

## SURVEY SERIES

Annual CIO Survey: Executive Collaboration for Strategic IT



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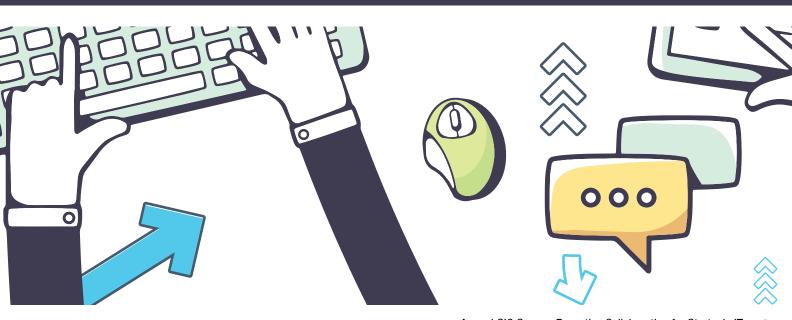
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## **TABLE OF CONTENTS**

Executive Summary	.4
About the Study	.6
Common Perspectives at the Intersection of CIO and CFO	.7
CxO Collaboration: Before and Amid FITARA	10
Legacy Systems and Current Modernization Trends	11
Agency IT Budget Allocation	12
Lessons Learned	13
Conclusion	14



## **EXECUTIVE SUMMARY**





During a time of fiscal austerity and stagnant budgets, government agencies face growing pressure to improve performance and realize cost savings. To do so, federal executives turn to information technology (IT) to streamline business processes and more efficiently utilize resources. The Federal IT Acquisition Reform Act (FITARA), enacted in December 2014, supports such activities, and calls for agency executives to adopt a more coordinated approach to technology acquisition and implementation.

More specifically, FITARA encourages collaboration among chief finance, IT and acquisition officers (CFO, CIO and CAO, respectively) in technology-related budgeting, procurement, and workforce decision making. FITARA also increases accountability, responsibility and authority of agency CIOs when utilizing technology to support agency-specific missions, programs, and operations.

This survey examines collaboration techniques used by today's C-suite executives, and provides insight into federal IT investment practices — from sourcing technologies to deployment. The study team met with finance, IT and acquisition leaders across an array of federal agencies to identify successful collaboration practices, common challenges faced when investing in IT, and current trends in federal IT strategy.

Responses to binary survey questions posed to the participating executives note collaboration regularly occurs between the CIO, CFO and CAO, but unique challenges faced by each function may hinder organization-wide performance:

- All executives interviewed said their agency's long-term IT strategy received input from the CIO, CFO and procurement leader.
- All executives interviewed stated collaboration between the aforementioned parties occurs, at a minimum, on a bi-annual basis.
- More than 60 percent of interviewed executives said it is a significant challenge for the CIO to communicate cost savings of successful IT investments.
- Seventy-five percent of executives interviewed noted that when deciding to implement a new technology, procurement and/or change management challenges are more significant considerations than budget.
- All executives interviewed agreed hiring and retaining talent in the acquisition function is a challenge.

I am heavily dependent on my C-suite counterparts.
We're constantly communicating and I am regularly reminding them of my goals. These relationships are vitally important. Without money or contracts, I cannot deliver.

— Federal CIO





Responses to open-ended questions from the same group of executive leadership note continuous collaboration across the C-suite is essential to successfully support agency-specific missions and operate efficiently. Key points from the discussions include:

