

Improve Government Efficiency and Effectiveness With AI, Data and Analytics

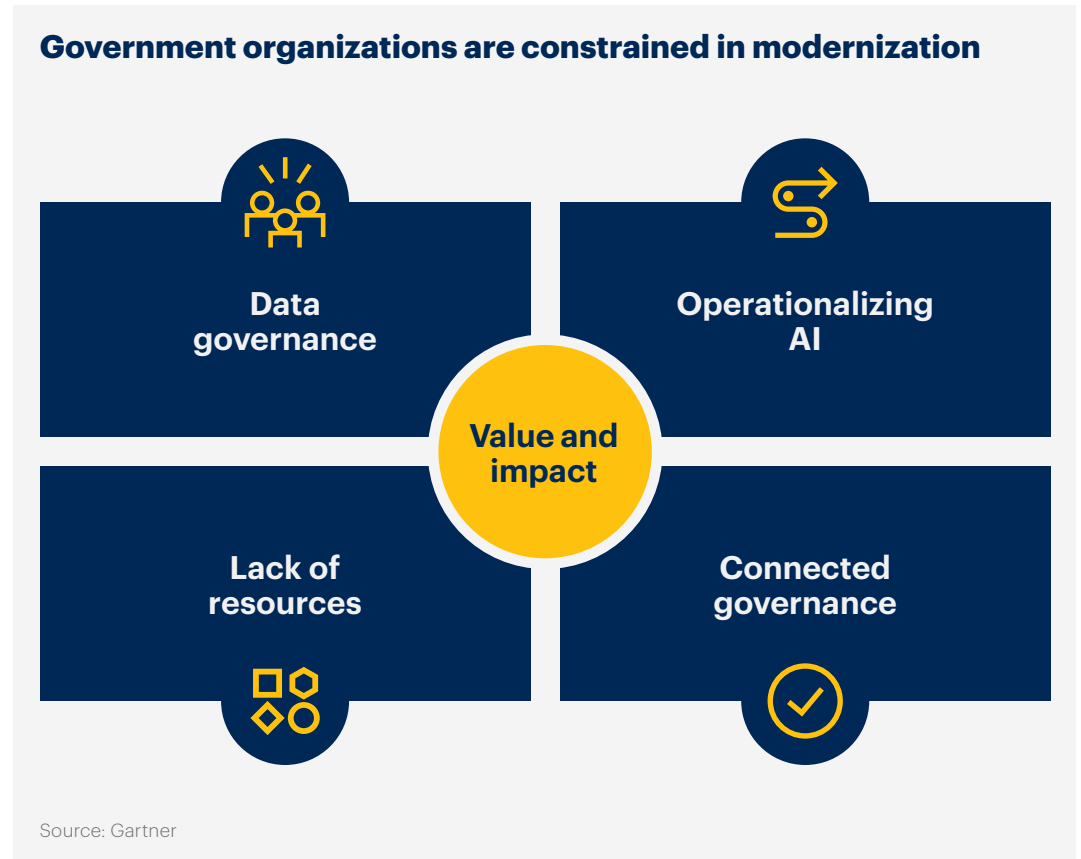
A 5-step roadmap to deliver public sector modernization

Leveraging AI, data and analytics to enhance government efficiency and effectiveness

In today's dynamic digital environment, it's crucial for government entities to harness data, analytics and AI to enhance service delivery and efficiency. The rise of AI underscores the importance of demonstrating data's value and alignment with strategic goals and mission objectives.

By 2026, the CDAO's ability to deliver data and AI literacy, culture change and a skilled workforce will be a top 3 determining factor in supporting mission objectives.

Public sector organizations are prioritizing data transformation to address current constraints in modernization and leverage future opportunities. Data and analytics are key, enabling informed decisions across all levels. As public sector institutions strive to operate more like agile businesses, high-quality data is a vital component for achieving innovation and mission success.

