IT Acquisition and Contracts Management

With more than one out of every six dollars of federal government spending going to contractors, it is imperative that the federal government leverages its buying power, drives more consistent practices across federal agencies, shares information, and reduces duplication while providing better results for the American taxpayers.

- Anne Rung, Former Administrator, Office of Federal Procurement Policy, OMB

Summary



IT Acquisition and Contracts Management

Overview

The Federal acquisition environment is often inefficient, cumbersome, and complex. In addition, current acquisition processes do not necessarily incentivize the use of agile or other innovative and modern information technology development and purchasing practices. The slowness, limitations, and uncertainties of the acquisition process were frequently cited during CIO interviews as major challenges in purchasing IT. Agencies face significant challenges in updating legacy IT systems given the long development and lead times, and the increased costs due to maintaining the existing systems and developing a new modern system alongside.

The Federal Acquisition Regulation (FAR) governs the acquisition process. For a variety of reasons, the FAR contains specific rules that can lengthen the amount of time it takes for the Federal government to acquire goods and services. As an example, the FAR mandates the use of small, minority-owned, or disadvantaged businesses in a certain percentage of Federal contracts.⁴ While encouraging entrepreneurship and supporting small businesses is an important goal, the additional requirements needed to meet small-business set asides can add months

to the acquisition process for larger investments. Moreover, complying with the processes and reporting requirements stemming from the FAR can make doing business with the government expensive for businesses, reducing the pool of potential vendors for agencies to work with. Another unique attribute of the Federal acquisition process is the protest process which allows losing bidders to protest the government's purchasing decisions. Agencies face the potential for vendor protests if regulations or agency policies are not followed correctly. Protests can result in significant delays in beginning work, and if sustained, may result in a new competition or cancellation of a contract.⁵

Agency CIOs sometimes anticipate that potential acquisitions will take up to two years to ultimately select a vendor. A result of this delay is that technologies that are considered state-of-the-art when a new procurement is envisioned are often outdated by the time a contract is awarded. The lengthy procurement process can also create significant barriers to improving the cybersecurity posture of an agency because of difficulties in rapidly procuring and deploying innovative, cutting-edge cybersecurity technologies.

Best practices in the acquisition and development of IT favor agile development principles that should enable Federal agencies to accomplish their missions more efficiently, effectively, and economically. However, managing and procuring these projects in such a way requires a fundamental shift in how program managers and contracting officers work with vendors to obtain services. Typically, agencies define as many requirements as possible at the outset of the procurement process. These practices often lead agencies towards more traditional waterfall style development cycles, building large, complex systems over the course of years rather than using more agile development principles.

The principal policy leader for government-wide acquisition initiatives is the Office of Management and Budget's (OMB) Office of Federal Procurement Policy (OFPP), often acting in partnership with the Office of the Federal Chief Information Officer (OFCIO) and the General Services Administration (GSA). There have been numerous efforts to update and improve the acquisition process to better accommodate the specifics of IT purchases, ranging from empowering the CIO, improving the speed of acquisitions, enhancing innovation, and buying commonly acquired goods or services at an enterprise level.

The recently enacted Federal IT Acquisition Reform Act (FITARA) requires agencies to increase their use of agile development, and OMB oversight mechanisms such as the Capital Planning and Investment Control were modified to better track agency agile projects.⁶ In addition, OFPP has been working to improve the agility and speed by which the Federal government can buy goods and services, especially for IT. These represent positive steps towards improving IT acquisition practices, but more work remains to be done.

A full treatment of all government acquisition procedures and issues is outside the scope of this document. Instead, this document focuses on several initiatives and efforts that have been undertaken to improve the ability of Federal agencies to successfully procure IT. These efforts sought to:

- Leverage the Federal government's ability to buy as an enterprise;
- Strengthen acquisition training and certification:
- Increase awareness of contract flexibilities and outreach to the contractor community; and
- Increase CIO oversight into the IT procurement process.

Policy Evolution

One of the first efforts to improve IT acquisitions began with adopting performance-based acquisitions. A performance-based acquisition differs from conventional government procurements by changing the requirements documents. Instead of mandating specific actions, workflow or actions by a contractor, the government outlines objectives that it would like to be met, and allows companies to propose their own approach to meet those objectives. The government then monitors their performance in line with the objectives, evaluating them on a set of agreed-upon metrics. By focusing on objectives, and not process, the government enables companies to provide best-in-breed or more innovative solutions, focusing on the outcomes that the government desires. As early as 2001, agencies were mandated to improve their use of performance-based service contracts. TIT projects are excellent targets for performance-based contracts given the rapid evolution of technology and the ability to enhance digitized processes to shorten timeframes. However, performance-based acquisitions require additional time investment from program staff and more deliberative proposal reviews, which has slowed their adoption.

The Federal IT Acquisition Reform Act (FITARA)⁸ represents the latest effort to improve the ability of Federal agencies to successfully procure IT. In particular, FITARA seeks to increase the CIO's awareness, oversight and authority over IT-related procurements by requiring all agency procurements that include IT be approved by the CIO, or via a delegated individual such as a bureau CIO. By providing this visibility into IT procurements, lawmakers sought to ensure that the agency CIO is fully integrated,

from the start, into the agency's processes for developing and delivering IT investments right.

Key Initiatives

Buying as an Enterprise: Sharing Contract Agreements

Provides access to multi-agency contract agreements to increase the government's purchasing power while simultaneously decreasing costs.

Buying as an Enterprise: Strategic Sourcing and Category Management

Facilitates access to expertise offered through Federal Strategic Sourcing Initiative analysts, GSA's Category Managers, TechFAR Hub, or agency buyer's clubs and acquisition innovation labs.

