25 POINT IMPLEMENTATION PLAN TO REFORM FEDERAL INFORMATION TECHNOLOGY MANAGEMENT

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**25 Point Implementation Plan to Reform Federal Information Technology Management**

**The White House, 1600 Pennsylvania Avenue NW, Washington, DC, 20500**

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Table of Contents

Introduction ................................................................. 1

PART I: ACHIEVING OPERATIONAL EFFICIENCY ......................... 3

A. Apply “Light Technology” and Shared Solutions ....................... 5
    1. Complete detailed implementation plans to consolidate at least 800 data centers by 2015 .... 5
    2. Create a government-wide marketplace for data center availability ......................... 6
    3. Shift to a “Cloud First” policy .................................. 6
    4. Stand-up contract vehicles for secure IaaS solutions ............................... 8
    5. Stand-up contract vehicles for commodity services .................................. 8
    6. Develop a strategy for shared services ................................... 8

PART II: EFFECTIVELY MANAGING LARGE-SCALE IT PROGRAMS .... 11

B. Strengthen Program Management ....................................... 13
    7. Design a formal IT program management career path ......................... 13
    8. Scale IT program management career path government-wide .................. 14
    9. Require integrated program teams ................................ 14
   10. Launch a best practices collaboration platform .......................... 15
   11. Launch technology fellows program ................................ 15
   12. Enable IT program manager mobility across government and industry .......... 16

C1. Align the Acquisition Process with the Technology Cycle .......... 17
   13. Design and develop a cadre of specialized IT acquisition professionals ........... 17
   14. Identify IT acquisition best practices and adopt government-wide ............... 19
   15. Issue contracting guidance and templates to support modular development ....... 19
   16. Reduce barriers to entry for small innovative technology companies .......... 20
C2. Align the Budget Process with the Technology Cycle ........................................... 23
  17. Work with Congress to develop IT budget models that align with modular development  23
  18. Develop supporting materials and guidance for flexible IT budget models ................. 24
  19. Work with Congress to scale flexible IT budget models more broadly ..................... 25
  20. Work with Congress to consolidate commodity IT spending under Agency CIO ......... 25

D. Streamline Governance and Improve Accountability ............................................. 27
  21. Reform and strengthen Investment Review Boards ............................................ 27
  22. Redefine role of Agency CIOs and Federal CIO Council ..................................... 28
  23. Rollout “TechStat” model at bureau-level ......................................................... 29

E. Increase Engagement with Industry ...................................................................... 31
  24. Launch “myth-busters” education campaign ...................................................... 31
  25. Launch interactive platform for pre-RFP agency-industry collaboration .................. 32

Summary .................................................................................................................. 33
Introduction

Information technology should enable government to better serve the American people. But 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. Too often, Federal IT projects run over budget, behind schedule, or fail to deliver promised functionality. Many projects use “grand design” approaches that aim to deliver functionality every few years, rather than breaking projects into more manageable chunks and demanding new functionality every few quarters. In addition, the Federal Government too often relies on large, custom, proprietary systems when “light technologies” or shared services exist.

Government officials have been trying to adopt best practices for years – from the Raines Rules of the 1990s through the Clinger Cohen Act and the acquisition regulations that followed. But obstacles have always gotten in the way. This plan attempts to clear these obstacles, allowing agencies to leverage information technology to create a more efficient and effective government.

Over the last 18 months, we have engaged the Federal IT, acquisition, and program management communities; industry experts; and academics. We have conducted listening sessions with Congress, Agency CIOs, and Senior Procurement Executives. We have received detailed input and recommendations from many industry groups such as TechAmerica. This engagement process has led to recommendations for IT reform in the areas of operational efficiency and large-scale IT program management.

A 25 point action plan is detailed below to deliver more value to the American taxpayer. These actions have been planned over the next 18 months and place ownership with OMB and agency operational centers, as appropriate. While the 25 points may not solve all Federal IT challenges, they will address many of the most pressing, persistent challenges. This plan requires a focus on execution and is designed to establish some early wins to garner momentum for our continued efforts. Active involvement from agency leadership is critical to the success of these reforms. As such, the Federal CIO will work with the President’s Management Council to successfully implement this plan.

Some highlights of the implementation plan include:

- Turnaround or terminate at least one-third of underperforming projects in IT portfolio within the next 18 months
- Shift to “Cloud First” policy. Each agency will identify three “must move” services within three months, and move one of those services to the cloud within 12 month and the remaining two within 18 months.
- Reduce number of Federal data centers by at least 800 by 2015
- Only approve funding of major IT programs that:
  - Have a dedicated program manager and a fully staffed integrated program team
  - Use a modular approach with usable functionality delivered every six months
  - Use specialized IT acquisition professionals
• Work with Congress to:
  – Consolidate commodity IT funding under the Agency CIOs and
  – Develop flexible budget models that align with modular development
• Launch an interactive platform for pre-RFP agency-industry collaboration

This plan is divided into two sections: Achieving Operational Efficiency and Managing Large-Scale IT Programs Effectively. The first section outlines the steps being taken to adopt cloud solutions and leverage shared services. The second section covers the structural areas that impact the success rates of large IT programs across government. The 25 action items listed throughout the plan are summarized in the chart at the end of the document.
PART I: ACHIEVING OPERATIONAL EFFICIENCY

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. The growth in data centers from 432 in 1998 to 2,094 in 2010 highlights this problem.

Leading private sector companies have taken great strides to improve their operating efficiencies. Cloud technologies and Infrastructure-as-a-Service enable IT services to efficiently share demand across infrastructure assets, reducing the overall reserve capacity across the enterprise. Additionally, leveraging shared services of “commodity” applications such as e-mail across functional organizations allows organizations to redirect management attention and resources towards value-added activities. The massive scale of the Federal Government allows for great potential to leverage these efficiencies.

The following section outlines actionable, achievable steps to improve the government’s operational efficiency.
A. Apply “Light Technology” and Shared Solutions

The shift to “light technologies,” that is, cloud services, which can be deployed rapidly, and shared solutions will result in substantial cost savings, allowing agencies to optimize spending, and allowing agencies to reinvest in their most critical mission needs. For example, GSA recently entered into a contract to shift email services to the cloud, resulting in a 50% cost reduction over five years – a savings of about $15 million. Agencies must focus on consolidating existing data centers, reducing the need for infrastructure growth by implementing a “Cloud First” policy for services, and increasing their use of available cloud and shared services.

1. Complete detailed implementation plans to consolidate at least 800 data centers by 2015

In February 2010, the Administration launched the Federal Data Center Consolidation Initiative (FDCCI) and issued guidance for Federal CIO Council agencies. The guidance called for agencies to inventory their data center assets, develop consolidation plans throughout fiscal year 2010, and integrate those plans into agency fiscal year 2012 budget submissions.

