

# Top Technology Trends in Government for 2022

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## Top Technology Trends in Government for 2022

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Initiatives: Government Digital Transformation and Innovation

This research guides public-sector leaders in accelerating digital transformation and mitigating disruption risks. Government CIOs should assess how technology trends impact their organizations' strategy and ability to deliver on constituent expectations, operational needs and mission priorities.

### Overview

#### Opportunities

- The pandemic has sparked and accelerated digital innovation across governments worldwide. The challenge now is to scale these efforts and ensure governments remain – or become – trusted, agile and resilient providers of citizen services and value to the public.
- Public-sector leaders look to CIOs and technology executives for creating future-ready organizations that can deliver and scale digital transformation initiatives in the face of uncertainty, shifting mission priorities and rapidly evolving challenges.
- Government CIOs can use the technology trends to guide enterprisewide digital investments and anticipate potential disruption, while dealing with sector-specific constraints like low digital maturity, unmet citizen expectations, insufficient resources and difficulties scaling innovation.

#### Recommendations

Government CIOs involved in digital transformation and innovation must:

- Ground their digital investment recommendations in the priorities of public-sector executives by assessing how technology trends might accelerate or disrupt the modernization and transformation initiatives in the organization.

- Help establish future-ready organizations by demonstrating how digital initiatives around these trends deliver value to diverse and evolving constituent needs, support new workforce trends, enable efficient scaling of operations and build a composable business and technology foundation.
- Improve and expand business capabilities by building custom Hype Cycles for the technology trends they have prioritized, and use them to develop an 18- to 24-month innovation roadmap consistent with plausible future scenarios and uncertainties.

## What You Need to Know

As 2022 unfolds, government leaders and elected officials face enormous challenges, but also opportunities resulting from the pandemic and economic recovery response, changing political demands and continued digital disruption. These macro challenges shape the Top Business Trends in Government for 2022 and the need to exercise strong digital leadership.

These macro challenges set the context for government CIOs, who should use the technology trends to design flexible business, operating and organizational models. The aim is to develop a “line of sight” connection between technology investments and public-policy objectives. This is the only way CIOs can demonstrate that digital investments are not just tactical; they also improve business capabilities and are critical to achieving leadership priorities in an evolving and uncertain environment.

CIOs do not usually have direct authority to control mission outcomes – unless they closely collaborate and co-create outcomes with business leaders.<sup>1</sup> However, the siloed nature of strategies and decision making remains the biggest constraint in the public sector.<sup>2</sup> Other limitations that have traditionally held back digital transformation in government are:

- Low-to-moderate levels of digital maturity
- Rising and diverse citizen expectations
- Risk-averse culture and rigid processes
- Insufficient budgets, skills and talent
- Difficulties scaling ad hoc innovation.

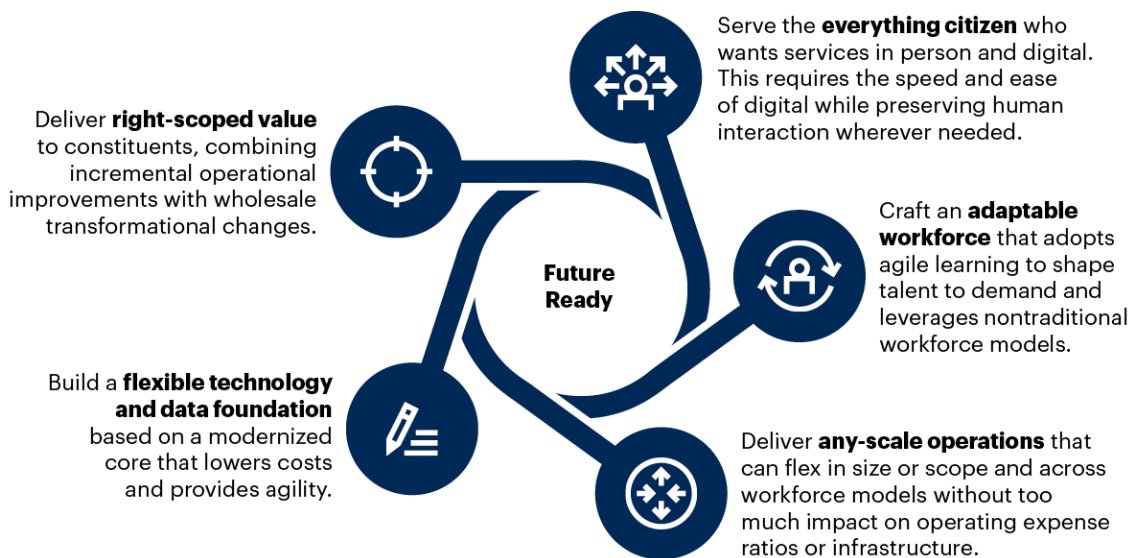
This combination of challenges plus politics and power-plays have made it difficult for government CIOs to scale impacts of an initiative beyond individual pockets of innovation. But going further, governments are, in fact, expected to scale from the digital gains achieved during the pandemic. <sup>3</sup>