Buying as an Enterprise: Consolidating IT Procurement Authority Under the CIO

Empowers CIOs around commodity IT responsibilities, expands CIO approvals across all IT acquisitions.

Buying as an Enterprise: Standardizing Requirements & Configurations

Rationalizes and reduces duplication in commodity IT, software licenses, desktops and laptops, and other mission-support areas.

Acquisition Training and Certification

Improves acquisition workforce skills through Specialized IT Acquisition Cadres, acquisition focus in Agency Human Capital Plans, and expanded FAC P/PM requirements.

Awareness and Outreach

Helps IT professionals navigate and better apply procurement procedures through publications such as acquisition Mythbusters materials, TechFAR Handbook, and contracting guidance for modular development.

Federal IT Acquisition Reform Act (FITARA)

Further empowers CIOs as the key IT leaders at their agencies by requiring all agency procurements that include IT to be approved by the CIO.

The strategies consist of numerous efforts and actions which took place over a broad period of years, and many are ongoing today. As such, specific years are not included.

Buying as an Enterprise

A common theme of government-wide acquisition initiatives has been trying to improve the ability to make decisions and agreements as an enterprise rather than as thousands of separate unrelated offices. By pooling acquisition requirements, contracts, and expertise, Federal agencies can generate economies of scale and realize significant savings. This can happen both within an agency and amongst agencies. Buying as an enterprise is more than simply "buying in bulk" the ultimate goal is to make smarter decisions at an aggregate level rather than many fragmented, isolated decisions. Additionally, these efforts can create opportunities to accelerate acquisition timelines (critical given expectations in today's marketplace) and ensure broader competition. The discussion below focuses on improving the Federal government's attempts to buy as an enterprise through:

- Sharing Contract Agreements,
- Strategic Sourcing and Category Management,
- Consolidating IT Procurement Authority Under the CIO, and
- Standardizing Requirements and Configurations.

"With over 3,300 contracting offices and often thousands of contracts for the same goods and services – many with the same vendor – the Federal Government buys like many small, separate entities."

- Anne Rung

Former Administrator, Office of Federal Procurement Policy, OMB in testimony June 10, 2015 before the Subcommittees on Information Technology and On Government Operations of the Committee on Oversight and Government Reform United States House of Representatives

Buying as an Enterprise: Sharing Contract Agreements

The government has expanded the variety of IT services and products offered through shared multi-agency contract mechanisms, which help agencies leverage the government's buying power. These agreements, vehicles, contracts, and other mechanisms allow various forms of "negotiate once, buy many" options for agencies to use.

A major focus of OMB's IT acquisition efforts is to expand and publicize these options and address obstacles agencies encounter in using them. Below is a brief listing of some of the methods by which agencies can share contracts.⁹

- Blanket Purchase Agreements (BPA) are simplified acquisitions that Federal agencies use to fill anticipated repetitive needs for supplies or services. BPAs allow the government to negotiate a portion of potential contracts up front with vendors so that future purchases are streamlined. As GSA describes them, "blanket purchase agreements eliminate such contracting and open market costs as the search for sources, the need to prepare solicitations, and the requirement to synopsize the acquisition."10 Some BPAs may be multi-agency while others aggregate needs across multiple programs or over time for a particular type of need or area of products or services.
- Indefinite-Delivery, Indefinite Quantity (IDIQ) agreements allow an agency to negotiate terms with a vendor once and then make additional future purchases using that pre-existing agreement.
- The Federal Supply Schedules program consists of contracts for similar or

comparable goods or services from more than one supplier at varying prices (awarded usually by GSA), for example, GSA's Schedule 70 for information technology. GSA's SmartBuy program for enterprise software is an example of a topic-specific purchasing program which leverages Schedule 70 to offer enterprise software options for agencies.

- Government-wide Acquisition Contracts (GWAC) are types of multi-agency contracts with more flexibility and fewer limitations than other multi-agency contracts. GSA operates a variety of IT related GWACs through its Federal Acquisition Service.
- Other multi-agency contracts enabled by statutory flexibilities, such as the Economy Act, are subject to various other limitations, conditions, or requirements.¹¹

These mechanisms have provided agencies access to shared contracts and agreements for products and services such as cloud platforms (GSA's Salesforce Implementation, Integration and Support BPA),¹² IT consulting and development (IT Schedule 70), enterprise software (SmartBUY),13 mobile services (FSSI-Wireless), and telecommunications (Networx, which will be succeeded by Enterprise Infrastructure Solutions). As OMB and GSA's collaboration with agencies through efforts such as Category Management expands, new agreements offering more options to agencies are likely to make use of similar flexibilities. However, while the potential for savings is clear, in many situations, agencies may wish to switch to one of these consolidated contracts, but the timing of their current contracts does not allow them to, or it may be too costly to transition out of their current contract ahead of schedule.

Buying as an Enterprise: Sharing Contract Agreements		
Summary of Effort	Multi-agency contract mechanisms which help agencies buy within the scale of the Federal government	
	GSA's SmartBUY program - government-wide approach for enterprise licenses on common software	
	Category Management	
Major Initiatives	Blanket Purchase Agreements (BPAs)	
	Indefinite-Delivery, Indefinite Quantity (IDIQ) agreements	
	Federal Supply Schedules	
	Government-wide Acquisition Contracts (GWAC)	
Goals of Effort	Increase an agency's purchasing power while simultaneously decreasing costs	
	Encourage agencies to use larger, shared contract agreements	
	These agreements allow various forms of "negotiate once, buy many" options for agencies to use	

"The Salesforce BPA is a significant step forward in supporting FITARA, our customers, and improving acquisition efficiency and effectiveness in the Federal Government. This unique, first-of-its-kind, cross-agency initiative will reduce the number of duplicative contracts for these services and lower overall costs by leveraging the buying power of the government into a consolidated services vehicle."

