



Testimony of  
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Before  
The House of Representatives  
Committee on Government Reform  
Subcommittee on Technology, Information Policy, Intergovernmental Relations  
and the Census  
May 19, 2004

Mr. Chairman and members of the Subcommittee, thank you for inviting me to appear before you today to discuss progress being made by OMB and federal agencies in developing and implementing enterprise architectures.

As you may know, the Council for Excellence in Government is a non-partisan, non-profit organization that has been dedicated for more than 20 years to helping government improve the quality of its performance and to increase the public's participation and confidence in government. We work to catalyze reform in government by providing forums for citizen engagement and building bridges between industry best practices and the desired goal of high performance government. We applaud the work of this Subcommittee and your leadership in providing essential congressional oversight focused on the measured progress that OMB and the agencies are making in using technology to enable high quality and cost effective services to the public.

As demonstrated by our regular national public opinion polls and most recently our Homeland Security town halls around the country, citizens want government that is accountable, convenient, easy to navigate, and accessible. The Federal Enterprise Architecture developed by OMB over the last two years is an essential element in defining and providing streamlined and simplified government to the American public.

In its simplest form, the FEA is comprised of five basic reference models that focus on:

- Defining functional lines of business that describe the business operations of the federal government independent of the agencies that perform them (*the Business Reference Model*),

- Measuring the performance of major IT investments and their contribution to line of business and agency program performance (*the Performance Reference Model*),
- Identifying reusable software applications, process automation services, business management services, transactional services, and customer services on a government wide basis (*the Service Component Reference Model*),
- Describing the data and information used in interactions and exchanges that support program and business line operations throughout government (*the Data and Information Reference Model*), and
- Identifying the standards, specifications, and technologies that support the construction and exchange of service components that can be leveraged in component-based or shared services-oriented architectures (*the Technical Reference Model*).

The FEA also provides an important foundation for the President's Management Agenda and its goal of achieving electronic government, financial management, performance and budget integration, and human capital goals. The FEA has provided crisp analyses of government "as it is" and offered a vision of where it can be – showing with amazing clarity and reality the program and business patterns of government.

This process has identified unparalleled opportunities to eliminate unnecessary overlap, redundancies, and inefficiencies in how citizens, businesses, and government employees interact with government and the programs and services it delivers. Why, for example, would government require businesses to submit virtually identical information to the federal government through dozens of different processes, different forms, and with varying degrees of efficiency? Why would we have over two dozen major payroll systems that perform the same basic function but with enormous variances in cost per transaction? The work underlying the FEA has provided unparalleled transparency into how the federal government operates. Moreover, performance outcomes and budget decisions can be more tightly linked using the FEA frameworks as guideposts.

The FEA effort itself – focused on using basic reference models for defining and aligning federal business functions and its supporting IT – represents leading edge practice. Only a handful of large companies have this kind of reference framework in place and other countries around the world astonished at the process used and its deliverables to date. The key to this progress has been focused leadership from OMB, disciplined controls, and a dedicated partnership between government and industry to make it happen.

Nonetheless, make no mistake: This difficult endeavor is full of challenges. The goal is not simply to provide a single, overarching enterprise architecture for the entire federal government. Rather, the FEA seeks to facilitate cross-agency

analysis and identification of duplicative investments, performance gaps, and opportunities for cross-agency collaboration on similar activities. The work in the trenches is far from finished and we find ourselves at a critical crossroads. We must stay the course if we expect to use the frameworks to bring cost efficient and effective service delivery to the public. It will require constant focus, disciplined management, and executive leadership, and a willingness to accept improvements along the way. The payoff can be huge for government performance improvement in terms of identifying opportunities to re-use and re-deploy IT assets across the government. Not only can this help achieve cost savings; it can also grow public confidence, trust, and satisfaction with government itself.

In my remarks today, I want to focus on three critical challenges related to the future of enterprise architectures in the federal government: (1) ensuring disciplined agency architecture maturity and alignment, (2) concentrating on tangible outcomes and measures of impact, and (3) providing continuous, focused leadership.

Let me begin with *disciplined maturity and alignment*. There are simply too many moving pieces within and across the federal government's myriad of programs, policies, and services to manage without enterprise architectures in place. Government programs have grown up over time, responding to time sensitive needs, crises, and public demand. Enterprise architectures provide a disciplined means to map the "business" of government and its corresponding data, information flows, and processes. It can bring visible structure and rigor to understanding what an organization does and the work processes, data, and technology which is attempting to enable mission outcomes.

There is good news in that several methodologies, tools, and assessment frameworks are available to agencies. For example, to assist in analyzing and benchmarking agency maturity in putting core elements of enterprise architectures in place, GAO has also created its own Enterprise Architecture Maturity Model Framework. There is a great deal of consensus in the federal IT community on the framework's value in providing a thorough, comprehensive assessment of agency EA progress. Its focus on performance and security, metrics for measuring EA development, quality, and use, and recognition of the need for using accepted EA methodologies, combined with independent verification and validation, are strong points. Additionally, OMB has created a web-based management system to help discover components, business services, and capabilities across the federal government. OMB has also recently augmented this with its own Enterprise Architecture Assessment Framework. In short, we don't have a shortage of models, guidance, tools, and assessment processes.

The key is ensuring that agencies design and implement their architectures using foundational principles and management processes identified

in the methods, tools, and assessment frameworks. Over the decades, the federal landscape is strewn with sizeable and costly efforts to define enterprise architectures. Most have been little more than abstract, paper product drills that have not been complete or never moved into real implementation and enforcement with corresponding management processes and executive oversight. The GAO assessment framework provides an invaluable way to examine real progress and maturity based on the best of available commercial and public sector approaches.

