



Public Sector Roadmap

# Modernizing Public Sector Infrastructure

A 5-step guide to efficient, cost-effective and secure transformation



# Is your modernization strategy closing the expectations gap — or widening it?

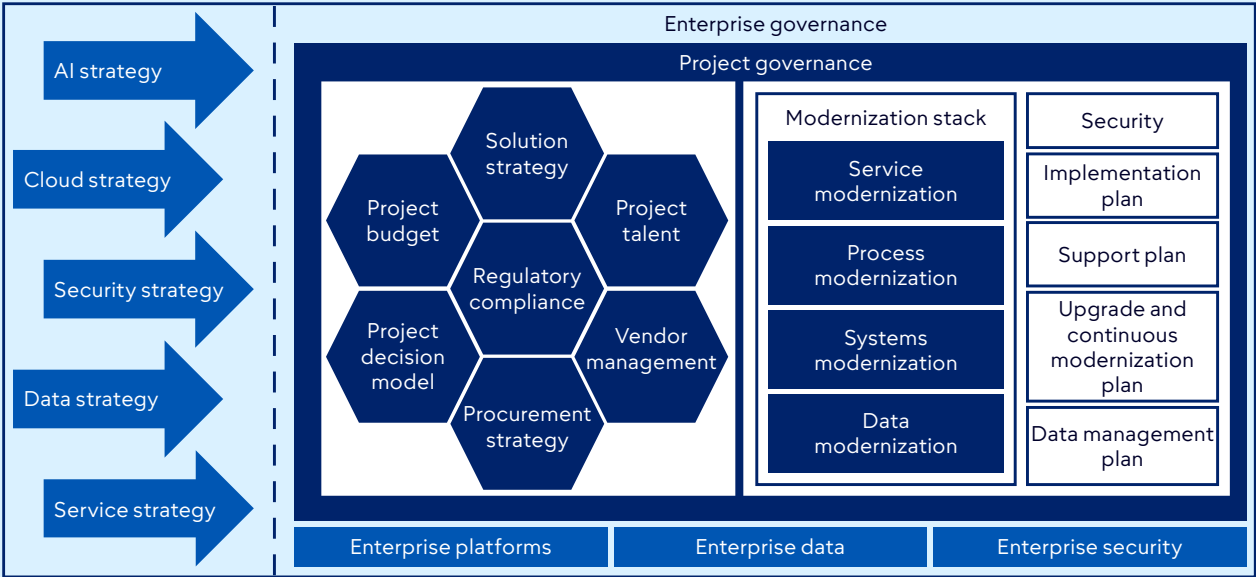
Public sector organizations face urgent pressure to modernize, yet most government IT leaders struggle to deliver the transformation citizens expect. Despite rising investment, **60% of AI and modernization efforts fall short** — straining your people, processes and legacy systems.

Key challenges include:

- **Aging systems:** Rising costs and operational risk
- **Talent gaps:** Limited expertise and vendor support
- **Siloed data:** Compliance risks and limited AI value

With tight budgets and high scrutiny, every modernization initiative must prove measurable value. The real question: **How do you drive sustainable change — without disrupting essential services or overspending?**

## Government modernization framework



Source: Gartner

## 3 essential questions for modernizing public sector infrastructure

**1** How can I guarantee organizational efficiency, resilience and security while modernizing our infrastructure?

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**2** What role does AI play in our infrastructure modernization journey?

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**3** How do I ensure modernization delivers measurable value for citizens and stakeholders?

## What are the key stages?

Designed for public sector leaders, this roadmap equips you with actionable steps to navigate complexity, overcome legacy technology constraints and attain modernization objectives. Leverage AI and best practices to drive lasting improvements in efficiency, resilience and citizen value — while ensuring your infrastructure transformation meets the demands of today and tomorrow.