The FDCCI is aimed at assisting agencies in identifying their existing data center assets and formulating detailed consolidation plans that include a technical roadmap and clear consolidation targets. The FDCCI will cut down the number of data centers across the government and assist agencies in applying best practices from the public and private sector, with goals to:

- Promote the use of Green IT by reducing the overall energy and real estate footprint of government data centers
- Reduce the cost of data center hardware, software, and operations
- Increase the overall IT security posture of the government, and
- Shift IT investments to more efficient computing platforms and technologies.

After an 8 month peer review process, we now know that the government is operating and maintaining almost 2,100 data centers. Through the FDCCI, a minimum of 800 data centers will be closed by 2015.

To meet this reduction target, OMB and Agency CIOs will take the following steps:

1.1 Identify agency data center program managers to lead consolidation efforts

Large IT projects often fail to meet goals because of distributed accountability for success. Large, complex, and critical infrastructure programs, such as data center consolidation, require a single person to lead the coordinated effort.

Within the next six months, each agency will designate a senior, dedicated data center consolidation program manager with project management experience and technical competence in IT infrastructure. Because data center consolidation requires interactions with many stakeholder groups, the data center
program manager must also have strong communication skills. The data center program manager at each agency will be responsible for developing a plan with interim, verifiable milestones to reach the agency’s data center reduction target and monitor progress toward those goals.

1.2  **Launch a Data Center Consolidation Task Force to ensure successful execution**

Within the next three months, the Federal CIO Council will launch a government-wide Data Center Consolidation Task Force comprised of the data center program managers, facilities managers, and sustainability officers. The Data Center Consolidation Task Force will be responsible for working together to share progress toward individual agency goals and the overall Federal target of a minimum of 800 data center closures by 2015. The Data Center Consolidation Task Force will meet monthly to review progress of each consolidation project and ensure government-wide alignment between agency efforts where appropriate. The Task Force will serve as a “community of practice” for Agency CIOs and data center program managers to share best practices from this effort and enhance consolidation effectiveness.

1.3  **Launch a publicly available dashboard to track data center consolidation progress**

OMB will launch a publicly available dashboard to serve as a window into progress of the data center consolidation program. The dashboard will ensure transparency and accountability, and keep the overall program in plain view of the public.

2.  **Create a government-wide marketplace for data center availability**

Within the next 18 months, OMB and GSA will create a government-wide marketplace that better utilizes spare capacity within operational data centers.

This online marketplace will match agencies with extra capacity to agencies with increasing demand, thereby improving the utilization of existing facilities. The marketplace will help agencies with available capacity promote their available data center space. Once agencies have a clear sense of the existing capacity landscape, they can make more informed consolidation decisions.

3.  **Shift to a “Cloud First” policy**

In the private sector, a web-based multimedia production company used the cloud to allow anyone with access to an Internet connection the ability to create their own fully customized, professional-quality, TV-like videos. Consumers can then share the resulting videos with friends and family across the world. The cloud allowed for a rapid response when demand jumped from 25,000 users to more than 250,000 users in three days, eventually reaching a peak rate of 20,000 new customers every hour. Because of the cloud, the company was able to scale from 50 to 4,000 virtual machines in three days to support increased demand on a real-time basis.

In contrast, the Federal Government’s Car Allowance and Rebate System (CARS, more commonly known as “Cash-For-Clunkers”) failed when faced with peak loads. To process the anticipated 250,000 transactions, the National Highway Traffic Safety Administration (NHTSA) deployed a customized commercial application hosted in a traditional data center environment on June 19, 2009. When dealer registrations
began on July 24, 2009, demand far exceeded initial projections, and within three days, the system was overwhelmed, leading to numerous unplanned outages and service disruptions. Ultimately, approximately 690,000 CARS transactions were processed. However, lacking the ability to scale rapidly, system stability was not achieved until August 28, 2009, over a month after registrations started coming in.

The Federal Government must be better prepared in the future. Beginning immediately, the Federal Government will shift to a “Cloud First” policy.

The three-part strategy on cloud technology will revolve around using commercial cloud technologies where feasible, launching private government clouds, and utilizing regional clouds with state and local governments where appropriate.

Cloud computing brings a wide range of benefits:

- **Economical**: Cloud computing is a pay-as-you-go approach to IT, in which a low initial investment is required to begin, and additional investment is needed only as system use increases.
- **Flexible**: IT departments that anticipate fluctuations in user demand no longer need to scramble for additional hardware and software. With cloud computing, they can add or subtract capacity quickly and easily.
- **Fast**: Cloud computing eliminates long procurement and certification processes, while providing a near-limitless selection of services.

When evaluating options for new IT deployments, OMB will require that agencies default to cloud-based solutions whenever a secure, reliable, cost-effective cloud option exists. To facilitate this shift, we will be standing up secure government-wide cloud computing platforms.

### 3.1 Publish cloud strategy

Within the next six months, the Federal CIO will publish a strategy to accelerate the safe and secure adoption of cloud computing across the government.

The National Institute of Standards and Technology (NIST) will facilitate and lead the development of standards for security, interoperability, and portability. NIST is working with other agencies, industry, academia, standards development organizations, and others to use existing standards as appropriate and develop cloud computing standards where gaps exist. While cloud computing services are currently being used, experts cite security, interoperability, and portability as major barriers to further adoption. The expectation is that standards will shorten the adoption cycle, enabling cost savings and an increased ability to quickly create and deploy enterprise applications.

### 3.2 Jump-start the migration to cloud technologies

Each Agency CIO will be required to identify three “must move” services and create a project plan for migrating each of them to cloud solutions and retiring the associated legacy systems. Of the three, at least one of the services must fully migrate to a cloud solution within 12 months and the remaining two within 18 months.
Each migration plan will include major milestones, execution risks, adoption targets, and required resources, as well as a retirement plan for legacy services once cloud services are online. These new cloud implementations should be compatible with the secure, certified platforms currently provided in the private sector. Migrating these services will build capabilities and momentum in the Federal Government, encourage industry to more rapidly develop appropriate cloud solutions for government, and reduce operating costs.

4. Stand-up contract vehicles for secure IaaS solutions

Federal, state, and local governments will soon have access to cloud-based Infrastructure-as-a-Service (IaaS) offerings. GSA’s IaaS contract award allows 12 vendors to provide government entities with cloud storage, virtual machines, and web hosting services to support a continued expansion of governments’ IT capabilities into cloud computing environments.

Within the next six months, after completing security certification, GSA will make a common set of contract vehicles for cloud-based Infrastructure-as-a-Service solutions available government-wide.

A government-wide risk and authorization program for cloud computing will allow agencies to rely on the authorization completed by another agency or to use an existing authorization, so that only additional, agency-specific requirements need to be separately certified. Our aim is to drive to a set of common services across the government supported by a community, rather than an agency-specific risk model. This will allow the Federal Government to “approve once and use often.”

5. Stand-up contract vehicles for commodity services

The Software-as-a-Service (SaaS) E-mail Working Group, formed in June 2010, has begun to identify and develop the set of baseline functional and technical requirements for government-wide cloud email solutions and is working towards developing business case templates for agencies who are considering transitioning to SaaS e-mail.