Acting under the pressures of macrosocietal challenges while dealing with public-sector constraints leaves government CIOs, figuratively speaking, between a rock and a hard place. By using the technology trends, CIOs should channel those pressures into investments that will improve institutional agility not just within IT, but across the whole organization.

CIOs should not fall into the trap of simply discussing granular technology trends with leadership. The trends should be regarded as means to an end: Leverage insights from these government trends to make a case for investments that turn your organization into a future-ready organization over time (see Figure 1). This applies to any government organization, regardless of geography, tier or sector.

**Figure 1: Aiming to Build a Future-Ready Public-Sector Organization Over Time**

### Aiming to Build a Future-Ready Public Sector Organization Over Time



Source: Gartner  
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The following technology trends enable and strengthen the key characteristics of a future-ready public-sector organization. Government CIOs should consider their collective impact on their organizations and include them in their strategic plans for 2022 and beyond. Not doing so risks undermining the quality of government services and the capacity to deliver mission value in the longer run.

## Trend Profiles

Click links to jump to profiles

**Table 1: Gartner’s Top Technology Trends in Government for 2022**

Adaptive Security	Anything as a Service (XaaS)	Hyperautomation
Digital Identity Ecosystems	Accelerated Legacy Modernization	Decision Intelligence
Total Experience	Case Management as a Service (CMaaS)	Data Sharing as a Program
Composable Government Enterprise		

Source: Gartner

## Trend: Composable Government Enterprise

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*Analysis by Bill Finnerty, Rick Howard, Apeksha Kaushik*

### Strategic Planning Assumption:

By 2024, over 25% of government RFPs for mission-critical IT systems will require solutions architecture and variable licensing that support a composable design approach.

### Description:

A composable government enterprise is a government organization that embraces three dimensions of composability:

- Composable business architecture
- Composable technology
- Composable thinking

Composability enables governments to focus on citizen-centric services, rather than on the frequently used, siloed, program-centric approach.

### Why Trending:

- Existing siloed approaches to managing services, systems and data limit governments' ability to adapt. Sustainable and stable government requires a more adaptive and flexible foundation.
- Transformation is better enabled by focusing on business and technical capabilities, rather than individual applications. By doing so, governments can more effectively adapt to changing legislative and policy demands.
- Establishing a composable, digital government technology platform-driven approach to application architecture enables governments to maximize investments in technical capabilities and drive continuous service and application improvement.

### Implications:

- There are two paths forward in implementing the composable government enterprise: enablement and empowerment.
- CIOs who focus on enablement often serve in organizations that struggle to see the value in digital transformation and are more focused on modernization through optimization.
- CIOs who focus on empowerment have an executive leadership role and drive enterprisewide, scaled digital transformation.
- Establishing a composable government enterprise extends beyond technology to include digital leadership, risk management, enterprise architecture, technology modernization and data.

