Government Technology Optimization and Modernization Primer for 2020

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24 January 2020
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Published 24 January 2020 - ID G00713970 - 9 min read

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Initiatives: Government Technology Optimization and Modernization

Government IT faces unprecedented change as digital drives technology optimization and modernization programs. Government CIOs must ready themselves, their operating models and their platforms to remain relevant and thrive.

Scope

This initiative focuses on the unique challenges posed by technology modernization and optimizing a government that an IT organization should consider in its delivery capabilities and capacity.

The topics we cover include:

- IT Management: Governance and Cost Optimization: Position government CIOs to evolve their operating model, modernize the IT estate, leverage new sourcing strategies and optimize smart spending to support new digital capabilities.

- IT Operations: Government Applications: Help government CIOs guide the selection of applications and lead their organizations’ approaches to development and modernization of applications to support digital transformation.

- IT Operations: Shared Services and Cloud: Help government CIOs successfully adopt and evolve the use of shared and centralized services, as well as cloud services, in order to enhance the position of IT in overall organizational priorities, funding and strategic importance.

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Analysis

Figure 1. Government Technology Optimization and Modernization Overview
In an increasingly digital society, agility is essential for government to successfully support the rapid, continuous and iterative delivery of improved and new services. However, most application portfolios in government remain skewed to deliver stable environments for slowly changing and evolving solutions due to a preponderance of legacy applications. This heavy reliance on legacy applications in government and the effort required to maintain them pose growing costs and risks, which slow the pace of digital innovation.

Caught between two worlds, the IT workforce and its leadership are stretched between conflicting expectations. They are tasked with keeping the legacy environment running but, at the same time, driving modernization and transformation without risking the political fallout of public failure. The desire to embrace new sourcing, operating and funding models is undermined by traditional risk-averse approaches, legacy capabilities and governance. Government CIOs face a delicate balancing act. With too much energy and resources spent on the legacy debt and foundational aspects, they will be relegated to a tactician role, while too much devoted to the transformational aspects will introduce more risk than is acceptable in the environment. Finding the correct balance in a bimodal approach is essential to their organizations’ success.

National, regional and local government CIOs are expected to deliver value to constituents and public officials in cycles that are far shorter than in the past. The dynamic, rapidly evolving environment also requires new approaches to information security and risk management.

To deliver against these expectations, government CIOs must lead the transformation of their own IT areas. They must modernize their operating models and service catalogs. They must critically assess the capabilities they will need in the future. At the same time, they need to modernize their legacy applications and integration technologies, adopting a platform approach that leverages a
blend of sourcing models and technologies like cloud, shared applications and anything-as-a-service models.

**Topics**

In an era of absolute dependence on technology, even increasingly outward-looking and business-aligned government CIOs are faced with enormous challenges: to drive digital government and to modernize their own IT organization to support this transformation. Our research is intended to help government CIOs address these critical challenges.

Our research centers on the following topics:

**IT Management: Governance and Cost Optimization**

Government IT organizations are under internal and external pressure to evolve to operate as part of an increasingly digital society. To successfully and smartly plan the modernization of their IT organization, government CIOs must take the initiative by modernizing their leadership, their IT area, and their governance practices to improve outcomes, effectively manage costs and ensure financial flexibility.

**Questions Your Peers Are Asking**

- How can government agencies establish effective IT governance and digital leadership to improve outcomes?
- What are approaches for cost optimization and maximizing financial flexibility in government?

**Recommended Content**

- “Creating Strong Governance for Government Projects”
- “6 Methods CIOs Can Use to Resolve Conflict in Consensus-Driven Governance”
- “Government Cost Optimization 101: Stop Acting Like a Cost Center”
- “Government Cost Optimization 201: Expand Impact to Mission and Business”

**Planned Research**

- Government perspectives on Gartner’s CIO role evolution research and how it relates to digital leadership across government
- Extending our government cost optimization series to explore how government can use digital to drive cost optimization and the impact structural change has on cost optimization
- Best practices required to effectively establish a smart city governance framework
IT Operations: Government Applications

Many governments have great ambitions to become digital governments, but lack the time, money and resources to overcome technical debt and modernize legacy applications. The decision on how to address these challenges can propel or stall digital progress. Government CIOs must think creatively and differently about how to approach the modernization of their legacy applications.

Questions Your Peers Are Asking

- How should government agencies address the unique challenges posed by modernizing legacy applications?
- How can government adopt government-specific applications that cut across agencies?

Recommended Content

- “5 Steps to Make Government Legacy Modernization a Success”
- “Survey Analysis: Results Show How Government CIOs Are Tackling Modernization”
- “Select Applications That Further Your Digital Government Technology Platform Goals”
- “Optimize the CDR Application Selection Process to Ensure Positive Project Outcomes”

Planned Research

- Develop an application-driven roadmap for a digital government technology platform in areas of government such as public safety and social services.
- Clarify the links between modernization and your digital government technology platform plans.
- Explore the relationship between funding of modernization agendas and the alignment to government priorities.
- Identify the core governance challenges associated with enterprise applications in government.
- Annual government technology Hype Cycle, government-related Market Guides and predictions that provide forward-looking assessments and guides to technology-related changes for use by CIOs in strategic and technology planning exercises.
Identify commonalities and differences in case management in areas of government such as public safety and social services.