- FITARA codifies several existing informal processes, resulting in a positive effect on C-suite collaboration and agency IT strategic planning efforts. "The legislation brings the right people to the table," one executive stated. "It makes CIOs an equal partner in planning short-term activities and long-term strategies."
- Integrating new technologies into agency legacy portfolios is a challenge, due to financial constraints, skillset gaps, and resistance to change. Thus, federal agencies may be slow to replace homegrown IT applications to adopt commercial off-the-shelf (COTS) solutions. COTS products may not fully meet unique agency mission requirements, and investing in the necessary hardware and/or software can require incredible switching costs. Often, these costs are not just quantitative. Users may be well-versed in antiquated systems, lacking the skills required to manage a new technology. Their resistance to change and the resources required to successfully manage a conversion can be discouraging when considering new IT. Despite these constraints, CIOs and CFOs understand legacy systems are just not cutting it these days. "I've come to realize that just because the [legacy] system is working doesn't mean it is good enough," one agency CFO stated.
- Agencies may choose existing technologies over emerging technologies when expanding their IT portfolio to maintain data integrity. Multiple executives interviewed stated they consider investing in new technologies, but not necessarily the newest, as emerging IT may not be as reliable or secure. With this mindset, agencies commonly integrate existing technologies and forgo cutting-edge solutions when modernizing their IT function. "We [government] tend to lag behind industry because of our inherent aversion to taking on more risk," noted a federal CIO.

- Current governance structures lack comprehensive visibility, making it difficult to calculate an agency's true IT spend. Luckily, FITARA will help with this issue. Many executives believe the required coordination and communication efforts driven by FITARA will play a key role in providing visibility into their agency's actual technology expenditures. Furthermore, as a result of the legislation, they expect to achieve cost efficiencies by identifying and consolidating redundant technologies and processes.
- Executives are restricted by the federal budget timeline, and often face budget uncertainty. The federal government's budget process requires agencies to plan for the upcoming fiscal year; however, technology investments are often multi-year expenditures. This requires finance and IT leaders to join forces in planning an agency's short- and long-term IT strategy. In addition to timing difficulties surrounding the budgeting process, federal agencies are also plagued by uncertainty in annual funding. "We don't always know the level of funding we will receive. Whether caused by sequestration or a continuing resolution, budget uncertainty is a problem at all points," one agency CFO stated. "On top of that, if we do secure the desired level of funding, there is a rush to get things done with it. Then, it becomes an issue of timeliness versus governance. Do we forfeit speed in order to maintain the documentation required for oversight?"
- Trends in IT investment have shifted from obtaining commodity IT services and centralizing duplicative functions, to improving availability and security of information. Although agencies are still consolidating data centers and moving to shared service providers (SSPs), they now increasingly look to digital technologies, such as cloud and mobility, to support citizen-facing and mission-focused programs. Furthermore, cybersecurity remains a top priority as interest in digital solutions increases.



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AGA sponsors and publishes various thought leadership publications, examining current topics and issues of interest to the government financial management community. Among these is the annual CIO Survey, which focuses on technology as an enabler of efficiency and innovation in government financial management.

AGA partnered with Accenture Federal Services to prepare this study, which applies a set of interviews with senior leaders involved in technology-related decision making, including CIOs, CFOs, and CAOs. Discussions focused on C-suite collaboration, recent acquisition reform, and emerging technologies. Responses to interviews shed light on the current condition of agency-wide communication and collaboration, challenges faced when implementing new technology, and how recent acquisition reform addresses these challenges.

#### **Objective**

This study aims to present evidence gathered and lessons learned for the benefit of the federal IT, finance, and acquisition communities. It draws perspectives from ClOs, CFOs, deputy ClOs/CFOs, and procurement leaders across an array of government agencies, and identifies the benefits of increased collaboration across these groups.

#### Methodology

AGA and Accenture Federal Services representatives met with senior government officials from a selection of federal agencies. Participants represented a diverse government community, including cabinet departments, component agencies of larger departments, and smaller independent agencies. Officials interviewed manage and/or oversee their agency's IT, finance, and/or procurement function. The study team applied three sets of open-ended questions, and 13 binary (agree/disagree) questions to all participants in one-hour interviews.

Open-ended questions covered the following topics:

- challenges faced while implementing new technologies;
- the parties involved in developing long-term IT strategies;
- metrics used to measure value, risk and return on IT investments:
- level of difficulty in communicating return on IT investments to stakeholders:
- technologies considered when looking to realize quantitative and qualitative efficiencies;
- top areas of IT spending;
- · common areas where C-suite support is necessary;
- difficulties in the IT procurement process, and the effects of recent acquisition reform on these difficulties;
- · current IT governance structures; and
- adoption of emerging technologies and overcoming user resistance.