### Actions for Government CIOs:

- Establish policies aligned with composable thinking principles by requiring that applications opened for modification are reviewed for the opportunities to decompose them into business capabilities and make them API-enabled. Policies must include criteria for advising product managers and governance on when taking this action is most advantageous.
- Direct the enterprise architecture program to develop, or update, the business and technology capability models across the organization, and establish a future-state capabilities model to enable a composable business architecture.
- Establish a composable technology architecture by working with solution architects to implement a mesh app and service architecture and an enterprise approach to integration that will support a modular approach to development and implementation that includes packaged business capabilities.

## Trend: Adaptive Security

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*Analysis by Michael Brown, Katell Thielemann*

### Strategic Planning Assumption:

By 2025, 75% of government CIOs will be directly responsible for security outside of IT, including operational and mission-critical technology environments.

### Description:

The adaptive security model is one in which cybersecurity systems operate more like an autonomic biological immune system. The concepts of continuous monitoring, now part of the National Institute of Standards and Technology (NIST) Risk Management Framework, and zero-trust network access (ZTNA) are examples of an adaptive security model. The adaptive security architecture features components for prediction, prevention, detection and response; it forgoes traditional notions of perimeter and assumes there is no boundary for safe and unsafe.

### Why Trending:

- As threats increase in scope and impact, the shift from a compliance-based to a risk-based approach for cybersecurity and response capabilities will be necessary.

- Converging technologies for enterprise data, privacy, supply chain, operational technology, Internet of Things/cyber-physical systems and cloud environments will require governments to integrate security measures.
- Cyberspace as a contested domain in which nation states and criminal organizations target defense, societal and economic interests is a driver for governments to update policy and strategies.
- The cybersecurity techniques are only as good as the weakest link, and that weakest link is often the human element. This requires improved awareness programs, embedding cybersecurity practices throughout IT organizations and cybersecurity talent acquisition.

## Implications:

- Sustained funding – A robust cybersecurity program can be expensive. The high cost of tools and services to establish or reinvigorate and sustain a security program may come at the expense of capability and services that business unit leaders expect.
- Talent – Cybersecurity skills shortages are widely reported. Government agencies are challenged to compete with the private sector for staff with necessary skills.

## Actions for Government CIOs:

- Offset any lingering resistance to adoption of adaptive security by linking its value to broader digital innovation, transformation and organizational resilience objectives.
- Adopt an integrated, risk-based security approach by collaborating with leaders for physical and personnel security, and collaborating with mission units for operational technology security.
- Focus policy and practices on essential activities by emphasizing tools, techniques, response capabilities and talent. Where allowable and practical, deprioritize document-based compliance activities.
- Address the essential human element of cybersecurity by growing expertise from within through in-depth training programs and broad employee support through engaging awareness education.



- Mitigate the tools arms race by ensuring that the full capability and value of current cybersecurity tools are being exploited, avoiding duplicative products, retiring tools where appropriate and scaling tools where needed most for high-value assets.

## Trend: Digital Identity Ecosystems

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*Analysis by Arthur Mickoleit, Michael Brown*

### Strategic Planning Assumption:

- By 2023, at least 80% of government services that require citizen authentication will support access through multiple digital identity providers.
- By 2024, at least a third of national governments and half of U.S. states will offer citizens mobile-based identity wallets. Only a minority will be interoperable across sectors and jurisdictions.

**Description:** Citizen digital identity is used to cover mostly online authentication (eID) and electronic signatures in interactions with the government. But the scope and needs for digital identity are quickly expanding beyond those boundaries. Governments are looking to identity proofing, bring your own identity (BYOI), identity wallets, organization and objects identity, and identity ecosystems in order to ensure trusted and convenient access to services.

### Why Trending:

- COVID-19 catapulted digital identity from niche technology circles into mainstream political debates. Today, digital identity makes the difference between more- and less-advanced digital governments.
- Adoption increases where digital identity is trusted and available for relevant services. Elsewhere, adoption stalls, and public services suffer from inefficiencies and fraud.
- Many governments are still shying away from investments in identity proofing, fraud detection and other advanced capabilities necessary to foster trust and adoption among citizens.

- Digital identity products and ecosystems are fast-evolving, which pushes governments to do more than just providing and consuming citizen digital identity. Failure to adapt opens up risks to public service quality and national (digital) sovereignty.