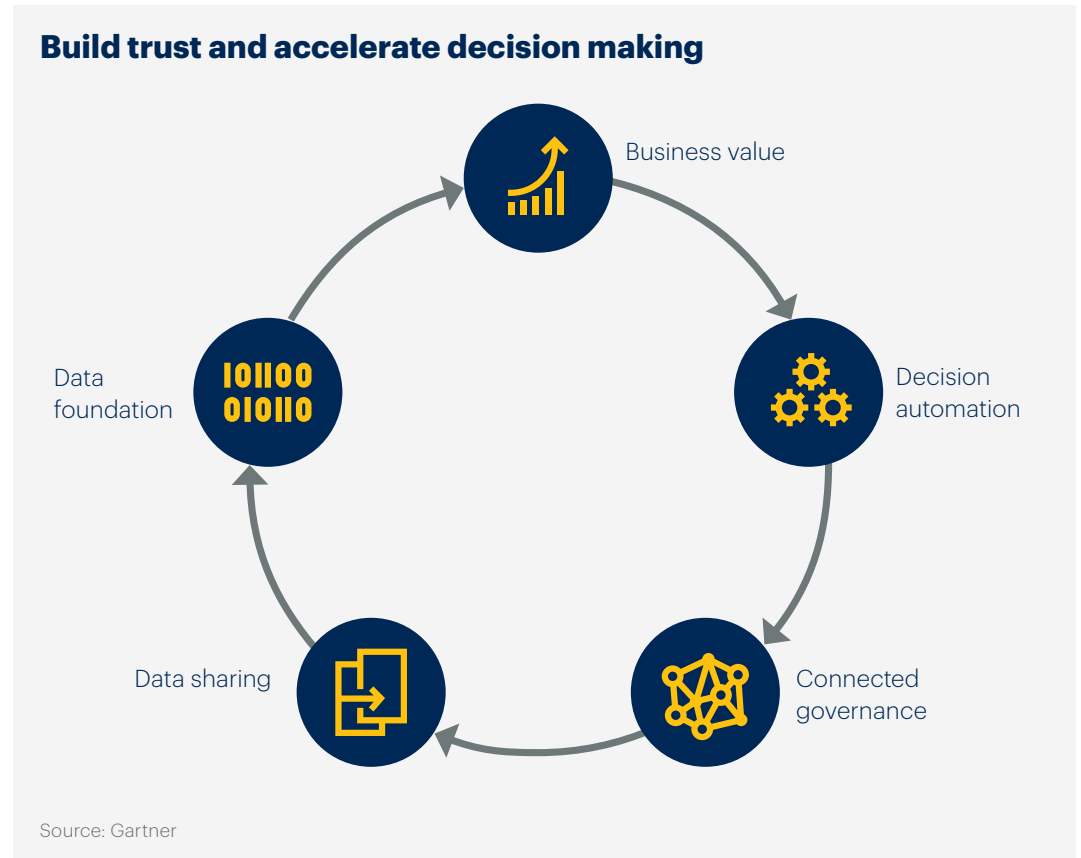


How can government organizations enhance impact through trusted data and analytics governance?

To become data-driven and AI-ready, government organizations must align data and analytics (D&A) with strategic goals and measurable outcomes. Central to this transformation is effective D&A governance, ensuring data integrity, compliance and value creation.

Data is a vital and highly regulated government asset, necessitating strong governance frameworks to facilitate collaboration and data sharing. Focusing on D&A governance helps leaders overcome operational barriers, streamline processes and improve service delivery.

Government leaders should prioritize robust governance structures to support data-driven decisions and innovation. A connected governance model enables them to better address legal and privacy concerns, while supporting citizen needs and demonstrating impact with improvements in service delivery.



3 key questions as you phase the development of strategy for D&A and AI, and prioritize your initiatives

- 1

How do we move forward with an agile D&A strategy?
- 2

How do I effectively operationalize my D&A strategy?
- 3

What are the steps to make my organization data-driven?

What are the key stages?

This roadmap — useful for aligning all stakeholders — shows the sequence of objectives and desired outcomes. It’s distilled from interactions with Gartner clients who have successfully implemented data, analytics and AI initiatives within their own government organizations.

The full roadmap, available to Gartner clients, details actions, milestones and resources for each stage of your initiatives (see examples by phase).