Within 12 months, GSA will utilize these requirements to stand up government-wide contract vehicles for cloud-based email solutions. GSA will also begin a similar process specifically designed for other back-end, cloud-based solutions.

6. Develop a strategy for shared services

Within the next 12 months, the Federal CIO will develop a strategy for shared services. That strategy will build on earlier Federal Government successes in shared services and include benchmarks on current usage and uptake rates, as well as service level agreements (SLAs), customer satisfaction levels, costs, and overall economic effectiveness.

Managing partners of shared services will assess the current state of shared services and each release a roadmap to improve quality and uptake. Ultimately, the managing partners will be responsible for executing these roadmaps and will be held accountable for improvements on SLAs and reductions in cost. These efforts will enable the current shared services to be accessible government-wide at higher quality levels.
### Action item owner and deadlines

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PART II: EFFECTIVELY MANAGING LARGE-SCALE IT PROGRAMS

IT has transformed how the private sector operates and has revolutionized the way in which it serves its customers. The Federal Government has largely missed out on these transformations, due in part to its poor management of large technology investments.

To address these execution problems, we launched the IT Dashboard in June 2009, allowing the American people to monitor IT investments across the Federal Government and shining a light onto government operations. While this unprecedented transparency was an important first step, it was not enough to simply shine a light on problems and hope that solutions would follow.

Building on the foundation of the IT Dashboard, we launched TechStat Accountability Sessions ("TechStats") in January 2010. A TechStat is a face-to-face, evidence-based review of an IT program with OMB and agency leadership. TechStat sessions enable the government to turnaround, halt, or terminate IT investments that do not produce dividends for the American people.

As a result of more than 50 TechStat reviews, OMB now has a sharper picture of the persistent problems facing Federal IT. One of the most consistent problems lies in project scope and timeline. In TechStat sessions, OMB found that many current IT projects are scheduled to produce the first deliverables years after work begins, in some cases up to six years later. In six years, technology will change, project sponsors will change, and, most importantly, program needs will change. Programs designed to deliver initial functionality after several years of planning are inevitably doomed.

Modular development delivers functionality in shorter timeframes and has long been considered best practice in the private sector and in some areas of government; in fact, both Raines Rules and the Federal Acquisition Regulation (FAR) advise agencies to plan programs in this way. Successful organizations using modular development base releases on requirements they define at a high level and then refine through an iterative process, with extensive engagement and feedback from stakeholders. To maintain the discipline of on-time and on-budget, organizations push out additional functionality and new requirements for major changes into future releases and prioritize critical needs and end-user functionality.

Evidence shows that modular development leads to increased success and reduced risk. However, because this is a new way of thinking about IT programs for some groups within government, it requires additional training, templates, and tools. Many existing government processes – from planning to budgeting to procurement – naturally favor larger, more comprehensive projects. As such, far too many Federal IT programs have multi-year timeframes well beyond the now accepted 18- to 24-month best practice. The activities outlined in this plan attempt to address the structural barriers to implementing modular development consistently across government.

Moving forward, Federal IT programs must be structured to deploy working business functionality in release cycles no longer than 12 months, and, ideally, less than six months, with initial deployment to end users no later than 18 months after the program begins.
Program managers need to define each phase of the IT development lifecycle and rigorously manage scope. These timelines should encompass the entire process – from concept through requirement analysis, development, test, and delivery. Today, a number of agencies have implemented these modular practices successfully. The Department of Veterans Affairs now requires that large IT programs deliver working functionality every six months.

The following practices will help achieve the promises of modular development:

- Ensuring each module aligns with overall program and business objectives and has clear quantitative and qualitative outcome measures for success
- Awarding contracts that incorporate clear business objectives and performance outcomes, a vision for future state architecture, and parameters for iterative design and development
- Delivering new working functionality to users at least every 12 months, with no more than 3 months dedicated to creating detailed system specifications
- Regularly capturing and incorporating user feedback through an iterative process that assesses user satisfaction with each release, continuously refining design to ensure alignment with business needs
- Preventing scope creep by defining high-level requirements upfront, locking down the current release, and pushing additional non-critical functionality to future releases
- Moving resources from one release phase to the next as soon as they complete their work (e.g., the requirements team builds requirements for the next release, while developers build current release)
B. Strengthen Program Management

Effectively managing modular IT programs requires a corps of program and project management professionals with extensive experience and robust training. Strong program management professionals are essential to effectively steward IT programs from beginning to end, align disparate stakeholders, manage the tension between on-time delivery and additional functionality, and escalate issues for rapid resolution before they become roadblocks. The size and criticality of large Federal Government IT programs are considerable. The people managing these programs must represent the best of the best.

Challenges with program management are pervasive across the Federal Government due to a general shortage of qualified personnel. However, pockets of excellence exist in the government. For example, the Social Security Administration (SSA) has developed a multi-tier career track for program managers that requires both training and experience for advancement. Program managers advance by gaining experience on small projects before moving to larger, more complex programs. SSA feels so strongly about the critical role of program managers that it will not begin a new program unless the right manager is in place and dedicated to lead it.

High-performing IT organizations have a well-developed program management talent strategy. The Office of Personnel Management (OPM), working with the Chief Human Capital Officers Council, will need to take steps to significantly enhance the supply of IT program management talent in the Federal Government. Steps include creating a career path to attract and reward top performers, establishing integrated, multi-disciplinary program teams with key skills before beginning major IT programs, requiring program managers to share best practices at the close of each program, launching a technology fellows program, and encouraging mobility of program managers across the government.

7. Design a formal IT program management career path

In the next six months, OPM, with input from agencies and OMB, will create a specialized career path for IT program managers (PMs). This will likely require creating a separate Occupational Series specific to IT program management within the current IT family with career advancement paths that are more competitive with the private sector. The path should require expertise and experience for advancement. It will also require the development of a competency model for IT program management consistent with the IT project manager model.

Finding, recruiting, and hiring top IT program management talent is challenging. In the next six months, OPM will work with OMB to provide agencies with direct hiring authority for IT PMs as necessary.

Further, agencies will identify specific IT program management competency gaps in the next Human Capital Management Report and develop specific plans to close the IT PM gap. To ensure that agencies are executing these plans, senior agency executives will review their progress and provide an interim report to OMB, 12 months after the next Human Capital Management Report is published.

OPM will work with the Department of the Treasury and the Department of Agriculture (USDA) to pilot the IT program management career track.
8. **Scale IT program management career path government-wide**

After piloting IT program management career paths at Treasury and USDA, OPM will work to expand the IT program management career paths more broadly across the Federal Government.

9. **Require integrated program teams**

A primary challenge impacting the successful delivery of IT programs is the need to manage a broad set of stakeholder communities, including agency leaders, business process owners, IT, acquisition, financial management, and legal. The typically siloed nature of government stakeholder communities is ill-suited for the multi-disciplinary and rapidly evolving needs of major IT program management processes.

