Government Digital Transformation and Innovation Primer for 2020

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Initiatives: Government Digital Transformation and Innovation

Governments look to emerging technologies, data, analytics and artificial intelligence to optimize and augment everything they do, while inspiring the innovation required to transform. Government CIOs must guide the digital journey, tackling the strategic and tactical challenges ahead.

Scope

Gartner's government digital transformation and innovation initiative focuses on supporting strategic leadership of technology-enabled innovation that advances the organization's mission or purpose.

The topics we cover include:

- Transitioning to Digital Government: Helping government CIOs successfully plan and accelerate the implementation of a digital government strategy built around the targeted use of emerging technologies at the national, regional or local level.

- Leveraging Data for Digital Transformation and Innovation: Providing government CIOs with guidance about practices to improve data management, accelerate their open and shared data initiatives, increase their data analytics capabilities and maximize the impact of technologies like artificial intelligence and digital twins.

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Analysis

Figure 1. Government Digital Transformation and Innovation Overview
The mission or public purpose of government organizations is inextricably linked to technology and its application. Emerging technologies are expanding the boundaries of the possible. Community expectations for government already include agility, connectivity and human-centred, outcome-focused service delivery. The demands of the communities, businesses, government workforce and government leadership will continue to rise as the private-sector adoption of emerging technologies advances expectations for government services. Government CIOs must ensure their organizations take full advantage of these new capabilities quickly and completely.

Finding balance between achieving better outcomes while cutting operating costs is a dynamic tension for CIOs and other government leaders. Governments are seeking to stimulate innovation both inside and outside of government. CIOs are working to help governments manage their largely untapped content and data as a strategic asset, identifying new data sources and improving data quality. Government CIOs need to increase the value of existing content and unstructured data by extending their capabilities in critical areas such as security, advanced analytics and artificial intelligence (AI). At the same time, they must come to grips with nontechnical considerations and legislative mandates related to equity, privacy, ethics and transparency.

CIOs must adopt an outcome-focused approach to digital strategies and investments as digital societies progress. Digital government will not develop in isolation, and digitally augmented ecosystems will continue to emerge and evolve, placing new expectations and pressures on government to supply access to data and digital services that are easily consumed. National, regional and local government CIOs must continuously communicate a sense of urgency and ensure organizational readiness so that their digital innovation keeps pace.

The adoption of a digital government technology platform will alleviate the ecosystem pressures noted above by connecting and federating proven technology enablers such as cloud, mobile, data...
analytics, APIs and the Internet of Things (IoT). Government CIOs must bring together diverse, cross-functional teams to maximize outcomes when adopting emerging trends such as digital twins, conversational platforms, machine learning and blockchain. At the same time, when building government services government CIOs must be human-centered in their approach to designing solutions for the workforce, businesses, citizens and the complex ecosystems on which all of these depend.

**Topics**

Digital government is government designed and operated to take advantage of digital data and digital technology in optimizing, transforming and creating government services. As the journey toward digital government continues in various forms around the world, the transformational challenges for government CIOs are growing rapidly.

Our research centers on the following topics:

**Leveraging Data for Digital Transformation and Innovation**

Data is at the heart of the digital transformation of government. Governments are looking to data and analytics to reliably and accurately detect and predict shifts in risk, opportunity and outcomes prior to their occurrence. Government must look to data to drive innovation through improved management, targeted data sharing and AI-augmented data analytics capabilities.

**Questions Your Peers Are Asking**

- How can government agencies improve public services, achieve mission outcomes and drive innovation through the use of data, analytics and AI?
- How can government agencies augment government capabilities, collaborate with ecosystem partners and drive innovation through the ethical use of shared data?

**Recommended Content**

- “Turning Smart Cities Into Intelligent Urban Ecosystems”
- “7 Ways to Maximize Impact From Open Government Data: Lessons From France”

**Planned Research**

- Examples of use cases and realized benefits of data and analytics from governments around the world that support more integrated and improved service delivery
Transitioning to Digital Government

The transition to digital government requires careful planning and a focus on outcomes. To drive innovation and accelerate the transition to digital government requires governments to take an “outside-in” approach to service design and to make strategic use of emerging technologies.