Assess current state



Define modernization focus



Evaluate strategies



Prepare and execute



Optimize and scale



## Assess current state

**Key outcome:** Comprehensive map of capability gaps and improvement areas to prioritize your modernization strategy.

### Actions to take:

Assess current infrastructure, resources and performance against mission needs.

Identify gaps between today's capabilities and future public sector requirements.

Define key milestones and KPIs to track progress and demonstrate value throughout modernization.

### Sample of Gartner client resources include:

#### Insights

- [Digital Government Maturity Framework](#) to set and share your top priorities for digital investments
- Benchmark your plans with the [2026 Technology Adoption Roadmap for Infrastructure and Operations](#)

#### Tool

- [Maturity assessment](#) to evaluate the capabilities of your I&O organization

#### Executive Partner Consultation

- Team workshop to select pilot projects based on readiness of initiative, team and stakeholders

**Benchmark your public sector I&O performance and uncover key improvement areas with the Gartner IT Score ↗**

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## Define modernization focus

**Key outcome:** Clearly defined modernization focus areas that align with your mission and strategy. Top priorities include **security and zero trust, resilience and continuity, cloud modernization and operational efficiency.**

### Actions to take:

Map and categorize current public sector workloads and systems.

Create a modernization plan covering all infrastructure components to justify and secure budget funding.

Prioritize key objectives, optimize cloud costs and target quick wins to build momentum.

### Sample of Gartner client resources include:

#### Insights

- [Digital Government 2026: Challenges, Progress and Actionable Next Steps](#)
- Gain insights on [how to establish a baseline and prioritize your digital workplace investments](#)

#### Executive Partner Consultation

- Session to organize your infrastructure by categorizing systems into data, application, presentation and network tiers

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# Evaluate strategies

**Key outcome:** Modernization approach is finalized, budget is approved and RFPs are created to engage vendors and launch priority modernization projects.

**Actions to take:**

Choose the right modernization approach with input from a cross-functional team of internal and external stakeholders.

Ensure RFPs — whether within or outside existing frameworks — align with modernization goals and overall strategy.

Evaluate how solutions integrate with your current systems and require vendors to show how their use of tech innovations — such as AI — support your modernization goals.

**Sample of Gartner client resources include:**

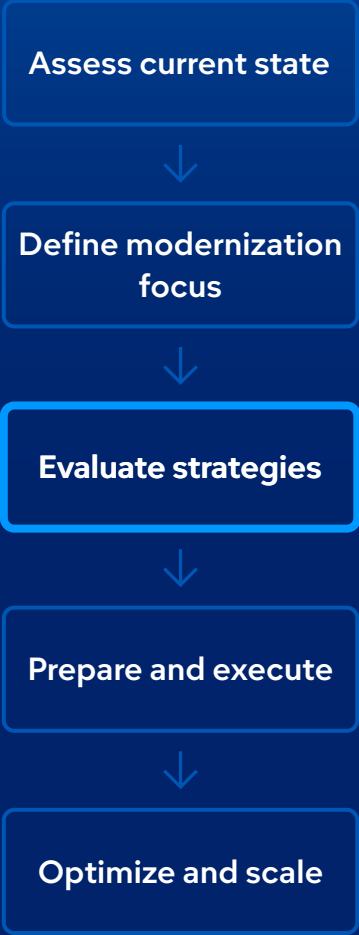
**Insights**

- Assess our research on [What Good Modern Infrastructure Looks Like](#)

**Tools**

- Streamline your team’s path to better technology buying decisions with [Gartner BuySmart™](#)
- Explore vendors and solutions with the [Gartner Magic Quadrant™ for Observability Platforms](#)

[Streamline technology buying decisions with Gartner BuySmart™ ↗](#)





## Prepare and execute

**Key outcome:** Implementation of modernization efforts that balance risk and cost.

### Actions to take:

Evaluate cost, risk and impact proactively to ensure strong performance and oversight accountability.

Prioritize modernization initiatives that strengthen resilience and enhance IT performance for critical public services.