High-performing private sector firms quickly bring together small multi-disciplinary, integrated program teams (IPTs) consisting of the following functions: business process owners who have a clear vision of the problem they are solving, IT professionals who understand the full range of technical solutions, acquisition professionals who plan and procure needed labor and materials, and finance staff to secure required funding. In addition, other functions such as HR and legal are included on the program team as needed. At the hub of these IPTs is a strong and effective program manager who stewards the process from beginning to end.

Examples of high-functioning IPTs exist in pockets of the Federal Government in which a complete IPT is required for major programs prior to beginning the investment review process. However, the practice is still only unevenly applied. The healthcare.gov initiative at the Department of Health and Human Services provides a good example of what a fully integrated multi-disciplinary team can do in the Federal Government. The healthcare.gov team successfully launched a citizen-facing website within 90 days of program initiation to rave reviews.

Over the next six months, OMB will issue guidance requiring an IPT, led by a dedicated, full-time program manager and supported by an IT acquisition specialist, be in place for all major IT programs before OMB will approve program budgets.

9.1 **Dedicate resources throughout the program lifecycle and co-locate when possible**

For each large IT program, critical members of the IPT will serve as full-time resources dedicated to the program. This must include a 100% dedicated IT program manager, but other roles will vary by program. Key members of the IPT will also be co-located during the most critical junctures of the program. This is especially important during the requirements-writing phase, when business, IT and acquisition must define and modify requirements in short iterative cycles, and when “translation issues” have historically caused problems.

The core of the IPT, including all IT program leadership roles, will be in place throughout the program lifecycle, from the initial concept development phase through the delivery of the last increment under the contract. For major IT investments, agency leadership will approve the composition of the integrated program team and the dedicated program manager.
9.2 **Agencies will hold integrated program team members accountable for both individual functional goals and overall program success**

A pervasive issue in government programs is that individual stakeholders focus primarily on performance metrics within their functions, and not on the holistic outcomes of the program. For example, IT or program staff may push to award work to a particular vendor, or to add “bells and whistles” that fail to take into account time pressures and budgetary constraints. Similarly, contracting staff may focus so much on competition requirements and small-business participation goals that they fail to look for solutions that meet these important requirements while also satisfying program needs. We need to replace these “stovepiped” efforts, which too often push in inconsistent directions, with an approach that brings together the stakeholders and integrates their efforts.

Agency executives will work with their senior procurement executives (SPEs), CIOs, and program leaders to take action and drive towards a more balanced set of individual and program success metrics based on the following two recommendations:

- First, agencies should set up individual performance goals that cover individual and program objectives. Performance goals for acquisition, IT, and business personnel need to include a combination of individual and program objectives.

- Second, agencies must also ensure that the individual and program metrics balance speed, quality, effectiveness, and compliance with Federal Acquisition Regulations. Supervisors must utilize a balanced set of performance metrics to evaluate individual performance. Individuals who provide exemplary contributions to the team will be recognized for their success (e.g., acquisition recognition through the Federal Acquisition Institute Awards & Recognition Program for individuals who effectively meet program needs without sacrificing compliance).

10. **Launch a best practices collaboration platform**

Within six months, the Federal CIO Council will develop a collaboration portal to exchange best practices, case studies, and allow for real-time problem solving. To institutionalize this best practice sharing, agency PMs will submit post-implementation reviews of their major program deliveries to the portal. These reviews will populate a searchable database of synthesized and codified program management best practices that all PMs can access.

11. **Launch technology fellows program**

Within 12 months, the office of the Federal CIO will create a technology fellows program and the accompanying recruiting infrastructure. By partnering directly with universities with well-recognized technology programs, the Federal Government will tap into the emerging talent pool and begin to build a sustainable pipeline of talent. The technology fellows programs should specifically target competency gaps that are identified in the Human Capital Management Reports submitted by agencies.

The program will aim to cut bureaucratic barriers to entering public service and provide access to unique career opportunities in government agencies. At the same time, these roles will provide new fellows with relevant training in large IT program management.
12. Enable IT program manager mobility across government and industry

The Federal CIO Council, OMB, and OPM, over the next 12 – 18 months, will be responsible for developing a process that will support and encourage movement of program managers across government and industry. Rotational opportunities allow the Federal Government to leverage its size to share knowledge and expertise across agencies. IT program managers with experience on specific types of programs or with specific types of systems should have opportunities to apply this experience on similar programs across government. Similarly, program managers should be given opportunities to learn from leading private companies. The Federal CIO Council, OMB, and OPM will work to design opportunities for industry rotation to allow Federal program managers to remain up-to-date with the latest skills while managing conflict of interest issues.

To support PM mobility, the Federal CIO Council will build a repository of information on all Federal Government IT PMs, including relevant background, specific expertise, implementation experience, and performance as part of its best practices collaboration platform.

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<td>Launch technology fellows program</td>
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<td>12</td>
<td>Enable IT program manager mobility across government and industry</td>
<td>OMB, CIO Council, OPM</td>
<td></td>
<td>✓</td>
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</table>
C1. Align the Acquisition Process with the Technology Cycle

The acquisition process can require program managers to specify the government’s requirements up front, which can be years in advance of program initiation. Given the pace of technology change, the lag between when the government defines its requirements and when the contractor begins to deliver is enough time for the technology to fundamentally change, which means that the program may be outdated on the day it starts.

The procurement reforms enacted in the 1990s provided tools to speed up the acquisition process, but the government has failed to take full advantage of those tools, so we continue to see programs delayed longer than the life of the technology. In particular, the use of multiple-award indefinite-delivery, indefinite-quantity (ID/IQ) contracts, called for in the 1994 Federal Acquisition Streamlining Act (FASA), was intended to allow quicker issuance of task orders, to be competed through streamlined “fair opportunity” mini-competitions among the multiple contract holders. The creation of government-wide acquisition contracts (GWACs) for purchasing IT goods and services was also intended to provide a limited number of specialized vehicles open to the entire government that could quickly respond to individual agency needs.

While the innovations in FASA have produced benefits, too often those tools are not used or not used effectively. IT acquisition, particularly for large projects, continues to move intolerably slowly. We need to make real change happen, by developing a cadre of specialized acquisition professionals and by educating the entire team managing IT projects about the tools available to streamline the acquisition process.

In addition, requirements are often developed without adequate input from industry, and without enough communication between an agency’s IT staff and the program employees who will actually be using the hardware and software. Moreover, agencies often believe that they need to develop a cost estimate that is low in order to have the project approved. As a result, requirements are too often unrealistic (as to performance, schedule, and cost estimates), or the requirements that the IT professionals develop may not provide what the program staff expect – or both. Speeding up the acquisition timeline and awarding more successful contracts for IT requires a multifaceted set of solutions including increased communication with industry, high functioning, “cross-trained” program teams, and appropriate project scoping.