## Implications:

- The divergent interests of ecosystem actors unsettle passive, less-mature government organizations. More proactive governments take on the challenge by federating, facilitating or regulating as digital identity ecosystems evolve.
- The critical success factor for adoption is linking digital identity to salient use cases. Ideal use cases are often those with a high frequency of use or a high target population. But as a noncommercial actor, the government must also serve small or marginalized user groups.
- Future identity use cases must be cross-sector and cross-jurisdiction to be relevant. This requires breaking out of past identity silos where organizations and sectors used to build their own schemes. Government should use its privileged position to act as facilitator, federator or regulator of the emerging ecosystems.

## Actions for Government CIOs:

- Revamp your citizen digital identity strategy by building on use cases that break out of traditional sector silos and thereby add greater value for citizens, government and economies.
- Raise trust and adoption by making high-assurance digital identity easy to obtain and use for the population and easy to integrate for public and commercial service providers.
- Proactively shape emerging ecosystems by asserting the government's role as potential federator, facilitator or regulator of diverse — and sometimes divergent — interests on digital identity. The scope of such assertion will depend on the specific context and digital maturity of an organization.

## Trend: Total Experience

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*Analysis by Apeksha Kaushik, Arthur Mickoleit, Daniel Snyder*

## Strategic Planning Assumption:

By 2023, at least 85% of governments without a total experience (TX) strategy will fail to successfully transform government services.

## Description:

Total experience (TX) is an approach that combines the disciplines of user experience (UX), citizen/constituent experience (CX), employee experience (EX) and multiexperience (MX) for a more holistic service design and delivery. A TX strategy interlinks digital and nondigital techniques from the CX, EX, UX and MX disciplines to increase citizen and employee confidence in, and satisfaction with, government services.

## Why Trending:

- Government leaders are prioritizing initiatives for improving service delivery to citizens and other constituents while also implementing, designing or planning improvements aimed at the workforce. These happen mostly in silos, missing out on synergies for improvements across both areas.
- A TX strategic approach improves both citizen and employee engagement by providing each constituency with modern tools across multiple channels and touchpoints, enhancing overall experience, inclusion and equity.
- TX initiatives offer governments a way to improve talent management strategies and develop stronger digital skill sets across their organizations. It can amplify the impact of investments for digital talent acquisition and retention.

## Implications:

- A TX strategy will help governments create synergies of resources across CX, EX, UX and MX disciplines. Collaboration between related teams can uncover new opportunities for improved service delivery.
- Citizens expect more than disparate channels to access public services and present the rich UX throughout different types of interactions. Failing to build a solid TX strategy increases service friction, leading to risk of service delays and underwhelming service experiences.

- Executive-sponsored fusion teams apply TX by starting with business architecture to close the strategy-to-execution gap. Governments should elevate TX to an enterprise leadership initiative that requires establishing executive sponsorship and inclusion in governance processes.

## Actions for Government CIOs:

- Build a TX strategy that coordinates experience initiatives across the organization by engaging a diverse set of stakeholders in formulating the TX vision so that technology and interactions empower citizens, customers and employees.
- Create bigger value for constituents by strengthening the linkages between CX EX. Use this opportunity to also seek synergies with UX and MX initiatives.
- Secure executive sponsorship that advocates for the importance of TX by engaging senior leaders to communicate the status and impact of initiatives and highlight immediate wins.

## Trend: Anything as a Service (XaaS)

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*Analysis by Alia Mendonsa, Neville Cannon*

### Strategic Planning Assumption:

By 2025, 95% of new IT investments made by government agencies will be made in XaaS solutions.