Questions Your Peers Are Asking

- How do government agencies leverage emerging technologies, applications and practices to support and advance transformation and innovation?
- How can governments and government agencies at the national, regional or local level successfully plan and implement a digital transformation strategy?

Recommended Content

- “Introducing the Gartner Digital Government Maturity Model 2.0”
- “Government CIO Essentials: Use Human-Centered Design to Build Better Services”
- “Digital Government in Action: 3 Practices to Transform Life Events Into Digital Civic Moments”

Planned Research

- Perspectives from government CIOs on the transition to digital government with special focus on how it manifests in different domains of government
- Proven practices to engage government leaders in sponsoring a digital government strategy and establishing investment priorities for digital initiatives
— Best practices and examples of how to measure the impact of digital on government services delivery and outcomes, including how to establish better and more meaningful indicators for digital government

— Use cases, best practices and market research on governments that are actively advancing their digital government maturity, including areas such as cross-organizational service integration

— Roadmaps for advancing digital government maturity and platforms in different government contexts

— A local government strategy framework that addresses the balance between digital service delivery, digital optimization and smart city initiatives

— A deeper exploration of the emerging trends in government, including the identification of trends specific to areas of government such as public safety

— Best practices and examples of emerging technologies like location intelligence and robotic process automation (RPA) being used in areas of government such as public safety and social services as they transition to digital government

Suggested First Steps

— “Digital Government 2030: Planning for an Uncertain Future” — CIOs in all government tiers should explore how future opportunities should influence today’s plans in their organizations.

— “Introducing the Gartner Digital Government Maturity Model 2.0” — CIOs in all government tiers should assess the maturity level of their organizations’ progress toward digital government and potential areas for improvement.

— “Government CIOs Must Assess Urgency and Readiness to Lead Digital Transformation” — CIOs should define their organizations’ scope and agility to address the decision-making and operating models of a digital organization.

— “Select Applications That Further Your Digital Government Technology Platform Goals” — CIOs must understand the different approaches to platforms in the market to build a hybrid application platform strategy that aligns with DGTP goals.

— “Develop Impactful KPIs Leveraging Citizen Experience Metrics to Show the Business Value of Digital Government” — CIOs can rally the business and digital teams around common goals by using CX key performance indicators to create a shared direction.

— “A CIO’s Guide to Strategy Development” — Effective CIOs support enterprise business outcomes and capabilities through unified information and technology (I&T) planning.
“#DigitalSociety Will Demand That a Clearly Articulated Purpose Guide the Enterprise” — CIOs should have a clear understanding of digital society and understand government purpose in a changing society.

**Essential Reading**

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

- “Hype Cycle for Digital Government Technology, 2019” — CIOs can learn about the maturity of the emerging technologies that are impacting governments as they transition to digital governments.

- “Hype Cycle for Smart City Technologies and Solutions, 2019” — CIOs can learn about the maturity of the emerging technologies that impact local governments that are looking to leverage technology across the community.


- “Technology Trends in Government, 2019-2020” — CIOs must understand how the technology trends emerging across governments impact their future strategic plans.

**Tools and Toolkits**

- “Toolkit: Digital Government Urgency, Readiness and Maturity Assessment” — CIOs must assess urgency for digital transformation and evaluate their organizational readiness and maturity.

- “Toolkit: Use Scenario Planning to Spark Digital Government Transformation” — CIOs transitioning to digital government can facilitate agency leadership in using scenarios to develop their strategy.

- “Toolkit: Example I&T Strategy for a Federal or National Agency” — CIOs must reinvent strategy to be pragmatic and relevant, as well as responsive to the mission, changing government policies and the federated dynamics of government.

- “Toolkit: Government Application Accessibility Program” — CIOs should use this Toolkit to assess the progress of the government application accessibility program.

- “Toolkit: 2020 Strategic Roadmap for Digital Government CX Programs” — CIOs should use this Toolkit to leverage that roadmap to establish a CX program with an outside-in approach to delivering services.

- “Toolkit: Strategic Industry Maps of AI Use Cases” — CIOs should look beyond government to identify the AI opportunities.
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