13. Design and develop a cadre of specialized IT acquisition professionals

Effective IT acquisition requires a combination of thorough knowledge of the Federal acquisition system, including the tools available, a deep understanding of the dynamic commercial IT marketplace, and the unique challenges inherent to successfully delivering large IT programs in a modular time-boxed manner. Agency CIOs and SPEs advised that acquisition professionals who were specialized in IT were more effective. This specialization is also consistent with private sector best practice. To bring these
increased capabilities online, we will be creating standardized training and development opportunities to develop a cadre of acquisition professionals with the specialized knowledge and experience required to expedite complex IT acquisitions across the Federal Government.

Over the next six months, the Office of Federal Procurement Policy (OFPP) and the Federal CIO, with input from agencies, will design a specialized IT acquisition cadre. In doing so, they will need to answer the following questions:

- What is the process for acquisition professionals to become specialized in IT?
- How do professionals progress within the community (i.e., transition from entry-level through to senior contributor)?
- How do you ensure that community members can focus on participating in IT acquisition?
- What training, experience, and certification are needed?
- What will be the impact on the remaining acquisition workforce and non-IT acquisitions if some of the staff are dedicated to IT acquisition?

A number of agencies have already developed IT acquisition specialists who can serve as a means to expedite IT programs. Useful lessons can be learned from drawing on the experience of the GWACs and the staff that support them at GSA, NASA, and the National Institutes of Health (NIH).

In the case of smaller agencies, where IT-only acquisition groups may be impractical, leveraging GWACs or using specialized cadres at larger agencies through Economy Act transactions may be the best solution (e.g., the Department of Veterans Affairs’ Technology Acquisition Center and Treasury Department’s BPD Acquisition Resource Center). In addition, both the GWACs and these other agencies can potentially provide cross-functional support through experienced IT program management and technical staff. Access to these resources will, of course, not be limited to smaller agencies, as they can often provide an efficient alternative to in-house IT acquisition even for larger agencies. Particularly within the current budgetary constraints, agencies may have only a limited capability to hire new staff as candidates for the IT cadre, so drawing on other agencies’ resources may be vital to success.

13.1 Strengthen IT acquisition skills and capabilities

Within six months, OFPP, with input from agencies, will develop guidance on requirements for IT acquisition specialists. In addition, OFPP will develop guidance on curriculum standards to cross-train program managers and IT acquisition professionals.

In particular, the guidance will focus on increasing cross-functional knowledge of the IT marketplace, IT program management, and IT acquisition. OFPP will build upon its current Federal Acquisition Certification in Contracting (FAC-C) to develop a path for IT expertise. OFPP will leverage existing curriculum that may exist within agencies that already host specialized IT acquisition professionals. Skills development will include:

- Classroom training: OFPP will leverage and strengthen, where necessary, existing classes at the Federal Acquisition Institute (FAI) and the Defense Acquisition University (DAU), and engage these and other training providers to develop additional offerings as necessary.
• **On-the-job experience:** As is true with acquisition in general, the skills needed to successfully handle large IT acquisitions call for a blend of classroom training and on-the-job experience. For example, contracting professionals with hands-on IT experience are better equipped to help IT and program staff translate business and technical requirements into a statement of work that can help ensure a smooth procurement.

• **Mentorship:** Building a strong culture of mentorship enables IT acquisition professionals to more quickly learn “the art of the possible” to deliver effective IT acquisition solutions. OFPP can encourage this by building on FAI’s ongoing efforts to foster mentorship and networking opportunities, within and between agencies.

As an immediate action to implement these recommendations, OFPP will consider these initiatives as part of its review of the Federal Acquisition Certifications for Program/Project Managers (P/PMs), Contracting Officer Technical Representatives (COTR), and contracting professionals in the next six months.

### 14. Identify IT acquisition best practices and adopt government-wide

OFPP will lead an effort over the next six months to study the experience of those agencies that have already created specialized IT acquisition teams, in order to develop a model to scale more broadly. Among the key questions to be considered will be the length of time individuals need to spend devoted solely to IT acquisition in order to add value to IT program teams, the kind of training and experiences that are most valuable, appropriate organizational structures, and successful acquisition strategies and practices.

Drawing on that experience, OFPP should work closely with senior agency leadership at the Department of Homeland Security (DHS) and Department of Energy (DOE) as they rollout their IT acquisition cadres in the next year. The next step, over the following 18 months, is to scale the specialized IT acquisition cadre government-wide.

### 15. Issue contracting guidance and templates to support modular development

Over the next year, OFPP will work with the acquisition and IT communities to develop guidance on contracting for modular development. As part of this effort, OFPP will hold an open meeting with industry leaders to solicit ideas/feedback on contracting for modular development. OFPP will develop templates and samples, and will create communities of practice to facilitate adoption of modular contracting practices.

This guidance will address a variety of factors that IT program managers as well as contracting officers will need to consider as they plan for modular development efforts, such as whether to award to a single vendor or multiple vendors; how to ensure that there is appropriate competition at various stages in the process; how broad or specific the statements of work should be; when to use fixed-price contracts or rely on other pricing arrangements; and how to promote opportunities for small business. As noted above, the Federal Acquisition Streamlining Act of 1994 provides a variety of flexibilities for acquiring
commercial items and for streamlining competition that will be reflected in the guidance to ensure IT program managers and others are aware of existing authorities that can further support modular IT development.

When evaluating acquisition strategies, agencies will need to prioritize those solutions that promote short deadlines for deliverables (generally less than three months), allow for responsiveness to rapidly evolving program and technical requirements, and facilitate a streamlined award process. One innovative example is at the Department of Transportation (DOT), which has recently formed IT “Agility Platforms” with contract vehicles in place that simplify how business owners can quickly access technology.

16. Reduce barriers to entry for small innovative technology companies

Small businesses in the technology space drive enormous innovation throughout the economy. However, the Federal Government does not fully tap into the new ideas created by small businesses. Unlike larger, more established firms, new entrants have little at stake in current technological systems ranging from software standards, to operating system and file standards, to business processes. While large firms drive many incremental improvements to the status quo, smaller firms are more likely to produce the most disruptive and creative innovations. In addition, with closer ties to cutting edge, ground-breaking research, smaller firms often have the best answers for the Federal Government.

However, small businesses too rarely approach the Federal Government as a customer because of the real and perceived barriers to contracting. The sales process is perceived as lengthy and complex, and, therefore, not seen as worthwhile unless done at scale. Without existing knowledge or access to specialized lawyers and lobbyists, small firms default to more traditional channels. And given their limited size, small businesses often find it difficult to bid on the large chunks of government work that require a substantial workforce across many functional capabilities. Ultimately, the government contracting process is easier to navigate by large, existing players, who in turn dominate the volume of contracts and therefore create a track record making them “less risky” and more likely to win future contracts.

To address the barriers that small businesses face generally (both in IT and more broadly), in April 2010, the President established an interagency task force to make recommendations for improving the participation of small companies in Federal contracts. The task force made 13 recommendations in its August 2010 report, which are currently in various stages of implementation. Of the 13 recommendations, six were also included, in whole or in part, in provisions of the recently-enacted Small Business Jobs Act of 2010.