**Create the
D&A strategy**

**Establish and evolve
the operating model**

**Seek quantifiable value
and outcomes**

**Drive culture and
manage governance**

**Evolve technologies
and capabilities**



Create the D&A strategy

Key outcome: A modern and actionable D&A strategy that sets the right foundations and delivers better mission outcomes

Actions to take

Understand key mission-critical priorities and how data, analytics and AI assets deliver improved mission outcomes and define governance for these assets.

Position data, analytics and AI as key government assets, and promote their impact on critical business processes, decisions and outcomes.

Build stakeholder relationships to secure support and funding, and identify opportunities to apply data assets to mission objectives with a clear strategy and roadmap.

Sample of associated Gartner resources include:

Consultation

- Draft an action plan and agree on engagements steps:
 - Leadership Vision for 2025: Chief Data and Analytics Officer
 - Drive Digital Transformation in Government Using Gartner's Maturity Model
 - Ignition Guide to Build a Data & Analytics Strategy in the Age of AI

Expert inquiry

- Engage with an analyst on best practices and strategies on deriving the business value of data analytics.

Research

- Review research for self-assessment of maturity:
 - Data and Analytics Maturity Assessment Score; Ignition Guide to Build a Data & Analytics Strategy in the Age of AI; How Can CDAOs Update Their D&A Strategy to Address GenAI
 - Clarify What U.S. Federal CIOs Should Expect From the New Administration and Quick Answer: How U.S. AI Funding and Regulation May Change in 2025

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Establish and evolve the operating model

Key outcome: An operating model that defines the ecosystem, delivery model and architecture that supports the goals of the D&A strategy

Actions to take

Identify gaps in capabilities, governance, culture, processes and technology to advance toward a data-driven organization.

Define roles and competencies, and implement a hybrid organizational model while cultivating data and AI literacy among stakeholders.

Design the governance operating model and architectural framework for data, analytics and AI platforms, ensuring strategy buy-in and support.

Sample of associated Gartner resources include:

Consultation

- Discuss methods, tools and characteristics of a modern operating model:
 - How CDAOs Can Evolve the D&A Operating Model to Drive Innovation and Agility
 - Data & Analytics Strategy and Operating Model Health Check

Expert inquiry

- Develop D&A governance charter and framework, connected with business outcomes:
 - A Journey Guide to Successful Data and Analytics Governance

Research

- Focus on the competencies required for a data-driven enterprise:
 - How D&A Leaders Should Organize Their Data and Analytics Teams
- Assess technology maturity for government service delivery over time:
 - Hype Cycle for Digital Government Services

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Seek quantifiable value and outcomes

Key outcome: A value-based portfolio of D&A investments, products and services for all stakeholders

Actions to take

Create and track a prioritized portfolio of data, analytics and AI investments based on value and feasibility.

Adopt frameworks and tools to accelerate development and delivery of data initiatives aligned with stakeholder goals.

Implement an iterative approach for developing capabilities and ecosystems, and establish a change management plan.

Sample of associated Gartner resources include:

Consultation

- Discuss removal of the most critical roadblocks by delivering exceptional business outcomes:
 - Build Successful D&A Initiatives by Overcoming 6 Common Roadblocks

Expert inquiry

- Create a narrative linking program outcomes to business outcomes and goals:
 - How to Achieve Stakeholder Priorities With Data & Analytics Performance
- Present value narratives to leadership to get stakeholder buy-in:
 - How CDAOs Can Engage Stakeholders to Foster Data Literacy and Deliver D&A Value

Virtual Executive Partner-led session

- Assess governance framework, operating model and roadmap against targeted mission outcomes:
 - How to Design an Effective Data and Analytics Governance Operating Model

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Drive culture and manage governance

Key outcome: A data-driven culture and change-management practice, including adaptive D&A governance

Actions to take

Create a compelling vision for a data-driven culture, and analyze gaps in governance policies and standards.

Engage stakeholders to promote data literacy, nominate a sponsor, and define policy and standard content needs.

Accelerate culture change with transformational initiatives, and develop a data literacy curriculum for diverse personas.

