Urban Development (HUD), we outsourced our HR services from Treasury. They used PeopleSoft and we were in the middle of a PeopleSoft implementation that wasn't going well. We invited them to tell us how much it would cost. It was more expensive for us to do it, even if we could pull it off. The CIO at HUD now says she saved \$10 million by outsourcing HR to Treasury.

BPMInstitute.org: So what is the Federal Enterprise Architecture?

Burk: The Federal Enterprise Architecture is a management tool to enable the federal government to optimize its resources in pursuit of its mission. Take an agency like the Center for Disease Control in Atlanta. Can they optimize the financial resources, human resources and other assets to deliver more on their mission to help people be healthier and safer without having to spend more? Yes, they can by using the discipline of enterprise architecture.

BPMInstitute.org: How so?

Burk: By creating an architectural blueprint which describes best how to maximize their IT investments in infrastructure, IT systems, geospatial information and other areas, and reusing what other agencies are doing, they make wiser decisions and leverage their resources to the max.

BPMInstitute.org: Can you give me an example?

Burk: If I give money to a locality to run a homeless shelter, I should also be able to tell them that we are funding healthcare in that area, and they can leverage their dollars to use those services to help the homeless people receive the care they need. The same is true for federally funded job training services. It is all about information. But the federal government is so big. The only way to localize services is for every one of the files we have regarding where we are providing funds to localities to be geographically located. Therefore, geospatially tagging the records is the service.

BPMInstitute.org: Isn't that complex?

Burk: It isn't as bad as it sounds. Think about the GPS system on your car. What has to go behind the technology is the discipline of geospatially enabling the files. You can spatially tag a million files in 30 minutes. But you have to do it, and you have to do it consistently across multiple agencies.

BPMInstitute.org: How did you identify geospatial information as an opportunity to provide cross-agency services?

Burk: We analyzed the records we had using the Federal Enterprise Architecture and it appeared that there was such commonality in multiple business units

around geographic information systems that it would be worth our while to pull a task force together, look at it seriously across the business units, and ask if we had a business case. Can we offer a better service for this commodity item? Is it standard-enough across multiple agencies that we could do it faster, cheaper, better? The answer was yes and it was approved in the last budget.

BPMInstitute.org: Where do you go from there?

Burk: The task force will build out this line of business. They will identify service providers or some other methodology for standardizing this across business units and offering it as a service - whether it is an IT service, geospatially enabling files, or other options.

BPMInstitute.org: Okay, this is a major initiative underway.

Burk: You can think about it the same way that you can think about electricity at the turn of the last century. Everybody who built apartments and office buildings put dynamos in their basements to generate electricity. Once the country agreed on using Westinghouse and alternating current instead of Edison and direct current, the municipalities began generating electricity and only the plugs had to be standardized. Over the years, the private sector beat out the public sector. It is the same scenario. We are about 15 years into a 40-year insertion of information technology into our society.

BPMInstitute.org: So where does the idea of architecture come in?

Burk: We must plan in a disciplined way in order to optimize our resources, then use those plans to invest and finally implement the solutions. Architect, invest, implement.

BPMInstitute.org: Is that new?

Burk: What we have done to date is to start with the investment. If an agency wants to do something, the first question is if they have the money.

BPMInstitute.org: What should the first question be?

Burk: What is it that we want to do in our business itself? Do we want to improve it? Do we want to overcome a deficiency that we have identified or somebody else, like the General Accountability Office, or the inspector general, or an oversight committee on Capitol Hill, or the newspapers, have identified?

BPMInstitute.org: Then what?

Burk: You can work through the discipline of architecture, which will help you say that you want to make specific investments that let you transition to a state where I don't have the problem or I can achieve a high level of performance. Once you do that exercise - whether it takes six weeks or six months - you are then in a position to invest. You can make decisions with your eyes wide open about what you need to invest to achieve the level of performance and drive the implementation. I know exactly what I am doing and why I am doing it. I have made a good business case. I operate like a business.

BPMInstitute.org: People frequently say that government should operate more like a business. Why doesn't it?