 Tom Sharpe, FAS Commissioner, from GSA news release on award of Salesforce BPA

Buying as an Enterprise: Strategic Sourcing and Category Management

OMB and GSA have worked to provide agencies access to shared groups of experienced IT acquisition professionals to offer support and expertise regarding their IT needs. This approach to pooling expertise centrally and making it available to agencies can provide greater access to best practices in industry, acquisition, and familiarity with emerging technology.

Since 2005, the Federal Strategic Sourcing Initiative (FSSI) has offered a "structured and collaborative process of critically analyzing an organization's spending patterns to better leverage its purchasing power, reduce costs, and improve overall performance" in selected acquisition areas, such as mobile service contracts. ¹⁴ OMB began to explore extending this strategic sourcing approach beyond its original areas of focus in 2012. ¹⁵

OMB and GSA expanded the approach to six IT-related sub-categories through the Category Management and Acquisition Gateway programs launched in 2014.¹⁶ The first government-wide "category manager" was appointed for IT in 2015, who now leads the six IT areas ("Hallways") of IT Software, Hardware, Consulting, Security, Outsourcing, and Telecommunications. Additionally, TechFAR Hub, also hosted by GSA, provides a platform for a community of experts with a focus on agile methodology and modern IT digital services. 17 OMB has also encouraged agencies to pool their acquisition expertise at the agency level through agency "buyer's clubs" or "acquisition innovation labs" led by acquisition innovation advocates. 18

Buying as an Enterprise: Strategic Sourcing and Category Management		
Summary of Effort	Provide access to shared groups of experienced IT acquisition professionals to offer support and expertise around agencies' IT needs	
Major Initiatives	• FSSI	
	Category Management	
	Acquisition Gateway ¹⁹	
	TechFAR Hub	
	Acquisition Innovation Labs	
Goals of Effort	Reduce duplication within and between agencies	
	Increase focus on and use of agile methodologies	

Buying as an Enterprise: Consolidating IT Procurement Authority Under the CIO

Federal dollars are often appropriated directly to a program or lower level bureau, rather than to the agency as a whole. As a result, IT purchases are often made within programs or bureaus directly without the supervision or knowledge of the agency CIO. This can lead to unnecessary duplication, missed opportunities for savings, and procurements that are not aligned with agency-wide strategies. Over the years, both OMB and Congress have taken steps to increase the responsibility of CIOs and extend their influence over IT acquisitions into agency programs and bureaus.

For example, in August 2011, as part of a broader effort to strengthen CIO authorities, OMB directed agencies to "pool their agency's purchasing power across their entire organization to drive down costs, improve service for commodity IT" and use shared services.²⁰ To assess agency progress towards this goal, OMB launched the PortfolioStat initiative, a "face-to-face, evidencebased review...of an agency's IT portfolio" that focused on the consolidation of commodity IT at an agency in March 2012.²¹ As a result of the PortfolioStat process, agencies were required to develop commodity IT consolidation plans that were reviewed and approved by OMB. These plans resulted in commitments from agencies to achieve over \$2.5 billion in target cost implications by 2015.²²

Over time, OMB followed up on these projects with 2013 PortfolioStat and tracked their actual savings in regular reports to Congress.²³ OMB incorporated the proposed savings from these IT commodity consolidation plans into the overall budget process for FY 2014, including offering ways for agencies to describe how they would turn their cuts to commodity IT into investment in innovative technology programs.²⁴



Figure F1: PortfolioStat Commodity IT Reduction Targets

Despite the new CIO Authorities policy and creation of the PortfolioStat initiative, agency CIOs did not necessarily see a significant shift in their procurement authorities for several reasons. There are a number of steps which could address this. First, although OMB declared that "the CIO shall pool their purchasing power across their entire organization to drive down costs and improve service for commodity IT," there was no real mechanism to do so. Changing how agencies actually receive their funding or improving the CIOs' visibility into funding at the program and bureaus could help CIOs take this action. Without these steps, agency CIOs were given responsibility for consolidating their agencies commodity IT, but they were not given the authority to actually accomplish it.

Second, while the supporting OMB memoranda²⁵ provided examples of what constituted "commodity IT," actually defining the term could help strengthen the approach. Without a clear definition, bureaus and programs were able to avoid including systems that could be consolidated.

Finally, this attempt to further empower agency CIOs appears to have been hampered by a lack of consistent oversight. For example, although the first PortfolioStat (2012) focused on the consolidation of commodity IT, the next year's version of PortfolioStat (2013) shifted the focus away from the consolidation of commodity IT.²⁶ While agencies established Commodity IT Consolidation Plans as a part of PortfolioStat 2012, there is no evidence OMB followed-up on these plans or asked agencies to send updated status of inprogress projects or results of completed projects.

Buying as an Enterprise: Consolidating IT Procurement Authority Under the CIO		
Summary of Effort	Expand the responsibility and influence of agency CIOs over IT acquisitions into programs and bureaus	
Major Initiatives	Commodity IT Consolidation PlansDeveloped PortfolioStat	
Goals of Effort	Encompass true portfolio management for all IT	

Buying as an Enterprise: Standardizing Requirements and Configurations

Reducing the need for variation across agencies in requirements, features, and configurations of software and hardware purchased can lead to significant savings, increased operational efficiencies, and even a stronger cybersecurity posture.²⁷ This idea is reflected in two 2016 memoranda laying out standard configurations for Federal laptops and desktops and agency-wide approaches to software license management.