As part of this effort, and to enable small IT companies to work with the Federal Government, SBA, GSA, and OFPP will take concrete steps over the next 18 months to develop clearer and more comprehensive small business contracting policies.
### Action item owner and deadlines

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<tr>
<th>Action Item</th>
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<th>Within 6 mos.</th>
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<tr>
<td>13 Design and develop cadre of specialized IT acquisition professionals</td>
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<td>14 Identify IT acquisition best practices and adopt government-wide</td>
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<td>15 Issue contracting guidance and templates to support modular development</td>
<td>OFPP</td>
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<tr>
<td>16 Reduce barriers to entry for small innovative technology companies</td>
<td>SBA, GSA, OFPP</td>
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C2. Align the Budget Process with the Technology Cycle

The rapid pace of technological change does not match well with the Federal government’s budget formulation and execution processes. In addition, modular development means that lessons learned from an early cycle in an IT program will likely inform the detailed plans for the next cycle. As such, agencies need more flexibility to manage IT programs responsibly. To compensate for this misalignment between the realities of IT program management and the need for detailed budgets several years in advance, several agencies have worked with Congress to achieve greater IT budget flexibility through multi-year and/or agency-wide portfolio appropriations.

To deploy IT successfully, agencies need the ability to make final decisions on technology solutions at the point of execution, not years in advance. Agencies need the flexibility to move funding between investments or projects within their portfolio to respond to changes in needs and available solutions. But at the same time, Congress has a legitimate and important need for oversight; and given the history of project failures and wasted investments, it is understandable that Congress requires compliance with a rigid system for managing IT investments.

The Department of Veterans Affairs (VA) presents an interesting model. Greater budget flexibility has allowed the VA CIO to freeze projects that are off track and either restructure them for success or cancel them. VA established an accountability system so projects that are missing milestones are flagged early. Greater budget flexibility paired with real-time visibility is leading to success at VA – and minimizing the risk of “big bang” failures.

17. Work with Congress to develop IT budget models that align with modular development

Working with Congress to design ways to better align funding to the technology cycle will reduce waste and improve the timeliness and effectiveness of provided solutions. Creating and leveraging flexible IT budget models requires work by OMB, Congress, and agency leadership.

17.1 Analyze working capital funds and transfer authorities to identify current IT budget flexibilities

Over the next six months, OMB will work with Congress to analyze existing working capital funds (WCFs) and other vehicles for pooling funds and extending availability of funding. Working capital funds (WCFs) are agency revolving funds for managing common administrative services that add budgeting flexibility within the agency. In addition to WCFs, franchise funds and other accounts can potentially provide added IT funding flexibility. These accounts add flexibility by pooling bureau-level funds to serve agency-wide purposes.

This analysis will address limits on the amount of funding that could flow through such accounts under current law across all appropriations and agencies, any limits on the types of activities that may be
funded, and any other limitations on the use of transfer authorities to feed such accounts from contributing accounts. This analysis would also include a comprehensive review of the legislative language for accounts receiving funds such as WCF accounts, General Provisions, or other legislative limits on transfer authorities, and the legal limits on use of general transfer authorities such as the Economy Act or the E-Government Act of 2002. The analysis will also identify examples of the use of the existing funding flexibility vehicles for IT projects and develop best practices guidance on applicability and implementation across the government, as well as identify where skill gaps exist in developing costing models and managing funds.

17.2 Identify programs for which to pilot flexible budget models

Within six months, Agency CIOs and CFOs will identify programs at several agencies for which added budget flexibility could save money and improve outcomes. OMB and agencies will work with Congress to develop proposed budget models to complement the modular development approach. In addition, OMB and agencies will evaluate mechanisms for increased transparency for these programs.

18. Develop supporting materials and guidance for flexible IT budget models

In order to support agencies and appropriations staff in leveraging budget flexibility, the Federal CFO Council, in collaboration with the Federal CIO Council, will develop a set of best practices and materials that explain the need for these types of funding, and prescribe a path to achieving more flexible models.

As a first step, the Federal CIO Council will create a segmentation of common IT program types and the associated funding requirements. The Federal CFO Council will then work with the Federal CIO Council to create detailed “playbooks” mapping each IT program type to specific budget vehicles based on examples of past investments and IT needs (e.g., multi-year funding for programs with several discrete deliverables). The playbooks will also explain in detail how the recommended budget flexibility improves delivery of the corresponding IT program results. Agencies will utilize these templates and training to clearly outline their financial needs to successfully deliver IT programs.

Program leaders and CIOs with increased budget flexibility will face higher expectations around successful delivery from agency leaders and Congress. Achieving greater flexibility in funding also requires greater transparency into spending effectiveness. Agencies will need to engage in more frequent dialogues with appropriations staff and to clearly demonstrate the performance of IT investments in achieving mission goals.

The Federal CFO and CIO Councils will create a set of guidelines for increasing transparency in the utilization of IT funds. Agencies will follow these guidelines and institute additional review processes for multi-year funds and portfolio funding to prevent mismanagement of increased funding flexibility (e.g., masking program delays or overruns).
19. **Work with Congress to scale flexible IT budget models more broadly**

Within 12 months, OMB will engage several agencies to work with Congress to launch flexible IT budget models where appropriate. As pilot agencies demonstrate success with flexible IT budget models on selected programs, OMB will continue to work with Congress to scale flexible budget models across major IT programs government-wide.

20. **Work with Congress to consolidate commodity IT spending under Agency CIO**

Agencies, departments, bureaus, and, at times, even programs currently design, build, and operate independent systems for “commodity” IT services (e.g., e-mail, data centers, content management systems, web infrastructure). Their functionality and the infrastructure that supports them are often duplicative and sub-scale. These independent systems currently draw resources away from IT programs that deliver value to the American taxpayer. With few exceptions, the minor differences between agency-specific systems and their associated operational processes do not drive value for the agencies.

Consolidating these systems and their associated infrastructure (e.g., data centers) will be difficult and complex if the current funding models are maintained. Within the next six months, OMB will work with Congress to develop a workable funding model for “commodity” IT services. These funding models will be applicable to both inter-agency IT services and intra-agency IT services. On an annual basis, the Agency CIOs and the Federal CIO Council will identify “commodity” services to be included in this funding model as they are migrated towards shared services.

A benefit of consolidated commodity IT spending is the ability to move more rapidly to adopt strategic sourcing solutions. Once agencies with common business needs can effectively coordinate or consolidate the procurement of IT-related goods and services and demand is aggregated within agencies, it will be easier for the government to more effectively negotiate for volume discounts and improved service levels.

**Action item owner and deadlines**

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<tr>
<th>Action Item</th>
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<th>Within 6 mos.</th>
<th>6-12 mos.</th>
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<td>17 Work with Congress to create IT budget models that align with modular development</td>
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<td>18 Develop supporting materials and guidance for flexible IT budget models</td>
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<td>19 Work with Congress to scale flexible IT budget models more broadly</td>
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<td>20 Work with Congress to consolidate Commodity IT spending under Agency CIO</td>
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D. Streamline Governance and Improve Accountability

To strengthen IT governance, we need to improve line-of-sight between project teams and senior executives, increase the precision of ongoing measurement of IT program health, and boost the quality and timing of interventions to keep projects on track. These improvements will both boost the efficiency of project oversight and better manage programs in distress.