### Description:

XaaS encapsulates several categories of IT infrastructure and software services, including those delivered in the cloud as a subscription-based service — such as:

- Software as a service (SaaS)
- Platform as a service (PaaS)
- Infrastructure as a service (IaaS)
- Business process as a service (BPaaS)

- Unified communications as a service (UCaaS)

## Why Trending:

- The pandemic has sped up the public-sector adoption of cloud solutions and the XaaS model for accelerated legacy modernization and new service implementations. It provides scalability and a shorter time to value for delivering digital government at scale.
- An XaaS delivery model shifts capital expenditure (capex) IT investment “heavy lifts” to a more consistent pay-as-you-go operating expenditure (opex) funding mechanism. This normalizes IT spend over time, making budgeting for IT more predictable, while avoiding the accrual of technical debt.
- XaaS delivery models require different internal IT skill sets and place less demand on the organization to develop or acquire emerging IT skills, which are often hard to find and hard for governments to afford.
- Government trends regarding ethics, privacy and digital sovereignty may stall or quash interest in XaaS for some jurisdictions. Mounting concerns with privacy and data protection have also fostered new regulations about the use and location of citizen data.

## Implications:

- Innovation opportunities – IT organizations at all levels of government will leverage XaaS offerings for the provision of enterprise business capabilities.
- Enterprisewide IT role – Central IT organizations play a key role in performing the enterprisewide governance duties to aid adoption and management of platforms and packaged business capabilities.
- IT operating model – Government CIOs who are managing the shift toward XaaS models for IT applications and infrastructure must assess all elements of the information and technology (I&T) operating model.
- Talent and workforce development – This shift from direct physical management to brokering I&T products and services will greatly impact the skill sets required to manage IT as well.

## Actions for Government CIOs:

- Educate stakeholders about XaaS as a sourcing strategy – including potential benefits, challenges and pitfalls – through proactive research and communication about XaaS solutions.
- Develop and proactively monitor and articulate performance metrics to help stakeholders understand the business value being achieved via IT services, regardless of the delivery model.
- Evaluate skill set and competency gaps for managing XaaS IT relationships, and create a workforce development and augmentation plan that redirects resources to the new skill sets that cloud services technology demands.

## Trend: Accelerated Legacy Modernization

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*Analysis by Neville Cannon, Alia Mendonsa*

### Strategic Planning Assumption:

- By 2025, over 75% of governments will operate more than half of their workloads using hyperscale cloud service providers.
- By 2024, 75% of governments will have at least three enterprisewide hyperautomation initiatives launched or underway.

### Description:

A legacy application is an application that is based on outdated technologies, yet remains critical to current operations. Legacy modernization is planned and designed to replace outdated architectures, hardware and software applications with modern equivalents. While there are several approaches to modernization, they universally shift applications to a cloud delivery model as part of modernization.

### Why Trending:

- While citizen use of online services increased, core legacy business systems failed to handle the surge in demand for services such as unemployment benefits and furlough payments.

- Governments' return to normal operational practices has been delayed further as countries continue to battle COVID-19 and its variants. Systems need strengthening through greater agility and increased resilience in the face of uncertainties.
- There is a continuing need for government staff to work remotely; therefore, government agencies at all tiers and across all domains have embraced remote working technologies. As hybrid working models are operationalized, systems in support must be fortified.
- Business units have established new collaborative and data-sharing relationships to maintain and enhance services. Many have seen knowledge gaps exposed in core processes and systems. Line-of-business units now have an opportunity to significantly address these issues.

## Implications:

- Organizations must maintain full commitment to accelerated legacy modernization, beginning with senior leadership. This requires planning for activities to align with core business objectives and goals.
- Financial investment must be sourced, perhaps over a lengthy period (for example, replacing a taxation system may take several years and may cross election cycles).
- Technical and business resources for development and testing are required, and progress cannot be made quickly unless these are dedicated to the initiative.
- The methodology used to manage the project is a critical decision, and agile methodologies are shown to be more successful.

## Actions for Government CIOs:

- Bolster existing legacy modernization plans by identifying optimum packages of interdependent data and applications that could potentially release whole processes to be migrated to cloud technologies.
- Support and align modernization initiatives with business transformation by encouraging joint business process reviews between technology teams and business users. Identify and migrate complete processes required for future agility.
- Establish a joint business and IT leadership team for legacy modernization governance and agree on reporting lines to senior executives.