In addition to open-ended questions, the study team posed 13 binary (agree/disagree) polling questions to interviewees on similar topics. Note: Some officials determined that neither an "agree" or "disagree" answer was appropriate or representative of their organization, resulting in some responses not totaling 100 percent.

#### **Anonymity**

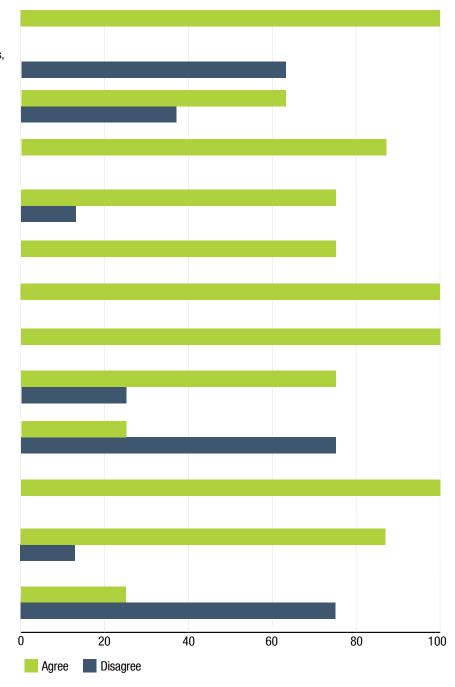
To encourage candid and open discussion, all responses, quotes, and anecdotes are anonymous and are not associated with any specific government official interviewed.



## COMMON PERSPECTIVES AT THE INTERSECTION OF CIO AND CFO

Figure 1. Binary survey results summarized

- The IT strategy in place at my agency has received input from the ClO, CFO, and procurement leader.
- 2. To make the most of the government's IT investments, it is best to use government-managed solutions.\*
- It is a significant challenge for the CIO to communicate the cost savings of successful IT investments.
- 4. The impact of FITARA on managing IT has been shared with and is understood by agency ClOs.\*
- 5. FITARA and other acquisition reforms will improve the procurement process and allow agencies to realize cost savings in the future.\*
- Recent acquisition reform will allow agencies to implement IT solutions that have faced resistance in the past.\*
- 7. Getting and retaining talent in the acquisition function is a challenge.
- My agency regularly obtains feedback from both vendors and internal stakeholders to enhance acquisition processes.
- Agencies should have at least one emerging technology in their long-term IT strategy.
- When deciding to implement an emerging technology, budget is a more significant consideration than procurement or change management challenges.
- 11. The CIO and CFO of my agency are aware of recent acquisition reform and the technologies emerging around us.
- 12. My agency recognizes that FITARA provides the CIO with greater authority to make necessary changes to failing IT projects.
- 13. There will be little resistance to make changes in agency governance structures to incorporate the autorities provided to the CIO regarding IT projects and IT budgets.



<sup>\*</sup>Note: One or more agencies stated this binary question was not applicable to their agency; or could not be sufficiently answered with a binary response. As a result, no answer was provided for this question, and they have been removed from totals for comparability purposes.





#### **Executives Are Collaborating**

The survey results indicate that IT strategies are consistently developed with input from the CIO, CFO and procurement leader. Most often, these stakeholders are members of a larger working group, including other key executives, to ensure an integrated approach to IT investment. However, a few respondents noted only the CIO, CFO, and procurement leader are involved in these planning discussions.

Across the board, executives noted the occurrence of periodic meetings with these key stakeholders to discuss mission objectives, current IT initiatives, and prioritization of new technologies. At a minimum, formal collaboration occurs on a bi-annual basis between the CIO, CFO, and procurement leader. However, several agencies cited meeting as often as weekly to review their portfolios, and discuss potential acquisitions.