Rebuild, replace or consolidate legacy systems, and continuously evaluate how AI and automation support modernization goals.

### Sample of Gartner client resources include:

#### Insights

- [Journey Guide to AI-Based Application Modernization](#)
- Use [Dynamic Sourcing](#) to achieve desired government outcomes

#### Toolkits

- Plan a portfolio of projects to achieve desired modernization outcomes with our [Prioritization and Resource Capacity Planning for Public Sector](#)
- The [I&O Automation Roadmap](#) offers resources to plan and scale I&O automation

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# Optimize and scale

**Key outcome:** Processes and progress are continuously reassessed to identify opportunities for further improvement.

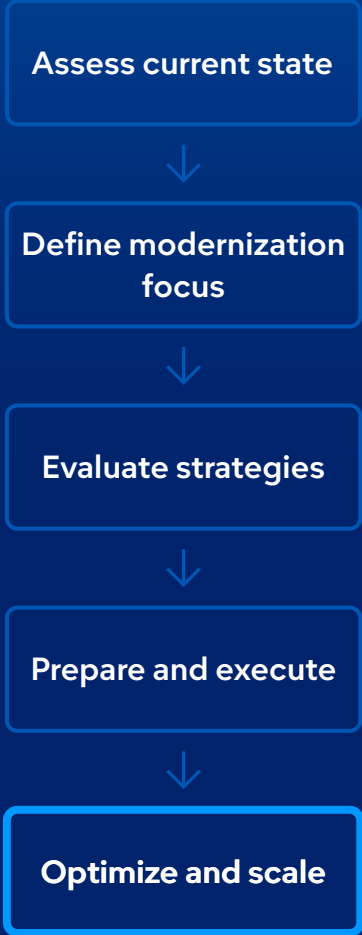
**Actions to take:**

- Tailor communication on metrics and performance to the specific needs of internal and external stakeholders.
- Establish shared objectives that connect infrastructure initiatives directly to mission outcomes.
- Review processes routinely to ensure transparency across workflows and promote a collaborative, citizen-centric approach to agility.

**Sample of Gartner client resources include:**

- Insights**
- **Optimizing Government Services:** Implementing data-driven metrics for enhanced citizen experience
- Executive Partner Consultation**
- Deliver metrics tailored to each audience, ensuring internal and external stakeholders receive the insights most relevant to their needs
- Tool**
- **Gartner Hype Cycle™:** Redefine agile as collaborative, flexible and citizen-centric, not just IT-focused

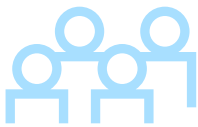
**Accelerators:** Fast-track priorities with step-by-step resources and tools for public sector leaders ↗





# Who needs to be involved?

Successful government organizations form cross-functional teams for infrastructure modernization. Here are the key functions and roles to involve for achieving milestones.



## CIO/Head of Technology

Communicates strategy and objectives across the organization, ensuring IT resilience and maintaining ongoing alignment between IT initiatives and broader goals of the organization.

## Head of Infrastructure and Operations and Team

Develop the I&O strategy and technical roadmap by anticipating organizational needs, driving value through automation, aligning cloud strategy with mission goals, enabling continuous improvement and designing infrastructure for performance, scalability and security.

## Head of Enterprise Applications and Team

Guide enterprise application strategy by managing new technology adoption, delivery methods and organizational models; supporting applications to meet modernization goals; and designing architectures to reduce risk, enhance capabilities and drive value.

## Chief Information Security Officer and Team

Ensure security is integrated into every aspect of the modernization process by aligning security goals with the organization’s objectives, conducting thorough risk assessments to identify potential vulnerabilities and designing resilient security solutions that support modernization.

## Head of Enterprise Architecture and Team

Translate mission outcomes into IT strategy and future-state architecture by guiding technology decisions to align with organizational objectives, establishing a well-governed IT ecosystem that maximizes opportunities and minimizes cost and risk and developing architecture that supports the IT strategy.