Update the I&T operating model to support digital product management, including defining the role of the product manager in government.

IT Operations: Shared Services and Cloud

An increasing demand for agility in developing and supporting services, as well as continuous cost/value conversations and competition for talent, is pushing government IT toward a combination of centralized or shared services, alongside cloud and as-a-service solutions. Government CIOs must focus on outcomes as they drive to improve flexibility by moving to increasingly blended IT operations.

Questions Your Peers Are Asking

- How can government evolve centralization and shared services to optimize IT operations?
- How can government agencies adopt cloud to optimize government IT operations?

Recommended Content

- “Responsibility for ‘Cloud First’ in Government Must Be Spread Widely”
- “Government Cloud Use Starts With 3 Vital Components: Policy, Strategy and an Adoption Plan”
- “Government Cloud Policy Template, 2019”
- “Government Shared Services Governance That Works”
- “Government Cloud 2025: Fight, Implementing or Optimizing?”

Planned Research

- Assessing the implications of data sovereignty on government’s continued adoption of public cloud
- Best practices cost optimization models for cloud adoption
- Best practices on how to overcome obstructions to cloud from middle management
- Exploring the business models applied to shared services in government
- Exploring centralized, decentralized and shared services approaches to government IT
- The future of shared services and practices in the short term
The impact of XaaS on shared services organizations

Suggested First Steps

- “A Master CIO in Government” — Learn about the new skills and competency required by a CIO to lead the transition to digital government.

- “Escaping the Vicious Cycle of IT for Government CIOs” — Learn how to escape the vicious cycle: constrained funding, inability to invest or deliver, growing technical debt and dissatisfaction, and lost credibility.

- “A Digital Government Technology Platform Is Essential to Government Transformation” — Learn how to make the case for sustained IT modernization funding by showing how digital platforms are vital to lowering risk and achieving business transformation goals.

- “How to Begin Using Public Cloud Infrastructure as a Service” — Learn how late-adopting organizations — like many governments — can get started with cloud services.

- “The Challenges for Government Private Cloud to Deliver Value” — Learn how to articulate to senior management the ongoing requirements for investment in private cloud.

- “Government Cost Optimization 101: Stop Acting Like a Cost Center” — Optimize IT costs to position for enterprise cost optimization.


- “How to Use Cloud to Modernize Legacy Systems” — Learn how to explore different approaches, rather than the familiar, failure-prone ones.

Essential Reading

- The Most Critical Success Factor of Government Governance — Governance can make or break IT and project management success. Most leading government CIOs help develop carefully designed approaches to governance. Even the best approaches, however, will fail if they don't properly engage the right people.

- “A CIO's Guide to Dealing With Political Attacks Through Verbal Diplomacy” — CIOs frequently find themselves on the receiving end of political attacks from stakeholders who may perceive them as service providers and easy targets. CIOs can become proficient at defending against verbal attacks and change enterprise perceptions by becoming verbal diplomats.

- “What Is a Shared Services Center, What Is Its Purpose and Why Is That an Important Question?” — CIOs can learn why shared services centers continue to have a vital role to play, and how many are moving up the value chain.
“Getting Past the Politics of an IT Shared Services Agenda”— CIOs must learn how to push past transactional customer/provider conflicts to deliver both IT service efficiency and business unit strategic priorities.

“Government CIOs Eliminate Technology Gaps to Maximize Efficiency” — CIOs must learn how to communicate and tackle challenges like technical debt and a business case for change.

“Predicts 2020: Governments Balancing Change and Continuity, Disruption and Evolution” — CIOs can learn about Gartner’s predictions for government organizations.

“Apprenticeships Are a Practical Means for Government CIOs to Develop the Workforce” — This document helps governments plan for and deliver developmental opportunities to build a more capable workforce.

“Decision Point for Migrating Your Data Center to Public Cloud Infrastructure as a Service” — This document helps government CIOs conduct a rapid assessment of technical and business factors to determine the viability of cloud migration.

“Hype Cycle for Software as a Service, 2019” — This document assesses the pace of incremental innovation associated with the SaaS journey toward mainstream acceptance and transformative business usage.

Tools and Toolkits

“Toolkit: Adapt Agile Development Methodologies to Technology Procurement Processes to Enable Digital Business” — CIOs familiar with agile development methods and practices can use this Toolkit to adapt them to technology procurement.

“Toolkit: Gartner’s Top 100 IT Cost Optimization Ideas” — This Toolkit provides CIOs with the tools and techniques to prepare for a fiscally austere environment or exercise.

“Toolkit: A Model for Justifying Business Case Value and Returns” — This Toolkit provides CIOs with assistance in constructing a compelling and convincing business case.

“Manage the Impact of Cloud Applications on Opex and Capex Budgets” — CIOs must work with CFOs to determine and communicate how the shift to the cloud affects their IT operating budgets.

Document Revision History

Modernizing Legacy Mission-Critical Applications in Government Primer for 2018 - 11 January 2018
Additional research
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