#### Communicating Success Can Be a Challenge

More than half of the CIOs interviewed believe it is difficult to communicate the cost savings of successful IT investments to their C-suite counterparts. Participants noted the significant challenge to quantify efficiencies gained from newly implemented technology, as savings may not be measured in dollars. As a result, most agencies look to qualitative metrics, such as accuracy of information

and required processing time to measure a project's return on investment (ROI). Unfortunately, these results are not generally recognized immediately. Projects are commonly deemed successful if they meet time and budget expectations, and ROI is rarely considered after initial implementation.

In addition, agencies commonly face difficulties measuring the risk of potential IT investments. The results of this survey indicate that time and budget constraints dampen business owners' ability to identify and consider all risks prior to development and/or implementation of new technologies. More often than not, risks are dealt with as they emerge.

Of those interviewed, the executives who consider their agency successful in assessing risk require business case submission for new IT investments to be considered. At these agencies, business cases are proposed by individuals and/or groups who articulate value using quantitative metrics, outline known risks and related mitigation strategies, and define potential cost savings. Each period, key stakeholders score submissions based on a number of pre-determined factors, and the highest-scoring technologies are prioritized for implementation. In addition to realizing a greater number of successful IT projects, these agencies tout high levels of visibility into other business areas. They believe this leads to improved understanding of resource allocation, and thus enhances mission support across the organization.

The IT strategy in place at my agency has received input from the CIO, CFO and procurement leader.

**100% AGREE** 

More than half of the CIOs interviewed believe it is difficult to communicate the cost savings of successful IT investments to their C-suite counterparts.

It is a significant challenge for the CIO to communicate the cost savings of successful IT investments.

63% AGREE





### Government-Managed Solutions May Not Be the Best Solution for All Agencies

More than half of the agency executives interviewed expressed that an in-house IT function is more effective than government-managed solutions. Executives within these agencies noted shared services may fail to address their unique mission(s) and requirements. Instead, they support the implementation of government-wide acquisition contracts, such as General Services Administration (GSA) schedules, which define IT acquisition and procurement procedures as well as potential commercial sources.

The remaining executives noted management of IT is system specific, and that a mix of in-house and government-managed technology can deliver more positive results. "Centrally managed payroll is incredibly cost-effective for us," one agency CIO stated. "However, we want to manage our grants system. We will do it better than anyone else."

#### Agencies Foresee Challenges but Expect Positive Outcomes from Recent Acquisition Reform

All interviewed CIOs and CFOs confirmed they are aware of, and understand the potential impact FITARA will have on managing

IT. The majority noted the recent acquisition reform enables implementation of IT solutions that have faced resistance in the past, as it grants agency CIOs greater authority over IT spending decisions. Furthermore, they stated the additional authority granted to the CIO will enable their agency to more easily address failing IT projects. With help from FITARA, executives expect to gain a more accurate depiction of their agency's true IT spend, along with enhanced communication across agency, component, and bureau C-suites.

#### The Acquisition Function Faces Difficulties, Too

"Currently, each department at our agency plans for acquisitions differently. Because the process is not standardized, it is impossible to determine if we are spending our money effectively and efficiently," an agency CAO stated. Many CIOs and CFOs alike agreed, stating the acquisition life cycle is composed of many different areas, and obtaining enterprise-wide visibility of the entire life cycle is incredibly difficult. Agencies hope to improve their acquisition life cycle by developing agency-specific policies and enforcing recent reform requirements.

Further, all executives interviewed cited challenges in obtaining and maintaining talent in the acquisition function. "An acquisition workforce is necessary to ensure appropriate spending," one CIO stated. "We [agency executives] need to work together to ensure we attract and keep talent in this function. We cannot rely on HR alone."

Getting and retaining talent in the acquisition function is a challenge.

**100% AGREE** 

To make the most of the government's IT investments, it is best to use government-managed solutions.

37% AGREE

FITARA and other acquisition reforms will improve the procurement process and allow agencies to realize cost savings in the future.

86% AGREE



## CXO COLLABORATION: BEFORE AND AMID FITARA

The majority of agencies interviewed noted FITARA has little impact on current governance processes. Many cited only minor changes were necessary to conform to FITARA's baseline requirements, such as formal documentation of their communication framework, and/or small adjustments to their budgeting and acquisition processes.