- Desktops and Laptops. OMB's first Category Management memorandum made standardized configurations mandatory, requiring that agency CIOs: "ensure that at least 80% of their agency's new basic laptop and desktop requirements are satisfied with [a government-wide approved standard configuration" unless an exception is granted.²⁸ Numerous contract vehicles were identified to assist agencies with procuring desktops and laptops, however, several agency CIOs indicated they believed they could get better pricing on their own procurements. Additional efforts to leverage purchasing of desktops and laptops as an enterprise are needed.
- Software License Management. In addition, reducing the complexity of agencies' software license purchases was a major focus in OMB's Category Management memorandum.²⁹ This required agencies to appoint an agency-wide enterprise software manager, establish agency-wide software license inventories, and implement a "Software Management Centralization Plan" while reporting all cost savings to OMB's Integrated Data Collection.

Buying as an Enterprise: Standardizing Requirements and Configurations		
Summary of Effort	Created standard configurations for desktops, laptops, and agency- wide approaches to software license management	
Major Initiatives	M-16-02 Category Management Policy 15-1	
	M-16-12 Category Management Policy 16-1	
	Software Management Centralization Plan	
Goals of Effort	Mandated no less than 80% standardization across an agency for laptops and desktops	
	Alignment across these areas could achieve significant savings, increased operational efficiencies, and a stronger cybersecurity posture	

Getting acquisition officers trained on how to acquire utility services that aren't defined as such in the FAR is a huge issue. Cloud First says SaaS, laaS, etc. are utilities, but the FAR doesn't treat them that way.

- Agency CIO

Acquisition Training | and Certification

Newer digital technologies and agile methodologies frequently present challenges to an agency acquisition workforce trained in an era of legacy systems and a waterfall development approach. Working through the Federal Acquisition Institute (FAI). Defense Acquisition University, private sector vendors, and other Federal agencies, OFPP has sought to equip the Federal acquisition workforce with the knowledge, skills, and expertise in using emerging tools and technologies in a more agile manner to solve agencies' needs. The U.S. Digital Service also created a new Digital IT Acquisition Professional Training Program (DITAP), which seeks to train contracting officers on agile acquisition principles and how to leverage the FAR to support these activities.30

The biggest opportunity is streamlining how we do our acquisitions and hiring. — I have a project that might get approved this month that is 18 months behind schedule before any work is done, before any protest. We were not able to buy any network hardware for two years due to an acquisitions protest. It is unacceptable for a BPA to take 2.5 years. Very understaffed and fearful of risk. It has put my infrastructure at end of life with no patches. 70% of [my agency's] network is at risk now.

- Agency CIO

For example, in 2011, OFPP issued guidance defining "Specialized IT Acquisition Cadres," highlighting the training and skillsets of particular relevance for the IT acquisition workforce.³¹ In 2013, under the Federal Acquisition Certification program, OFPP began a process to expand and strengthen the acquisition training and certification requirements (known as "FAC P/PM") for project managers and program managers, with a particular focus on the IT workforce.³² More recently, in 2015, as a part of the implementation of FITARA, OMB instructed agencies to include detailed analysis of these IT acquisition cadres in their Agency Human Capital Plans.³³ Enhanced acquisition training needs to extend beyond acquisition staff to encompass project managers who have significant acquisition responsibilities. This need is underscored by the fact that 82% of IT projects larger than \$2M do not have managers with a Federal Acquisition Certification for Program or Project Managers.34

Acquisition Training and Certification		
Summary of Effort	Provide the training tools needed to equip the Federal acquisition workforce with the knowledge, skills, and expertise so they can use emerging tools and technologies in a more agile manner	
	Specialized Acquisition Cadres	
Major Initiatives	Strengthen the acquisition training and certification requirements	
	 Digital IT Acquisition Professional Training Program (DITAP) 	
Goals of Effort	Achieve better value for government acquisitions	
	 Develop a digital service core- plus specialization for contracting professionals 	

Awareness and Outreach |

In addition to the training opportunities discussed above, OMB also initiated a series of education efforts to increase familiarity amongst IT project managers and the acquisition workforce of the flexibilities and options allowed by procurement regulations. This began with the 2011 release of OMB's 25 Point Implementation Plan to Reform Federal IT.35 which included a series of "mythbuster" documents, guidebooks, and other explanatory documents designed to dispel common misconceptions of procurement procedures or illustrate examples of flexibility in the FAR. A few examples of these documents include:

- OMB's "Mythbusters" documents addressed the misconception that meeting with a potential vendor before a planned award was generally forbidden by outlining situations where that kind of "market research" is not only permissible, but encouraged.³⁶
- The TechFAR Handbook provides guidelines on how to support agile development and other modern project management approaches using existing procedures in Federal regulations.³⁷
- OMB's 2012 Contracting Guidance to Support Modular Development similarly outlined how to use existing procedures to support innovative procurements.³⁸

Each of these initiatives did not seek to change the procurement process, but rather to improve general understanding of how the existing procedures may be used to support innovative IT practices. Breaking through many of these myths requires a long-term, coordinated approach to changing people's understanding of the rules. OMB has tried to improve awareness of these documents by including "number of contracting officers who have finished the Digital Service Certification Program" which draws on materials such as the TechFAR,³⁹ as part of the Smarter IT Delivery CAP Goal.