Sample of associated Gartner resources include:

Consultation

- How to create a data-driven culture and cultivate data literacy:
 - How CDAOs Must Lead Data Literacy and Data-Driven Culture
 - Executive AI Governance Playbook
 - AI Risk Management Framework for U.S. Federal CIOs

Research

- Develop a data-driven culture in the organization and build data literacy:
 - CDAO Field Guide for Data Literacy and Data-Driven Business Transformation
 - A Journey Guide to Managing AI Governance, Trust, Risk and Security

Expert inquiry

- How to apply adaptive D&A governance and change governance practices:
 - Maturing D&A Governance Is a Catalyst for Business Innovation and AI
 - What U.S. Federal CIOs Need to Know About NIST's AI Risk Management Framework

Virtual Executive Partner-led session

- Assess change plans, mission expectations and transformation activities for targeted business outcomes:
 - CDAO Field Guide for Leading Data-Driven Change Management

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**Evolve technologies
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Evolve technologies and capabilities

Key outcome: Enhanced D&A maturity through continuous improvements in people, process, technology and data

Actions to take

Track metrics and gather stakeholder feedback to identify improvements for funded initiatives, and assess operational results.

Reassess D&A strategy and operating model in light of new priorities and emerging trends, technologies and approaches.

Implement governance improvements through change management, and benchmark against peers to adjust future iterations.

Sample of associated Gartner resources include:

Virtual Executive Partner-led session

- Discuss approaches based on composable data management, integration and governance:
 - Secure a Competitive Edge With Data Ecosystems: A Comprehensive Guide

Consultation

- Plan evolutionary changes to data management and upgrades to architecture, platforms, skills and processes:
 - A Journey Guide to Delivering AI Success Through 'AI-Ready' Data

Expert inquiry

- Reimagine how self-service content is created and governed, how change is managed, and how skills are developed:
 - A Journey Guide to Transforming D&A Self-Service With GenAI

Tool

- Repeat self-assessment of maturity:
 - CDAO Effectiveness Diagnostic

Who needs to be involved?

The most successful government organizations establish cross-functional teams for their data, analytics and AI initiatives. We have outlined the recommended functions to involve and their roles to ensure the best success in hitting the milestones.



Mission-critical team members

<p>CIO</p> <p>Creates a collaborative working structure with the CDAO with clear responsibilities for each. The CIO needs to partner on technology trends, architecture, infrastructure, platforms and tools. CIOs need to work with D&A governance leaders on data transformation and quality, government/agency regulations, and D&A policies and standards.</p>	<p>CDAO and team</p> <p>Build the foundation for the management, measurement and monetization of D&A assets to create a data-driven and data-literate culture, and champion mission-led governance and risk by co-chairing the D&A governance steering group and to facilitate D&A governance decision rights.</p>	<p>CISO and team</p> <p>Engage with the CDAO and governance leaders to ensure that risk management and information security implications are understood and addressed in the governance initiative. The CISO also guides planning activities for data asset management and governance, and risk and compliance activities.</p>	<p>CFO</p> <p>Works with the CDAO to modernize D&A budget processes to ensure optimal allocation of resources, tracks and reports D&A cloud spend at the workload level, links specific workloads or projects to budget line items, and introduces financial operations as an interactive discipline.</p>	<p>Enterprise architecture and technology innovation leader</p> <p>Demonstrates mission impact by investing in a modern D&A landscape to capture agency and governmentwide D&A requirements, and identifies data-driven innovation opportunities.</p>
<p>Enterprise application leaders</p> <p>Collaborate with the CDAO and enterprise architect to implement modern data management, analytical applications and composable solutions. Enterprise application leaders support and manage applications to achieve D&A strategy and governance objectives.</p>	<p>Software engineering leaders and team</p> <p>Design, develop and implement data services, data pipelines and event-based data storage, and work closely with the CDAO and their teams to deliver data-driven applications.</p>	<p>Sourcing procurement and vendor management leader</p> <p>Works with CDAOs to identify, assess and select technology vendors and external service providers.</p>	<p>Technical domain architects</p> <p>Plan the D&A technical roadmap; design and implement master data management policies, data pipelines and data stores; select D&A tools and vendors; architect and implement D&A solutions that span application, infrastructure and security; and architect and deploy data governance tools and procedures.</p>	

Expert guidance and tools for key government agencies

Public safety and justice

Integrated digital public safety and justice capabilities require composable solutions and modular information and technology design.

