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BEFORE THE
COMMITTEE ON HOMELAND SECURITY AND GOVERNMENTAL AFFAIRS
UNITED STATES SENATE

MAY 25, 2011

"How to Save Taxpayer Dollars: Case Studies of Duplication in the Federal Government"

Good morning, Chairman Lieberman, Ranking Member Collins, and Members of the Committee. Thank you for the opportunity to testify on our efforts to eliminate waste and duplication in the Federal Government's information technology (IT) spending.

During his State of the Union Address, President Obama spoke about overlapping programs and redundant spending across government. Many of these programs depend on IT, leading to a proliferation of duplicative systems. Our organizational and structural redundancies have been mirrored as the government has increasingly moved into the digital world. As the President said, "we live and do business in the Information Age, but the last major reorganization of the government happened in the age of black-and-white TV."

And the way we fund IT, agency-by-agency, bureau-by-bureau, only adds to the duplication, hindering our ability to share services government-wide. Even the best-intended efforts for cooperation between and even within agencies are often met with organizational friction, if not total obstruction.

We need look no further than the very infrastructure that powers our IT systems to see evidence of wasteful and duplicative investments. Since 1998, the number of Federal data centers has more than quadrupled, from 432 to more than 2000. And too often agencies rely on custom, proprietary applications that reinforce organizational silos.

Our approach to eliminating duplication and cracking down on wasteful IT spending includes:

- ***Eliminating duplicative IT infrastructure*** that has enabled the proliferation of hundreds of redundant applications from human resources management systems to email, and leveraging game-changing technologies, such as cloud computing, to find efficient solutions that can be shared across the government.
- ***Reforming Federal IT management*** by making the tough decisions to terminate investments where necessary and using architecture to drive implementation.
- ***Streamlining service delivery*** by simplifying access to government services so that the American people don't have to navigate thousands of websites to find what they are looking for.

Already, these efforts have led to data centers being shut down, billions of dollars in cost reductions, and better access to government services for the American people. We are focused on addressing the structural barriers that get in the way of consistent execution, to create an environment that will help prevent duplication and waste.

Eliminating Duplicative IT Infrastructure

Much as overlapping programs have spawned duplicative IT investments, the proliferation of infrastructure has created an environment that enables redundant systems and applications to sprout like weeds. On the infrastructure side, from 1998 to this year, the number of data centers has increased from 432 to more than 2,000 – leading to more than: 24,000 websites, 500 human resources management systems and 500 financial management systems. Rather than attempting to pull the weeds individually as we've done over that last four decades, we have developed a new approach. We are attacking the problem by consolidating our fragmented infrastructure data center-by-data center and moving to lightweight, shareable technologies, such as cloud computing, that allow agencies to pay for only the resources they consume.

Data Center Consolidation

To reverse the unsustainable trend in data center growth, we are eliminating 800 duplicative data centers in the next four years. Last month, we announced 137 specific data centers to be closed by the end of this year, of which 39 have already been shut down. For example, HHS is shutting down a 14,992 square foot data center in Rockville, Maryland that consumes $1.2 million in electricity annually (Figure 1).

Figure 1: HHS Data Center, Shutdown Underway

The goal of the Federal Government's data center consolidation initiative is to free up resources to support mission-critical activities; reduce the overall energy and real estate footprint of Federal data centers; and improve the government's IT security posture. Furthermore, in shutting redundant and under-utilized data centers, we are starving the duplicative infrastructure that breeds unnecessary applications and wasteful IT.

Cloud Computing

We must also shift the government's mindset from asset ownership to a utility-based model, in which agencies pay for only the resources and services they consume. By leveraging shared infrastructure and economies of scale, "light technology" or cloud computing services[1], agencies are able to measure and pay for only the IT resources they consume, increase or decrease their usage to match requirements and budget constraints, and leverage the shared underlying capacity of IT resources.

To harness the benefits of cloud computing, we have instituted a "Cloud First" policy through the "Federal Cloud Computing Strategy."[2] This policy is intended to accelerate the pace

[1] The National Institute of Standards and Technology defines cloud computing as "a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction."

[2] http://www.cio.gov/documents/Federal-Cloud-Computing-Strategy.pdf.

at which the government will realize the value of cloud computing by requiring agencies to evaluate safe, secure cloud computing options before making any new investments.