Awareness and Outreach	
Summary of Effort	 Increase familiarity amongst IT project managers and acquisition workforce of the flexibilities and options allowed by procurement regulations
Major Initiatives	 "Mythbusters" Additional guidelines in TechFAR Handbook on how to support agile development
Goals of Effort	Improve the general understanding of how existing processes can support innovative IT practices

The Federal Information Technology Acquisition Reform Act (FITARA)

In December 2014, Congress attempted to further empower agency CIOs in the acquisition process by passing FITARA.⁴⁰ In addition, the subsequent development of OMB's Common Baseline of CIO roles and responsibilities reinforced CIO approval of all IT acquisitions through partnership with the CAO around all acquisition strategies and acquisition plans. To improve how the Federal government acquires, implements, and manages its IT investments, FITARA gave the Agency CIO more authority over the budget, governance, and personnel processes for Agency IT investments With regard to the acquisition process, FITARA stated that an agency "may not enter into a contract or other agreement for information technology or information technology services, unless the contract or other agreement has been reviewed and approved by the CIO of the agency."41 The goal is for CIOs to participate earlier in the conversation as an enabler for the mission staff.

Ensuring CIO visibility is a minimal first step, additional efforts are needed by CIOs to be proactively involved in acquisitions early in the process to leverage potential efficiencies and ensure strategic alignment.⁴² For example, despite its strong statutory language, CIOs expressed concerns regarding this authority during interviews, indicating there remains room for improvement and clarification. As one CIO put it: "what does it mean when FITARA says 'I need to approve all purchases?' Am I just showing up at the 11th hour, approving requisitions? I want to have more say over the formulation of the spend."

The Federal Information Technology Acquisition Reform Act (FITARA)		
Summary of Effort	 Provide CIO with more authority as it relates to IT investments 	
Major Initiatives	FITARAOMB Common Baseline for the Management of IT	
Goals of Effort	 Consolidate knowledge of agency IT acquisition efforts and strategy in CIO's office 	

Metrics and Oversight

Primary Objective Emphasized in Metrics and Oversight

Based on the metrics used in oversight, the primary focuses of OMB's efforts in IT acquisition have been to reduce the cost of IT goods and services and improve agency satisfaction with the acquisition staff. By better leveraging the scale of the Federal government and by not repeating acquisition processes unnecessarily, agencies can reduce the cost of IT acquisition. Repeatedly, the potential value of efforts like strategic sourcing, category management, and commodity IT consolidation has been described in terms of the potential reductions in spending due to elimination of duplicative processes or purchases.

Examples

PortfolioStat and the Benchmarking initiative have gathered data to establish a baseline of Federal spending in common business areas, through commodity IT data calls and management function spending data calls, specifically:

- In PortfolioStat, agencies reported how many GWACs and BPAs they used for each commodity IT area; and
- In the Benchmarking initiative, costefficiency, customer satisfaction, and operational metrics (e.g., a comparison of cost per email box versus email satisfaction) were developed to provide further context into which agencies were more efficient at each area.

Strategic sourcing and category management have established their own more nuanced baseline by defining the total likely "addressable spend" within each business area or type of services they examine, then measuring agency progress adopting or applying recommended approaches to that addressable spend. OMB assumes that 7.5% of any services using strategic sourcing are achieved as cost savings, according to the Category Management CAP Goal, though the details behind this estimate are not provided.⁴³ OMB has not released how each agency's spending on each commodity IT area examined in 2012 PortfolioStat has changed in the 4-5 years since launching consolidation projects.

Other behaviors that OMB has recommended, required, or examined include wider FAC P/PM training for acquisition officials involved in IT acquisitions, adoption of the Common Baseline's acquisition-related elements, and practices emphasized in USDS's acquisition training described in the Smarter IT Delivery CAP Goal.

Most years of PortfolioStat have included key performance indicators related to the acquisition approaches related to commodity IT. PortfolioStat included key performance indicators for some form of commodity IT related spending or savings in every year from 2012 - 2016.44 Similar data was also used in GSA's Benchmarking Initiative, the Benchmark and Improve Mission-Support Operations CAP Goal, and FedStat.⁴⁵ Additionally, years 2013 -2015 particularly focused on the mobile device and mobile service contracts category of commodity IT. Similarly, also see the IT Infrastructure Modernization policy paper for PortfolioStat KPIs related to spending on the data centers category of commodity IT.46

Lessons Learned

It is unclear how widely adopted strategic sourcing, category management, commodity IT consolidation, and other strategies are by agencies. The Category Management CAP Goal reports that as of Q3 of FY 2016, zero percent of the "common spend" is "under government-wide management," but it is difficult to determine how widely agencies are using other category management approaches.

For strategies which rely on agency adoption of recommended practices, OMB has not always been consistent on measuring and emphasizing such adoption. As metrics were not included that evaluate agency progress implementing the Common Baseline in 2015 or 2016 PortfolioStat, agencies may not be placing progress adopting its CIO and CXO⁴⁷ acquisition roles and responsibilities at the same level of priority as policies that are emphasized in PortfolioStat KPIs.

Agency Observations and Findings

The Federal acquisition process has been a constant source of frustration for agency IT personnel. As OMB and GSA continue to work towards improving resources and available tools, agency CIOs continue to struggle with internal processes that do not align with modern technology management and have not used the available tools to a great extent. The acquisition process needs to evolve to serve agency IT needs rather than impede success specifically in today's constant threat environment.

FINDING #1

Despite Better Awareness, Existing Acquisition Flexibilities Are Underutilized by Agencies.