Our strategy for strengthening IT governance centers on driving agency adoption of the “TechStat” model currently used at the Federal level. TechStat Accountability Sessions are face-to-face, evidence-based reviews of agency IT programs with OMB and agency leadership. Using data from the Federal IT Dashboard, investments are carefully analyzed with a focus on problem-solving that leads to concrete action to improve performance.

TechStats have led to accelerated deliverables, budget reductions, and project terminations. Results include:

- $3 billion reduction in lifecycle costs
- Average acceleration of deliverables from over 24 months to 8 months

Our goal is to scale this capability across the Federal Government, increasing the number of programs that can be reviewed and hastening the speed at which interventions occur. Through this strategy, we aim to enable agencies to grow their own performance management standards and focus OMB direct involvement on a limited number of highest-priority cases.

21. Reform and strengthen Investment Review Boards

Investment Review Boards (IRBs) were created to control and evaluate the results of all major IT investments. In practice, these review boards have frequently failed to adequately manage the IT program portfolio by establishing successful projects or taking corrective action. Today, typical IRB meeting agendas currently set aside two hours to review the entire IT portfolio, far too little time to adequately review dozens of technical projects. These IRBs will be restructured according to the “TechStat” model.

21.1. Revamp IT Budget Submissions

OMB Exhibits 53 and 300 have come to support stand-alone processes to request and justify funding rather than serving as management tools for monitoring program health. In many cases, these documents are prepared in large part by third-party contractors and there is minimal involvement by agency executives and program managers.

These exhibits will be revamped to better align them to agency budgeting and management processes, make them more relevant and useful, and ensure they promote the use of modular development principles. The improved exhibits will also alleviate reporting burden, increase data accuracy, and serve as the authoritative management tool.
By May of 2011, OMB will reconstruct the 300s and 53s around distinct data elements that drive value for agencies and provide the information necessary for meaningful oversight. The timing of these elements will be separated into distinct streams to clarify objectives, give agencies adequate time to assemble strong responses, and improve data quality. These streams will include:

- **Budget justification** for new major Development, Modernization and Enhancement (DME) investments, significant re-engineering of existing DME investments, and annual re-justification of DME investments.
- **Health monitoring** of existing DME investments and Operations and Maintenance (O&M)
- **Portfolio governance** to ensure the IT portfolio and individual projects are consistent with the agency mission and Federal policy objectives

Importantly, OMB and agencies must evaluate the way in which IT programs are reviewed so that budget approval for large IT programs is tied to key implementation steps rather than seemingly upfront, wholesale approval of massive programs. OMB will evaluate ways to ensure agencies can demonstrate strong performance in earlier modules in order to receive approval for funding of subsequent modules.

### 21.2 Rollout “TechStat” model department-wide

By March 2011, OMB will work with Agency CIOs and other agency leaders to stand up the “TechStat” model at the departmental level. Steps include:

- OMB will assist agencies in designing tools and enforcing their use, to provide the transparency required for the “TechStat” model to be effective
- OMB analysts will provide in-person training to Agency CIOs in “TechStat” methodology including accountability guidelines, engagement cadence, evaluation processes, and reporting processes.
- Agency leaders will lead, sponsor, and manage the process within their departments

### 22. Redefine role of Agency CIOs and Federal CIO Council

Currently, Agency CIOs and the Federal CIO Council spend a majority of their mindshare on policymaking and maintaining IT infrastructure. As we move forward with the IT reforms, CIO focus must shift towards portfolio management. This shift will be encouraged by activities such as the restructuring of the Investment Review Boards. Similarly, agencies will be increasingly freed from low-value activities (e.g., building redundant infrastructure) as they adopt technologies such as cloud computing.

- Agency CIOs will be responsible for managing the portfolio of large IT projects within their agencies. This portfolio management role will include continuously identifying unmet needs to be addressed by new projects, terminating or turning around poorly performing projects, and retiring IT investments which no longer meet the needs of the organization. Steps will include:
  - As described above, Agency CIOs will take on responsibility for the “TechStat” governance process within their agencies as of March 2011.
Agencies will turnaround or terminate at least one-third of poorly performing projects in their portfolio within the next 18 months. The Federal CIO Council will play a similar portfolio management role, but at a cross-agency level. Within six months, the Federal CIO Council will periodically review the highest priority “TechStat” findings assembled by the Agency CIOs. These reviews will enable CIOs to share best practices and common sources of failure to improve success rates over time.

23. Rollout “TechStat” model at bureau-level

Once cemented at the agency level, the “TechStat” model will be deployed at the bureau-level to ensure the effective management of large programs. Within 18 months, Agency CIOs, in collaboration with other agency leaders, will be responsible for deploying the tools and training necessary to ensure rollout has been completed.

Action item owner and deadlines

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<td>21 Reform and strengthen Investment Review Boards</td>
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<td>22 Redefine role of Agency CIOs and Federal CIO Council</td>
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<tr>
<td>23 Rollout “TechStat” model at bureau-level</td>
<td>Agency CIOs</td>
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E. Increase Engagement with Industry

The Federal Government does not consistently leverage the most effective and efficient available technologies. Federal IT contracts have been difficult to manage because they were not well-defined or well-written. These contractual challenges produce waste, delay program delivery, and erode the value of IT investments.

In many cases, agencies have been hindered by inadequate communication with industry, which is often driven by myths about what level of vendor engagement is permitted. The result has been barriers between industry and government buyers, whose efforts are often frustrated by a lack of awareness of the most efficient and effective technologies available in the private sector. These barriers negatively affect the full breadth of the acquisition process including needs identification, requirements definition, strategy formulation, the proposal process, and contract execution. Educating the community on the myths of vendor engagement will increase constructive and responsible engagement with the private sector IT community and improve the quality and cost effectiveness of the IT services provided.

24. Launch “myth-busters” education campaign

Commonly-held misunderstandings about how industry and government can engage with one another during the acquisition process place an artificial barrier between Federal agencies and their industry partners. These myths reduce the government’s access to necessary market information as government officials, both program managers and contracting officers, are often unsure how to responsibly engage with their industry counterparts. They may have inaccurate information about the rules, may be overly cautious in their interactions, or may be unaware of communication strategies that can help the government define its requirements and establish sound acquisition strategies. The fact is that the statutory and regulatory framework for communications between industry and government allows significantly greater engagement than current practice. The government therefore needs to raise awareness of these flexibilities to its workforce.