When asked about expected benefits of the legislation, all executives noted new or stronger relationships among key agency stakeholders. Multiple participants mentioned the ability to more easily identify areas to create synergies, remove duplicate efforts, and

gain efficiencies. Many stated deeper involvement across the organization's leadership further enables stakeholders to support the overall mission of the agency, as roles and resource allocation will be more transparent.

Study participants noted specific instances in which increased collaboration delivered results. One respondent described how on going integration with the procurement function allowed the agency to distinguish between operating leases and capital leases in their financial statements, creating greater transparency in financial

reporting. Another respondent, struggling with the administrative burden of implementing legislative requirements, described how collaboration between the CFO, CIO, and mission area allowed them to implement manual workarounds during the one-to-two year period

FITARA is going to give us a clearer picture of the technologies and dollars that make up our [IT] portfolio.

required to modify systems for compliance.

Along with enhancing relationships among agency CxOs, executives expect stronger collaboration among departmental CIOs, and their bureau and component counter parts. With greater communication throughout all levels of the agency, executives anticipate increased visibility into the acquisition function, specifically in the area of IT investment. According to one CIO interviewed, "We're a big agency with a lot of small-dollar, fieldlevel procurements. We've never been able to fully quantify our

true IT spend. FITARA is going to give us a clearer picture of the technologies and dollars that make up our [IT] portfolio." A majority of CIOs also noted FITARA provides CIOs greater authority over the agency's IT function. Specifically, these executives anticipate greater power in remediating underperforming investments.

At the time this survey was conducted, the majority of interviewees were optimistic regarding the current state of their governance processes in relation to FITARA's requirements.

However, multiple executives noted although agencies may be aware of FITARA, some do not fully understand the direct implications of the legislation. Specifically, they suggested CFOs may not fully comprehend the responsibilities they must relinquish to their CIO counterparts.

My agency recognizes that FITARA provides the CIO with greater authority to make necessary changes to failing IT projects.

88% AGREE 12% DISAGREE



## LEGACY SYSTEMS AND CURRENT MODERNIZATION TRENDS

Despite the availability of highly evolved technologies, federal agencies' portfolios remain heavily invested in legacy applications and infrastructure. The majority of interviewees noted their current portfolio consists of at least 70 percent legacy IT. When asked why such large volumes of dated technology are maintained, multiple CFOs expressed a hesitation to invest in new IT while their current legacy system is functional and supporting their needs. Their CIO counterparts noted updating legacy infrastructure can be incredibly difficult due to the unique nature of their business, and can be extremely costly because one COTS solution may not fully address their needs.

Although federal portfolios are heavily populated by legacy technologies, agency CIOs are pushing their CxO counterparts to modernize with emerging technologies. One CIO stated, "A legacy system's age can work against it. When a system has been around for a while, it is easier to crack."

When asked to name specific technologies each agency is currently considering, most executives noted plans to adopt cloud and mobile technologies to decrease the investment in physical

At the end of the day, it's about balance. We can't have IT that is too new because it is not yet fully proven. At the same time, we can't maintain insufficient legacy systems either. It's a mix of experience and expertise.

infrastructure, and increase the availability of services to users. In addition, they noted great interest in new cybersecurity solutions. "Technology offers so much benefit these days; as a result, cyber remains an area in which we must remain vigilant," one executive stated.

In years past, federal agencies focused on using technology to achieve cost efficiencies. Executives commonly looked to data centralization and commodity services (e.g., email, networks, etc.) to enhance bottom-line results. More recently, agency focus has shifted to increased efficiency of operations through the use of enterprise systems. Results of this

survey show shared services, category management activities (e.g., government-managed purchasing options in categories such as IT, transportation, and travel), and digital services remain at the forefront of federal IT investment today. However, federal IT executives expect a shift to continuous modernization in the near future. "It is way more effective and efficient to keep architecture up to date — instead of injecting new solutions every five years," said one federal CIO.