Although OMB and GSA have worked together on several informational campaigns to publicize the flexibilities and procedures available to support innovative approaches to IT acquisition, these are still underutilized by agencies. CIOs shared that their acquisition partners remain reluctant to explore these flexibilities. In addition to educating agencies, OMB has focused on initiatives dedicated to helping the government pool its common resources to achieve government-wide savings and efficiencies. Although these initiatives have led to new acquisition approaches, there has been reluctance on the part of agencies to widely adopt them. CIOs are often highly dependent on their partners in the acquisition community to understand what their options are, partly because of short tenures or lack of Federal procurement experience.

FINDING #2

Delays and Uncertainty Due to Procurement Process Length are Obstacles to Effective IT.

A number of CIOs stated that the procurement process takes too much time to keep up with rapidly changing cybersecurity needs and customer demands for technology. Moreover, CIOs must deal with uncertainty over how long the process will take, whether there will

be protests, and what the results are likely to be. These types of delays can leave agencies without the ability to purchase network hardware until the protest is settled.

I have a project that *might* get approved this month that is 18 months behind schedule before any work is done, before any protest. It is unacceptable for a BPA to take 2.5 years.

- Agency CIO

The challenges of the Federal budgeting environment, such as the possibility of available funding expiring at the end of the year, can exacerbate such delays. This environment encourages agency Contracting Officers (COs) to be more risk-averse when selecting procurement strategies to limit the potential for an award protest. This effort to minimize the schedule and planning risks comes at the expense of other factors such as price and performance, and may diminish the effectiveness of the end product. These types of situations can lead to increased risk for agencies.

FINDING #3

Acquisition Staff Face Challenges Evaluating Complex, Innovative Technology Without Greater Technology Expertise, However Efforts are Underway to Address Challenges.

Multiple CIOs described challenges with relying on partners in the acquisition community who lack the background in modern IT necessary to evaluate vendors' ability to perform the services required by agencies. Recent efforts could help address this, such as: category managers for IT categories, continued growth of specialized IT acquisition cadres, and USDS and 18F's focus on hiring acquisition staff with more modern technology experience.

FINDING #4

Restrictions to Accessing Vendors Create Unintentional Risks to Meeting IT Needs.

According to CIOs, pressure to incorporate what they see as secondary factors into vendor selection criteria increases the risk that awardees may be unable to meet the government's requirements. These factors often arise from the agency's interest in demonstrating compliance with government-wide procurement rules and strategies, real or perceived. As such the

Acquisitions are more about "fairness" than they are about best price [and that's an issue]

- Agency CIO

Acquisitions are about fairness and equality, but it should be about better buying power.

- Agency CIO

need to achieve small business and other set aside goals, demonstrate use of existing BPAs and Federal supply schedules, or use programs like FedRAMP⁴⁸

may cause agencies to artificially exclude potential vendors with appropriate and cost effective solutions.

One CIO described feeling required to use the agency's network operations support contract to help the agency achieve its small business set aside goals, but indicated the selected vendor proved unable to fully perform the work.

Other CIOs described pressure to first prove that vendors available through supply schedules, BPAs, or FedRAMP could not meet the government's requirements, rather than conducting a wide competition designed to reach the best solution. This built-in preference for existing vendors or other limited pool of potential vendors, while promoting certain goals, limits government access to the best vendor and introduces performance risk which can have other unintended schedule, security, and cost consequences.

FINDING #5

Agency Funding Mechanisms Negatively Impact the Ability of the Federal Government to "Buy as an Enterprise."

Finally, the appropriations process creates an additional burden on agencies attempting to leverage enterprise-wide buying as programs, offices or bureaus receive discrete appropriations, and appropriations law limits the ability to transfer funds to other organizations to facilitate consolidated enterprise purchases. As a result, agencies often have multiple contracts for the same products, such as Oracle database software, and paying different prices or with different configurations.

Notes

- M-16-20. Category Management Policy 15-1: Improving the Acquisition and Management of Common Information Technology: Laptops and Desktops. 10/16/2015.
 https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m_16_20.pdf and M-16-12. Category Management Policy 16-1: Improving the Acquisition and Management of Common Information Technology: Software Licensing. 6/2/2016. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-02.pdf
- For more information about cybersecurity initiatives and technologies, see Policy Chapter E: Cybersecurity
- FAC P/PM certification of entry-level, mid-level, or senior-level; Based on an analysis of the Projects data feed from IT Dashboard, Based on OMB's PortfolioStat 2016 methodology, includes all IT projects which completed after December 1, 2014 or are in progress, and a project lifecycle cost of greater than \$2 million. Original data source: https://itdashboard.gov
- 4. The small business set aside is mandated by statute. The FAR requires that agencies evaluate all potential requirements to determine if a small business is capable of performing the work. If two small businesses are capable of performing the work, then the acquisition generally must be set-aside for small businesses, in a process called the "Rule of Two." In some situations, this analysis can be taken care of quickly through market research, however, in many situations, an agency must conduct a Request For Information and evaluate potential small business sources. Agencies must set an annual goal and SBA monitors agencies' achievements against goals throughout the year. For more information on agency goals and contracts awards to various groups, see Small Business Administration. "Contracting". https://www.sba.gov/contracting/contracting-officials/goaling
- 5. Vendors have been filing more protests in recent years, though the underlying reasons for why are not fully known. Some of the potential factors include a depleted acquisition workforce that struggles with high turnover, low morale and difficulty in attracting new talented staff resulting in less than ideal acquisition, or increased pressure on companies to compete over fewer potential contracts as agencies face budget pressure brought on by sequestration and the use of continuing resolutions to fund the government. See Nextgov. com. "GSA Officials on Increased Bid Protests: 'This is how it is going to be'". 8/2/2016. http://www.nextgov.com/technologynews/2016/08/gsa-officials-increased-bid-protests-how-its-going-be/130417/ and Congressional Research Service. "GAO Bid Protests: Trends and Analysis". 6/21/2015. http://fas.org/sgp/crs/misc/R40227.pdf
- 6. The U.S. Digital Service's new Digital IT Acquisition Professional Training Program (DITAP) seeks to train contracting officers on agile acquisition principles and how to leverage the FAR to support these activities. Challenge. gov. "Digital Service Contracting Professional Training and Development Program Challenge". https://www.challenge.gov/challenge/digital-service-contracting-professional-training-and-development-program-challenge-2/