Agencies are already taking advantage of the benefits afforded by the cloud, by reducing their ownership costs, improving productivity, and provisioning and scaling faster than ever before. For example, the Department of Agriculture (USDA) is migrating 120,000 users across 5,000 locations to the cloud, reducing costs by $27 million over a five-year period, while the General Services Administration (GSA) is shifting 17,000 users to the cloud, reducing costs by $15 million over the next five years.

Agencies are pursuing cloud-based opportunities in a number of areas such as collaboration, infrastructure, cybersecurity, business intelligence and workflow. For example, 15 agencies identified approximately 100 collaboration systems serving 950,000 users that will move to the cloud. On May 9th, GSA issued a request for proposals for a consolidated, cloud-based collaboration platform.

Reforming IT Management

Federal IT is not immune to the laws of physics, especially entropy. Simply put, left alone, things tend to move from order to disorder. That is why we developed the "25-Point Implementation Plan to Reform Federal Information Technology Management" to remove the structural barriers that get in the way of consistent execution.

We are transforming the way we manage the Federal Government's IT projects – using transparency to shed light on government operations and to hold government managers accountable for results. And we are also fundamentally rethinking the role of enterprise architecture across the government.

Managing the Federal Government's IT Projects

In June 2009, we launched the IT Dashboard, which transformed the way we look at Federal IT investments, making information on the performance of IT projects, such as project budgets and schedules, publicly available and constantly updated.

Using the Dashboard, anyone from agency officials to the American public can now identify and monitor the performance of IT projects, just as easily as they can monitor the stock market or baseball scores. It shows budget, schedule and performance metrics. If a project is behind schedule or over budget, the Dashboard tells you that.

The Dashboard also ends the days of faceless accountability. It provides not only the contact information for the agency official responsible for the project, but also shows you their

picture and lets you contact them directly to provide feedback on the project's performance (Figure 2).

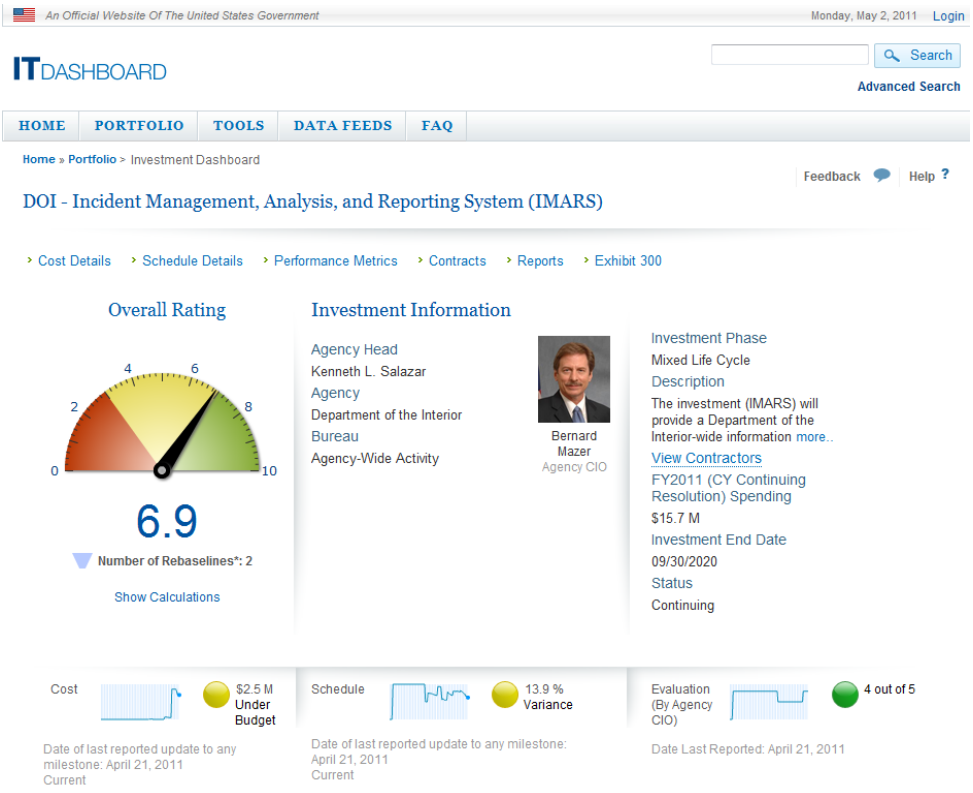

Figure 2: IT Dashboard Screenshot

In January 2010, we held the first TechStat Accountability Session. A TechStat session is a face-to-face, evidence-based review of an IT program, undertaken with OMB and agency leadership and powered by the IT Dashboard. Meetings conclude with concrete action items, with owners and deadlines that are formalized in a memo and tracked to completion. This improved line of sight between project teams and senior executives increase the precision of ongoing measurement of IT program health.