Figure 2: Trends in Federal IT Investment





## **AGENCY IT BUDGET ALLOCATION**

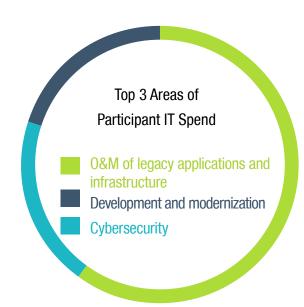


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Participants were asked to identify the top three areas in which they spend money within their IT portfolios. All executives noted leading expenditures in areas of operation and maintenance (0&M) of legacy applications and infrastructure. With portfolio compositions of more than 70 percent legacy IT, this comes as no surprise. "Much of our limited IT budget funds 0&M of existing systems, as opposed to development, modernization, and enhancement (DME)," one CIO stated. As a result, investing in new solutions may not always be feasible.

Fewer than 25 percent of those interviewed cited DME as a top area of IT spend. However, "It is becoming increasingly difficult to determine true DME from 0&M," one CIO stated. "As we've started implementing digital solutions, more and more projects are completed outside of the legacy environment." In addition, many of the CIOs and CFOs interviewed said their agency intends to increase the proportion of modernization spending going forward. One executive noted, "We recently formalized a policy that requires COTS consideration over in-house solutions with every new IT investment."

The same proportion of respondents identified cybersecurity as a primary expenditure. Although fewer than 25 percent currently prioritize cyber spending, most interviewees noted the inclusion of enhanced cyber solutions in their IT strategic plan. "This is one area where spending is quickly increasing," one CIO specified.





Through interviews with agency executives, the survey team gathered information that provides an understanding of relationships among federal leadership today, current IT trends, and best practices in managing governmental IT portfolios. In doing so, the team gained additional insight into areas in which improvements can be made.

#### Better mechanisms are needed to track IT spend.

Agencies should continue to improve cost tracking systems, processes, and procedures to gain an accurate depiction of IT spend. To do so, communication between field-level operations and headquarters must increase to aid in the discovery of technology expenditures throughout the enterprise. Once a greater understanding of spending is achieved, agencies will be more able to utilize available benchmarks and identify areas in which they can improve.

## For effective collaboration, communicate consistently and constantly. Increased communication among the C-suite will benefit agencies in all areas, not just IT.

However, if communication among leadership occurs only a few times a year, the benefit may not be as great. Agency executives should meet on a weekly or monthly basis, at a minimum, to ensure open and effective collaboration.

### Communication among CxOs is good, but functioning as a team is better.

In addition to increasing open and effective communication, as noted above, executives should work to align goals and objectives to more effectively support their agency's mission(s).

#### FITARA is the start of a journey, not the destination.

OMB's legislation will not be implemented overnight. It will take time to fully conform to and accept its requirements. Although agencies are seeing positive effects already, there is much room for improvement.

### The IT and finance functions should work together to enhance IT, while meeting financial targets.

CIOs tend to focus on technology-related matters, while CFOs concentrate on financial initiatives. With additional power granted by FITARA, CIOs will now make business decisions regarding IT investments. To successfully transition this responsibility, the CFO should assist the CIO in financial matters, such as tracking IT spend and measuring and/or managing the financial risk of a project.





## **CONCLUSION**

It is clear from the results of this year's CIO Survey that collaboration among the C-suite is essential to successfully supporting today's federal agency. As CxOs continue to lean on CIOs to increase innovation, drive efficiencies, and enhance performance, constant communication around strategic objectives is key. Gone are the days of departmentalized operations, and silo mentalities can no longer survive. Agency cultures are shifting to data sharing and ensuring goal alignment across all mission support areas. Consequently, transparency and visibility into operations are increasing, especially in the area of information technology.

Furthermore, this study revealed an increased reliance on federal CIOs. IT is no longer an administrative support activity, but a core function of the business. CIOs are required to run the systems and applications necessary to keep the agency running. CxO counterparts must continue to embrace this shift in responsibility and focus on managing their day-to-day operations.

As budget restrictions continue, agencies understand there will be challenges in the future of IT investment. However, executives remain optimistic in their abilities to make sound decisions and deliver enhanced results.