- 7. M-01-15. Performance Goals and Management Initiatives for the FY 2002 Budget. 3/9/2001. https://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/m01-15.pdf
- Federal Information Technology Acquisition Reform Act. 12/19/2014. Title VIII, Subtitle D of the National Defense Authorization Act (NDAA) for Fiscal Year 2015, Public Law No: 113-291: https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148 For more information about FITARA, see Policy Chapter A: Management and Oversight of IT
- General Services Administration. "Your Single Acquisition Source Reference Guide for GSA Technology". http://www.gsa.gov/graphics/fas/ITS_COMPARISON_Matrix.pdf
- General Services Administration. "Blanket Purchase Agreements (BPAs)" http://www.gsa.gov/portal/content/199353
- GAO-13-231. Acquisition Workforce: Federal Agencies Obtain Training to Meet Requirements, but Have Limited Insight into Costs and Benefits of Training Investment. 3/28/2013. http://www.gao.gov/assets/660/653437.pdf
- 12. Anne Rung, Former Administrator, Office of Federal Procurement Policy, OMB, has described the Salesforce BPA as representing the "best of the Administration's efforts to drive category management and increase innovation in the delivery of IT. By driving agencies to these BPAs, we will be able to leverage industry's agile talent while ensuring that we deliver the best value for the American taxpayer." General Services Administration. "GSA Awards BPA for Salesforce Integration and Support Services". http://www.gsa.gov/portal/content/121238
- 13. M-03-14. Reducing Cost and Improving Quality in Federal Purchases of Commercial Software. 2/25/2004. https://www.whitehouse.gov/omb/memoranda_m03-14 and M-04-08. Maximizing Use of SmartBuy and Avoiding Duplication of Agency Activities with the President's 24 E-Gov Initiatives. 2/25/2004. https://www.whitehouse.gov/sites/default/files/omb/memoranda/fy04/m04-08.pdf and M-05-25. SmartBUY Agreement with Oracle. 8/25/2005. https://www.whitehouse.gov/sites/default/files/omb/memoranda/fy2005/m05-25.pdf
- 14. OMB Memorandum. Implementing Strategic Sourcing. 5/20/2005. https://www.whitehouse.gov/sites/default/files/omb/procurement/comp_src/implementing_strategic_sourcing.pdf
- 15. M-13-02. Improving Acquisition through Strategic Sourcing. 12/5/2012. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-02_0.pdf
- 16. OFPP Memorandum. Transforming the Marketplace:
 Simplifying Federal Procurement to Improve Performance,
 Drive Innovation, and Increase Savings. 12/4/2014. https://www.whitehouse.gov/sites/default/files/omb/procurement/memo/simplifying-federal-procurement-to-improve-performance-drive-innovation-increase-savings.pdf
- 17. U.S. Digital Service. "TechFAR Hub: Introduction". https://techfarhub.cio.gov/

- 18. OMB Memorandum. Acquisition Innovation Labs & Pilot for Digital Acquisition Innovation Lab. 3/9/2016. https://www.whitehouse.gov/sites/default/files/omb/procurement/memo/acquisition-innovation-labs-and-pilot-for-digital-acquisition-innovation-lab-memorandum.pdf
- General Services Administration. "Acquisition Gateway". https://hallways.cap.gsa.gov/login-information
- 20. OMB defined "commodity IT" as IT infrastructure (data centers, networks, desktop computers and mobile devices); enterprise IT systems (email, collaboration tools, identity and access management, security, and web infrastructure); and business systems (finance, human resources, and other administrative functions). M-11-29. Chief Information Officer Authorities. 8/8/2011. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-29.pdf
- 21. M-12-10. Implementing PortfolioStat. 3/30/2012. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-10.pdf
- 22. In the years since, however, GAO and others have questioned the validity of these savings, noting that only one agency addressed all the requirements issued by OMB and that GAO's review of agency materials concluded that the potential for savings may be even greater than reported. GAO-14-65. Information Technology: Additional OMB and Agency Actions Are Needed to Achieve Portfolio Savings. 11/6/2013. http://www.gao.gov/assets/660/658883.pdf and GAO-15-296. Information Technology: Additional OMB and Agency Actions Needed to Ensure Portfolio Savings Are Realized and Effectively Tracked. 4/16/2015. http://www.gao.gov/products/GAO-15-296
- M-13-09. Fiscal Year 2013 PortfolioStat Guidance: Strengthening Federal IT Portfolio Management. 3/27/2013. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-09.pdf
- M-12-13. Fiscal Year 2014 Budget Guidance. 5/18/2012. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-13.pdf
- 25. M-11-29. Chief Information Officer Authorities. 8/8/2011. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-29.pdf. and M-12-10. Implementing PortfolioStat. 3/30/2012. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2012/m-12-10.pdf
- M-13-09. Fiscal Year 2013 PortfolioStat Guidance: Strengthening Federal IT Portfolio Management. 3/27/2013. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-09.pdf
- 27. For example, by reducing the variety of desktop software installed government-wide, it would became easier to secure networks to ensure that software vulnerabilities were mitigated or removed. For more detailed information about efforts related to cybersecurity-specific acquisitions, see Policy Chapter E: Cybersecurity
- 28. M-16-02. Category Management Policy 15-1: Improving the Acquisition and Management of Common Information Technology: Laptops and Desktops. 10/16/2015.