In June 2010, we halted all financial system modernization projects and required agencies to ensure that project plans were focused only on critical functionality and systems were broken down into small frequent deliverables. Then, in August 2010, OMB targeted 26 of the highest priority IT investments with TechStats to ensure they deliver value to the American people. In addition, under the IT Reform Plan, we have scaled the TechStat model to the agency level, with over 80 TechStats already held this year across government.

So far this approach has already reduced life cycle costs of major IT investments by $3 billion and decreased the average time for delivery of meaningful functionality from over two years to eight months.

Architecture and Standards You Can Use

Enterprise architecture (EA) is a management practice for aligning resources to improve business performance, to help agencies better execute their core missions. An EA describes the current and future state of the agency, and lays out a plan for transitioning from the current state to the desired future state. Architecture should serve as a compass, to help point agencies get to true north.

Yet for decades, it has been a costly paperwork exercise, producing binder after binder, rarely getting us anywhere. We are too often focused on painstakingly reconstructing the past at the expense of developing practical solutions to take on the challenges of the future. We cannot architect our way out of problems by producing artifacts that sit in metal cabinets across Washington that nobody reads or understands.

That is why we are focused on architecture that meets the needs of the agencies: nimble and practical, not an exercise to be undertaken for its own sake. We are using architecture to lower the cost of government operations, promote interoperability and reduce waste and duplication.

In 2008, the Department of Justice leveraged the National Information Exchange Model (NIEM) standard to lower the cost of interfacing from legacy police department records systems to the Law Enforcement National Data Exchange (N-DEx) by over 95 percent, from $250,000 to $10,000.

The Department of Defense and the Department of Veterans Affairs have collaborated to develop standards for electronic health records, and recently announced their intention to move to one shared system, fulfilling the President's goal of enabling records to follow members of the armed forces "from the day they first enlist to the day that they are laid to rest." The resulting joint system, serving more than 15 million patients annually, will combine functionality from VA's Veterans Health Information Systems and Technology Architecture (VistA) and DoD's Armed Forces Health Longitudinal Technology Application (AHLTA).

Agency data in the IT Dashboard has helped unearth duplication across the Federal government. The Dashboard reveals over 500 HR systems, 500 financial management systems, 260 project management systems, and 200 identity management systems in operation across Federal agencies.

Enterprise architecture, practiced consistently at the system, program, agency, and inter-agency levels will help to eliminate waste and duplication in each of these important mission support areas.

Streamlining Service Delivery

To keep pace with the public's expectations and to respond to budget pressures that demand that we do more with less, the Federal Government must deliver services better, faster, and at lower cost.

While many Federal websites provide timely and accurate information and services, too many others are redundant, outdated, hard to use, or poorly maintained. There are nearly 2,000 top-level Federal websites; within these top-level domains, there are thousands of additional sub-sites and microsites, resulting in more than 24,000 websites of varying design, navigation, usability, and accessibility.

On April 27th, President Obama issued Executive Order 13571, which directs agencies to provide services in a manner that seeks to streamline service delivery and improve the experience of its customers. As part of this effort, agencies are identifying websites that can be consolidated or eliminated to simplify access to government services and lower the cost of government operations.

Conclusion

As part of a broader IT transformation, the Federal Government needs to fundamentally shift its mindset from building custom systems to adopting light technologies and shared solutions. Too often, agencies build large standalone systems from scratch, segregated from other systems. These systems often duplicate others already within the Federal Government, wasting taxpayer dollars. Despite spending more than $600 billion on information technology over the past decade, the Federal government has achieved little of the productivity improvements that private industry has realized from IT. Eliminating duplicative IT infrastructure, reforming Federal IT management and streamlining service delivery are at the core of the Administration's approach to root out waste and duplication throughout government. Our focus on execution has already produced results, from terminating duplicative investments to shutting down duplicative infrastructure. I appreciate the work this Committee has done in this area—as you well know, the magnitude of duplication is going to require all of us to continue to work together.

Thank you for the opportunity to appear today and I look forward to answering questions.