## Client Story

# Driving Digital Transformation in Singapore's Ministry of Defense Success Story

### Mission-critical priority

The IT department of Singapore's Ministry of Defense wanted to undertake the challenging task of rethinking and redesigning their entire data ecosystem around their mission outcomes and goals. They also wanted to modernize their cloud technologies.



### How Gartner helped

Gartner acted as a trusted advisor and provided valuable resources, like BuySmart and Magic Quadrant, which helped the client make smart investments and aided stakeholder communication. The client also used Gartner analyst sessions to better map out the path to achieve desired mission outcomes.



### Mission accomplished

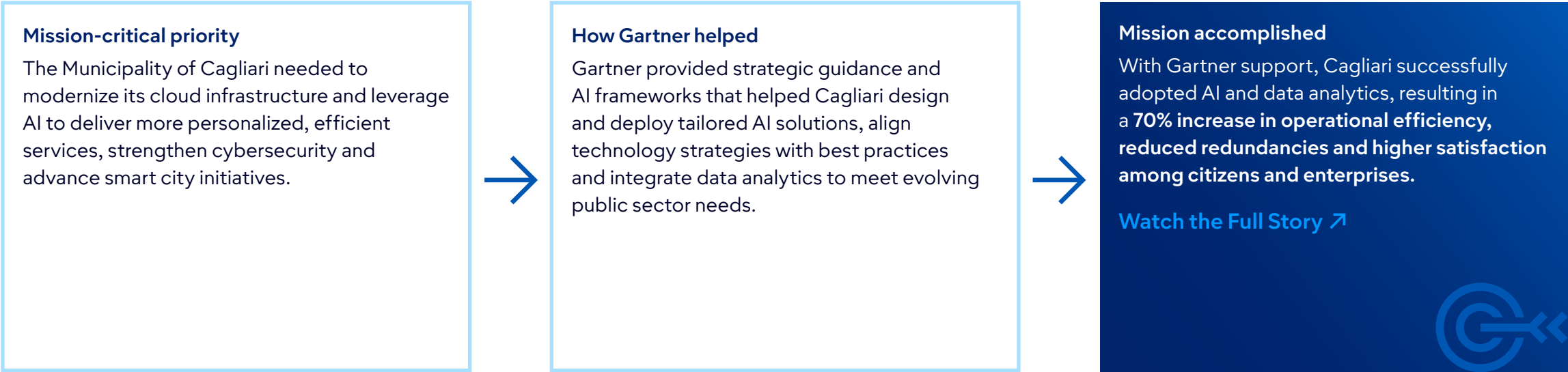
Gartner resources and capability modeling helped map the components and reusable capabilities needed to achieve the mission outcomes. Gartner objective decision intelligence enabled the Ministry's Data & Analytics department to **secure senior stakeholder buy-in for the new D&A direction and changes.**

[Watch the Full Story ↗](#)



Client Story

# Transforming Public Services With AI: Municipality of Cagliari’s Success Story



# Actionable, objective decision intelligence

Explore these additional complimentary resources and tools for public sector leaders:



**eBook**

Improve Government Efficiency and Effectiveness With AI, Data and Analytics

Explore our five-step guide to overcoming modernization barriers and unlock value with trusted data, analytics and AI for government organizations.

[Explore Now](#)



**Insights**

A Government CIO's Efficiency Toolkit

Learn how government CIOs can drive efficiency, modernize IT and deliver measurable outcomes.

[Access the Toolkit](#)



**eBook**

Unlocking AI Value for the Public Sector

A step-by-step guide to developing a secure AI strategy that accelerates and enhances mission outcomes in the public sector.

[Access the Guide](#)



**Tool**

Accelerators for Government CIOs

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

[Learn More](#)

# Connect with us

Get actionable, objective decision intelligence that drives smarter decisions and stronger performance on your mission-critical priorities.

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