We must get federal agencies up to par in order to deliver cost effective and high performance government services to the public. As GAO has reported, current agency progress in designing and implementing enterprise architectures is mixed at best. On its maturity scale ranging from one to five, average agency maturity has hovered around 1.75 for the last three years. As noted in GAO's recent government wide assessment, only 22 agencies increased their maturity stage, while 24 declined and 47 remained the same. Still, there are bright spots of progress and maturity as illustrated by efforts at Veterans Affairs, EPA, OPM, HHS, Treasury, DOD, IRS, and the Executive Office of the President. Lack of top management understanding and commitment and of maintaining adequate funding levels for EA development, plus the absence of skilled staff and simple parochialism, offer significant challenges thwarting continuity of design efforts and implementation. Without continued emphasis on disciplined approaches and follow-up management commitment, progress will remain difficult.

But putting agency centric enterprise architectures in place stops short of the true transformation they can help create. We must have both vertical alignment within agency boundaries and horizontal alignment across common functions and business processes of government. As we move forward, it is imperative that agencies construct architectures that are aligned with the FEA and its push toward process and systems consolidations. The FEA provides a true "portfolio" view of government programs, processes, and investments. Moreover, it offers a viable, collaborative way to analyze and approve budget requests that surface from agency-centric ways of doing business. Integrating enterprise architecture work with IT capital planning and investment decision-making, and ultimately performance and budget reporting, should be the norm, not the exception.

Let me turn to the "so what" of using enterprise architectures. We must see measurable impact on performance or a return on investment from the time and effort required to design, implement, and manage architecture efforts.

Traditionally, enterprise architectures are valued for their ability to:

- simplify and streamline processes and the supporting technology infrastructure,
- achieve greater levels of interoperability and thus enhanced data sharing capabilities,
- increase flexibility in adapting to technology change,

- deliver applications and systems faster and more cost effectively,
- reduce the overall cost of technology support by eliminating systems redundancy, duplicative data storage, and re-use of application components,
- align technology tightly with business drivers and needs,
- deliver systems on or ahead of schedule, and
- maintain highly reliable, dependable IT service levels.

Measuring compliance with proven methodologies and approaches is one way of determining whether process maturity is occurring. This kind of performance reporting and feedback is valuable and necessary, but by itself not sufficient. Being able to demonstrate productivity gains, cost improvements in the delivery of IT, and cost savings from systems consolidation and component or application re-use are equally important tangible measures of return.

But “real” returns are those that measure impact on direct mission related performance. If architectures are done well, we should expect visible changes in program or service delivery outcomes. For example, if DHS can demonstrate through its enterprise architecture efforts that it is able to identify homeland security threats in minutes or hours rather than days or weeks, then real change has occurred. Similarly, if an industry can submit the same registration or regulatory compliance information on-line once to government rather than numerous times to many agencies in different formats, then lower administrative costs and internal productivity gains to the industry are also a very real impact from the associated reduction in the reporting burden. Further, if social security or veterans’ disability claims can be resolved in hours or days because of people, process, and technology improvements that minimize unnecessary data collection and get the right information to claims specialists in a timely, reliable manner rather than taking months or Herculean efforts, we have truly achieved a real return on investment.

This brings me to a final key point. Enterprise architecture work requires leadership and executive understanding, commitment, participation, and constant attention. This work cannot be the sole purview of CIOs and their staffs. The front pieces of the Business Reference Model, the Performance Reference Model, and the Service Delivery Models have to be co-led by the business or program divisions. Governance structures and decision processes must be in place to make this a reality.

One of the most pressing leadership needs confronting us now is filling the position of the Chief Architect in OMB’s Office of eGovernment and Information Technology. Progress is in a perilous position as long as this position remains unfilled. This individual leads the important work of the FEA Program Management Office and is the most visible spokesperson for architecture work in the federal government. This void comes at a time when the remaining Data Reference Model is being finalized and vetted within government. The person

chosen for this important position must be a credible, experienced authority in enterprise architecture development and implementation and provide government wide direction to the continuing development, guidance, and oversight of the FEA and agency architectures.

More importantly, the Chief Architect position requires someone with strong outreach and communication skills. The individual must translate the core value of using enterprise architectures as a means of controlling IT investments and achieving cross-agency service delivery synergies essential to achieving high performance government. Working collaboratively with chief architects in the agencies, this individual must engage in constant, constructive dialogues with agency heads, program executives, Chief Financial Officers, and the Congress. We urge the Administration to move with careful but expedient consideration in making this important selection.

The chief architects serving in agencies across the government must also work as a collaborative, cohesive force and be equally engaging with non-IT executives. Importantly, this group recently convened its first government wide forum to network and exchange ideas. The Council is working to ensure that this forum continues as a means of identifying best practices, lessons learned, and conducting broad outreach and problem solving. The Chief Architect is a natural leader for this group and its cause.

In conclusion, Mr. Chairman, having enterprise architectures in place in government is paramount to achieving real performance outcomes. They are engines of change and instruments of sorely needed management control over orderly transformational changes. As we move forward, transparency, accountability, and results that translate into better government for the American public should be front and center. OMB must continue to exercise strong government wide leadership, working collaboratively with agencies but maintaining vigilance in its budget and accountability oversight. Agency leaders must involve themselves in enterprise architecture governance and evaluate progress and performance results. Lastly, it is imperative that the dialogue extends beyond this Subcommittee and into the agendas of the budget, appropriations, and agency oversight committees of the Congress.

Thank you.