Key considerations Gartner helps you address:

- What trends, including technology, are shaping the digital strategies of justice and public safety organizations?
- How do data and technology help to meet the needs of constituents and decision makers?
- How will technology shape the future of public safety and justice?

Human services

How can you deliver seamlessly integrated and coordinated public assistance and services to a highly diverse ecosystem?

Key considerations Gartner helps you address:

- What trends and priorities are shaping the digital investments being made by social and human services organizations?
- How is data being used to improve outcomes for citizens?
- How will technology shape the future of social and human services?

Military and national security

To respond to global geopolitical threats while meeting policy objectives requires modern and advanced digital maturity.

Key considerations Gartner helps you address:

- What strategies and technologies can enhance outcomes for staff, analysts, service personnel and warfighters?
- What is the role of data in advancing and securing mission objectives?
- How will IT-related legislation and policy impact your digital strategy?

How Gartner supports your priorities

Whether you are working on your data, analytics and AI strategy, Gartner covers the depth and breadth of chief information officers' (CIOs') and chief data and analytics officers' (CDAOs') priorities.

Chief Information Officer

CIO Impact on Digital Business Strategy & Execution			Digital Performance	CIO Executive Leadership Development		CIO Leadership of Culture & People
Enable Digital Business Strategy & Design	Drive Enterprise Governance of Technology	Support Digital Products & Services	Assess & Improve Digital Performance	Distribute Technology Leadership	Develop Executive Leadership	Evolve IT Org Structure
Create & Execute IT Strategy	Gartner Priorities Navigator™ for Chief Information Officers					Lead Org Change & Shape Culture
Evolve Operating Models						Build an Adaptive Technology Workforce
Build Software & Deliver Applications						Demonstrate the Business Value of IT
Deliver D&A, AI and Digital Platforms	Modernize I/O and Cloud	Foster Technology-Enabled Innovation	Track & Assess Disruptive Trends	Evaluate Emerging Technologies	Manage Technology Risk	Manage Technology Financials
Digital Foundations		CIO Innovation Leadership			Technology Finance, Risk & Value Management	

2024

Gartner for Chief Information Officers

Gartner provides insights, tools and guidance to support initiatives from improving digital delivery and evolving IT organizational structure to modernizing I/O and cloud, while upskilling and retaining talent. By working with Gartner, CIOs can measurably improve mission outcomes, demonstrate the value of IT and drive organizational objectives.

Chief Data and Analytics Officer

Lead a World-Class D&A Organization				Drive Quantifiable Value With D&A Solutions for the Business
Become a Successful Data and Analytics Leader	Create an Actionable Data, Analytics and AI Strategy	Establish and Evolve an Operating Model	Organize and Develop Data, Analytics and AI Talent	Discover the Potential of Data, Analytics and AI for the Business
Scale Data, Analytics and AI Platforms and Ecosystems	Gartner Priorities Navigator™ for Chief Data and Analytics Officers			Engage Stakeholders and Align Expectations
Architect and Optimize the Technology Landscape				Demonstrate ROI and Measure Business Value of Data, Analytics and AI Initiatives
Identify Business and Emerging Technology Trends				Execute and Embed Data, Analytics and AI Initiatives Effectively
Drive Culture Change to Support Data-Driven Decisions	Manage Data, Analytics and AI Governance and Assets	Manage Risk Aspects of Data, Analytics and AI		
Evolve Technology & Process Capabilities to Support D&A		Build Trust and Mature D&A Culture		

2024

Gartner for Chief Data and Analytics Officers

Gartner offers insights, tools and guidance to help CDAOs address four essential needs: lead a word-class D&A organization, drive quantifiable value with D&A solutions to support the mission, build trust and mature D&A culture, and evolve technology and process capabilities to support D&A.

Operate, modernize and deliver

Explore these additional complimentary resources and tools for government leaders:

eBook

A Government CIO's Efficiency Toolkit

Discover how government CIOs drive efficiency, modernize IT and deliver results for their agencies.



Explore Now

Research

Gartner Checklist for Government CIOs to Operate, Modernize & Deliver Efficiency

Learn how to optimize your impact during periods of policy change.



Access the Framework

Tool

Accelerators for Government CIOs

Explore our step-by-step tools and diagnostics tailored specifically for government CIOs.



Learn More

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