Burk: Businesses have a bottom line. In government it is less clear. Am I built to be agile? Am I built to be consistent and constant over time? Am I built to be fair? Do I have to be totally secure all the time? You have so many competing interests in the public sector. The legislative side does a wonderful job identifying

what needs to be done and what is really important. We need to go through a disciplined process to translate what needs to be done into how we do it. For example, the CDC is in the process of formulating what to do in response to a pandemic. But it is not doing that just for the CDC itself and its customers. It is doing it within the context of what the Department of Health and Human Services is doing, and that is being done in the context of what the federal government is doing. You are always part of a bigger organization. Architecture is the discipline by which you understand the context within which you are making these decisions.

BPMInstitute.org: And that is necessary at multiple levels.

Burk: For example, if you are going into a grant program, you have to authenticate who is receiving the grant. Well, you can waste a lot of time and money setting up your own authentication capability as part of a grant program. But why? You can buy that as a service and include it in what your doing. And that is one of the 24 e-government initiatives that we developed - a grant authentication service that is standardized across federal agencies and they have a variety of providers that they can choose from to authenticate people. It works through banks and other financial institutions. It is far cheaper to buy it as a service than build it themselves.

BPMInstitute.org: Why wouldn't somebody just buy the service?

Burk: Sometimes people working in one area don't know about that people are doing in another area. But the architecture and data discipline we have forces them to take a look at at the work others are doing and the services being provided. They can say that this is a service they can buy and they can spend their money on the core mission rather than on

building an authentication capability.

BPMInstitute.org: So what are your plans moving forward?

Burk: More and more of these cross-agency initiatives will be coming out of Congress and other sources. You have an information-sharing environment emerging. You need to have information sharing to fight terrorism. Developing the next generation air transportation system - which is looking out to the year 2025 - requires asking the Federal Aviation Administration, NASA, the National Weather Service, the Transportation Security Administration, all of the players, to come together and plan what the air transportation system is going to be in the next 15 to 20 years. The Presidential order on disaster victim assistance said that we have to coordinate assistance to disaster victims across multiple agencies. The more we focus on the citizen and the less on agencies and programs, the more we are going to come up with these cross-agency initiatives.

BPMInstitute.org: From time to time, new agencies are formed to facilitate that sharing - the Department of Homeland Security, for example?

Burk: We did it with the Federal Highway Administration in the 1950s, HUD in the 1960s and the Department of Energy in the 1980s. But it is very hard to do and takes a long time. We have to find a way to work with the existing organizations, to work across agencies. There are a lot of issues - the pandemic issue, global interdependence, national security, that cut across not only the federal government but state and local government; and they include the private, non-profit and public sectors. What we need is a methodology and language that will allow us to work across the organizational entities to achieve common goal. The Federal Enterprise Architecture provides that - a language to work with and a disciplined methodology. It brings people together.

BPMInstitute.org: How difficult is it to get the stakeholders to buy in?

Burk: It varies. A lot of stakeholders have longed for it. They had the need but didn't have the discipline and direction from above. The Information Technology Management Reform Act of 1996 said that every agency is going to have an enterprise architecture and you are going to use this architecture to inform and guide investments. That was reinforced in the E-Government Act of 2002. OMB was given a leadership role and a mandate to figure out how we are going to use technology to fulfill the mission of the agencies. We are going to do that.

BPMInstitute.org: Is the momentum strong enough to survive administration changes?

Burk: This has to work for the citizens and the employees of the federal government. If it doesn't it will go away. But the logic is compelling and it has been demonstrated in the private sector. We want to get to the point where people will say that they would not formulate a budget without an architecture.

BPMInstitute.org: Will the Federal Enterprise Architecture help ensure the success of major Federal IT initiatives?

Burk: If you spend the time upfront to articulate the need in business terms in a disciplined way and have a process so when the needs change, the changes can be incorporated into the design, you can have something that will last for a long time. It can be totally adaptable and meet the needs of successive customer bases. And you need the discipline of managing expectations, identifying what the problems are when they occur and take action to solve the problem when it is still in a nascent state. This is totally within our ability to accomplish. We can do this.