OFPP will identify the major myths that most significantly hinder requirements definition and the development of effective acquisition planning and execution. In January 2011, OFPP will issue a memorandum identifying these myths and the related facts and strategies to improve constructive engagement. This effort will be supported through discussions and other outreach efforts with key stakeholders in early 2011 including, but not limited to:

- Professional associations and other industry representatives
- Federal stakeholders including program managers, contracting professionals, agency attorneys, and ethics officials
Throughout 2011, the Federal Acquisition Institute (FAI) and OFPP will conduct a “myth-buster” awareness campaign to eliminate artificial private sector engagement barriers. Steps will include at least the following:

- Launch an online community of practice within the next six months using technologies such as video channels to provide a Q&A forum, celebrate successes, and share “myths” and potential “myth-busters”
- Conduct FAI webinar for the acquisition workforce hosted by OFPP by late January 2011
- Create mandatory, continuous learning program through the FAI website
- Present at conferences such as the GSA Expo, the National Contract Management Association (NCMA) World Conference, and NCMA Government Contract Management Conference throughout 2011

25. Launch interactive platform for pre-RFP agency-industry collaboration

The government benefits when there is broad engagement with industry before beginning an IT project. Recently, the government used an online wiki tool to rapidly and effectively explore solutions for a planned Federal IT investment. Tens of thousands of visitors participated from all 50 states and workers at Fortune 500 companies interacted with the owners of a 10-person business to discuss the best solutions for the government. The dialogue allowed participants to tag and vote on the best ideas, providing the agency with a list of top priorities and key themes that made the feedback both more comprehensive and more actionable than what could have been obtained through traditional methods. Technological opportunities were discussed, weighed, and judged by the community that were not immediately obvious at the onset of the effort.

Inexpensive, efficient solutions such as these should be made available to all agencies to effectively tap the understanding of industry partners, especially in the period prior to issuing a Request for Proposal (RFP). Within the next six months, GSA will launch a government-wide, online, interactive platform for this purpose. Action item owner and deadlines

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Summary

From delivering benefits to our veterans to advancing biomedical discovery, Federal Government IT investments are designed to serve the American people. By focusing on execution, oversight, and transparency, this plan will deliver tangible results to stakeholders across the Federal Government and the American taxpayers.

Individually and together, the 25 actions detailed above will move the government towards the future – more nimble, more cost effective, and more citizen-focused. These IT reforms require collaboration with Congress; engagement with industry; and commitment and energy from government leadership and IT, acquisition, and financial management professionals. They require relentless focus on near-term execution, recognition of past lessons, and a long-term vision for the future. But these efforts are worth the hard work. By shifting focus away from policy and towards execution and oversight, these IT reforms will succeed in delivering results for the American people.

The future picture for Federal Government IT is exciting. IT enables better service delivery, enhanced collaboration with citizens, and dramatically lower costs. We must get rid of the waste and inefficiencies in our systems. Outdated technologies and information systems undermine our efficiency and threaten our security.

Federal IT projects will no longer last multiple years without delivering meaningful functionality. Poorly performing projects will be identified early and put under a spotlight for turnaround – those that continue to flounder will be terminated. No longer will large IT contracts be negotiated by individuals without IT expertise. No longer will one agency build expensive new data centers when other agencies have excess capacity. And no longer will rigid budgeting constraints prevent executives from making smart decisions with taxpayer dollars; flexible models will allow agency leaders to shift funds where and when they are needed, ensuring that results matter more than plans.

A government powered by modern information technology is a faster, smarter, and more efficient government. While IT projects throughout the government will always have risks, there are no excuses for spectacular failures. And while not all projects can be perfect, major errors must and will be caught early and addressed appropriately. Projects should never be so far behind schedule that the primary activity of program managers shifts to waging a constant public relations battle to ensure continued funding. Instead, with streamlined governance and experienced program managers, issues can be caught early and course corrections can be made without wasting time and money.

The Federal Government will be able to provision services like nimble start-up companies, harness available cloud solutions instead of building systems from scratch, and leverage smarter technologies that require lower capital outlays. Citizens will be able to interact with government for services via simpler, more intuitive interfaces. IT will open government, providing deep visibility into all operations. With this 25 point plan, the Federal Government will turn the corner on implementing the most critical reforms, ensuring that large IT programs perform as expected and can be delivered on time and on budget in order to deliver for the American people.
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<tr>
<td>1. Complete detailed implementation plans to consolidate 800 data centers by 2015</td>
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<td>2. Create a government-wide marketplace for data center availability</td>
<td>OMB, GSA</td>
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<td>3. Shift to a “Cloud First” policy</td>
<td>OMB, Agencies</td>
<td>●</td>
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<td>4. Stand-up contract vehicles for secure IaaS solutions</td>
<td>GSA</td>
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<tr>
<td>5. Stand-up contract vehicles for “commodity” services</td>
<td>GSA</td>
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<td>6. Develop a strategy for shared services</td>
<td>Federal CIO</td>
<td></td>
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<td>7. Design a formal IT program management career path</td>
<td>OPM, OMB</td>
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<tr>
<td>8. Scale IT program management career path</td>
<td>OPM, Agencies</td>
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<td>9. Require Integrated Program Teams</td>
<td>OMB</td>
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<td>10. Launch a best practices collaboration platform</td>
<td>Federal CIO Council</td>
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<td>11. Launch technology fellows program</td>
<td>Federal CIO</td>
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<td>12. Enable IT program manager mobility across government and industry</td>
<td>OMB, CIO Council, OPM</td>
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<td>13. Design and develop cadre of specialized IT acquisition professionals</td>
<td>OMB, Agencies</td>
<td>●</td>
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<tr>
<td>14. Identify IT acquisition best practices and adopt government-wide</td>
<td>OFPP</td>
<td>●</td>
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<td>15. Issue contracting guidance and templates to support modular development</td>
<td>OFPP</td>
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<tr>
<td>16. Reduce barriers to entry for small innovative technology companies</td>
<td>SBA, GSA, OFPP</td>
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<td>Action Item</td>
<td>Owner(s)</td>
<td>Within 6 mos.</td>
<td>6-12 mos.</td>
<td>12-18 mos.</td>
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<tr>
<td>17 Work with Congress to create IT budget models that align with modular development</td>
<td>OMB, Agencies</td>
<td>●</td>
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<tr>
<td>18 Develop supporting materials and guidance for flexible IT budget models</td>
<td>OMB, CFO Council, CIO Council</td>
<td></td>
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<tr>
<td>19 Work with Congress to scale flexible IT budget models more broadly</td>
<td>OMB, Agencies</td>
<td></td>
<td>●</td>
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<tr>
<td>20 Work with Congress to consolidate Commodity IT spending under Agency CIO</td>
<td>OMB, Agencies</td>
<td>●</td>
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<tr>
<td>21 Reform and strengthen Investment Review Boards</td>
<td>OMB, Agencies</td>
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<td>22 Redefine role of Agency CIOs and Federal CIO Council</td>
<td>Federal CIO, Agency CIOs</td>
<td>●</td>
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<td>23 Rollout “TechStat” model at bureau-level</td>
<td>Agency CIOs</td>
<td></td>
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<td>24 Launch “myth-busters” education campaign</td>
<td>OFPP</td>
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<td>25 Launch an interactive platform for pre-RFP agency-industry collaboration</td>
<td>GSA</td>
<td>●</td>
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