 https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-02.pdf

- 29. M-16-12. Category Management Policy 16-1: Improving the Acquisition and Management of Common Information Technology: Software Licensing. 6/2/2016. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2016/m-16-12_1.pdf
- The Federal Acquisition Institute. "Digital IT Acquisition Professional Training (DITAP) with Joanie Newhart". https://www.fai.gov/media_library/items/show/27
- 31. OFPP Memorandum. Guidance for Specialized Information Technology Acquisition Cadres. 7/13/2011. https://www.whitehouse.gov/sites/default/files/omb/procurement/memo/guidance-for-specialized-acquisition-cadres.pdf
- 32. OFPP Memorandum. Revisions to the Federal Acquisition Certification for Program and Project Managers. 12/16/2013. http://www.fai.gov/drupal/sites/default/files/FAC%20 PPM%20Policy_121613.pdf
- 33. M-15-14. Management and Oversight of Federal Information Technology. 6/10/2015. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-14.pdf
- 34. FAC-P/PM certification of entry-level, mid-level, or senior-level; Based on an analysis of the Projects data feed from IT Dashboard, September 21, 2016. Based on OMB's PortfolioStat 2016 methodology, includes all IT projects which completed after December 1, 2014 or are in progress, and a project lifecycle cost of greater than \$2 million. https://itdashboard.gov/drupal/data/datafeeds?format=csv
- 35. Vivek Kundra. 25-Point Implementation Plan to Reform Federal IT Management. 12/9/2010. https://www.dhs.gov/sites/default/files/publications/digital-strategy/25-point-implementation-plan-to-reform-federal-it.pdf
- 36. OFPP Memorandum. "Myth-Busting": Addressing Misconceptions to Improve Communication with Industry during the Acquisition Process. 2/2/2011. https://www.whitehouse.gov/sites/default/files/omb/procurement/memo/Myth-Busting.pdf and OFPP Memorandum. "Myth-Busting 2": Addressing Misconceptions and Further Improving Communication During the Acquisition Process. 5/7/2012. https://www.whitehouse.gov/sites/default/files/omb/procurement/memo/myth-busting-2-addressing-misconceptions-and-further-improving-communication-during-the-acquisition-process.pdf
- 37. U.S. Digital Service. "TechFAR Hub: Introduction". https://techfarhub.cio.gov/
- 38. Contracting Guidance to Support Modular Development. 6/14/2012. https://www.whitehouse.gov/sites/default/files/omb/procurement/guidance/modular-approaches-for-information-technology.pdf
- 39. Performance.gov. "Cross-Agency Priority Goal: Smarter IT Delivery". FY 2016 Q2 Update. https://www.performance.gov/node/3403/view?view=public#progress-update
- 40. Federal Information Technology Acquisition Reform Act. 12/19/2014. Title VIII, Subtitle D of the National Defense Authorization Act (NDAA) for Fiscal Year 2015, Public Law No: 113-29: https://www.congress.gov/113/plaws/publ291/PLAW-113publ291.pdf#page=148

- 41. OMB's FITARA implementation guidance also committed to revising the Federal Acquisition Regulation (FAR) to expand the definition of "information technology," broadening the CIO's purview to clearly include cloud computing services and significant IT operated by contractors related to the agency environment. M-15-14. Management and Oversight of Federal Information Technology. 6/10/2015. https://www.whitehouse. gov/sites/default/files/omb/memoranda/2015/m-15-14.pdf
- 42. Measurement: There are no PortfolioStat key performance indicators which evaluate the role of the CIO. However, the Smarter IT Delivery CAP Goal reports the "number of approved FITARA agency plans." OMB collects Common Baseline Self-Assessments and milestones updates from agencies in order to evaluate their progress implementing the responsibilities required by FITARA, but these have not been incorporated into PortfolioStat
- 43. Performance.gov "Cross-Agency Priority Goal: Category Management." FY 2016 Q3 Update. https://www.performance.gov/node/3399/view?view=public#progress-update
- 44. Although OFCIO removed its commodity IT areas data collection from the IDC, it restored data center related categories to its CPIC guidance and GSA's Benchmarking effort continued to collect spending data in help desks and other areas. It is unclear whether these varied data collection efforts used the same definitions and reporting instructions, so it may be difficult to accurately compare agency data from year to year

- 45. Performance.gov. "Cross-Agency Priority Goal: Benchmark and Improve Mission-Support Operations". Quarterly Progress Update. https://www.performance.gov/node/3397/view?view=-public. For more information about government-wide Benchmarking initiative, see Policy Chapter A: Management and Oversight of IT
- 46. For more detailed information about efforts related to IT Infrastructure Modernization initiatives, see Policy Chapter B: IT Infrastructure Modernization
- 47. Senior Agency Officials such as Chief Acquisition Officer (CAO), Chief Financial Officer (CFO), Chief Human Capital Officer (CHCO), Chief Information Officer (CIO), Chief Operating Officer (COO); defined in M-15-14. "Management and Oversight of Federal Information Technology" 6/10/2015. https://www.whitehouse.gov/sites/default/files/omb/memoranda/2015/m-15-14.pdf
- 48. For more information about FedRAMP, see Policy Chapter B: IT Infrastructure Modernization