- Establish oversight goals that avoid the future accrual of technical debt, and prioritize investments for needed operational capabilities.
- Make rationalization and modernization a continuous activity by agreeing with the CFO on how funding may be consistently allocated. Introduce product management as a discipline.

## Trend: Case Management as a Service (CMaaS)

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*Analysis by Michael Brown, Rick Howard*

### Strategic Planning Assumption:

By 2024, government organizations with a composable case management application approach will implement new features at least 80% faster than those without.

### Description:

Case work is a universal workstyle of government. The integration of government services depends on designing and developing case management solutions as composable products and services that can be shared across the programs, verticals and levels of government. With CMaaS, each process of the case management life cycle is designed as a collection of application building blocks called packaged business capabilities (PBCs).

### Why Trending:

- Modernization of legacy custom-built case management applications is an opportunity to improve cross-government services integration.
- The COVID-19 pandemic exposed the risks to society when organizational barriers impair the timely sharing of data and coordination of resources among government departments, jurisdictions and partners.
- CMaaS can build institutional agility in government by applying composable business principles and practices to replace legacy case management systems with modular case management products.
- Government adoption of low-code application platforms can enable composable and modular interoperable applications.



## Implications:

- Case management applications will be composable, not siloed monoliths, in order to meet business needs more quickly.
- Supporting tools and platforms are required, including an array of capabilities, such as low-code application platforms (LCAPs), user ID and authentication, application composition technology, and cloud services.
- A variety of skills are required and the growing ranks of business technologists and the use of fusion teams can act as “force multipliers” to increase the pace of digital innovation in government.

## Actions for Government CIOs:

- Gain support from program executives for an adaptable, modular set of services to satisfy multiple case management functions by demonstrating how better outcomes, improved collaboration or program integration can be attained more quickly with the flexibility of composable applications.
- Develop a modular CMaaS application strategy by adopting a composable business architecture, using PBC and LCAPs.
- Harness the power of self-service, automation and collaboration by forming CMaaS fusion teams that include case workers and business technologists

## Trend: Hyperautomation

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*Analysis by Dean Lachecca, Irma Fabular, Daniel Snyder*

## Strategic Planning Assumption:

By 2024, 75% of governments will have at least three enterprisewide hyperautomation initiatives launched or underway.

## Description:

Hyperautomation in government is a systematic approach by governments to rapidly identify, vet and automate as many business and IT processes as possible. It involves the orchestrated use of multiple technologies, tools or platforms like AI, robotic process automation, XaaS, low-code/no-code and packaged software.

## Why Trending:

- Vulnerabilities in government service continuity have highlighted the urgency for government CIOs to address business processes and technical gaps such as interoperability, collaboration and data exchange.
- The accelerated deployment of digital solutions such as chatbots, unified communications and collaboration, wireless broadband, and low-code platforms during the pandemic has led to the expanded use of automation technologies by the government workforce.
- Strong political and senior executive support for remote work has spurred government CIOs to facilitate automation of end-to-end business and IT processes for public services and consistent employee experiences.

## Implications:

- Hyperautomation offers governments the opportunity to deliver connected public services that are seamless, proactive and almost “contactless.” This also creates synergies with their TX investments.
- Government organizations will be able to use hyperautomation to balance digital investments for resiliency and flexibility, while optimizing costs.
- Digital workplace solutions, such as unified communications and collaboration, will enable better employee experiences and constituent engagement.
- Focus on human factors and accountability are critical to address the risks around unethical use of data, privacy breaches and loss of trust.
- Success will depend on collaboration among an ecosystem of stakeholders across multiple government agencies, and potentially, tiers of government, including also partnerships with technology service providers.

## Actions for Government CIOs:

- Create a direct link between hyperautomation and your organization’s digital transformation vision by incorporating automation into your digital government strategy, roadmap and measures of success.
- Build a hyperautomation roadmap – rather than islands of task automation – that builds impact incrementally. Focus initially on lower-stake optimization potentials, and demonstrate the link to higher-impact transformation potential in the medium to long term
- Reach beyond single government organizations to build cross-cutting hyperautomation initiatives that focus on end-to-end government processes. Build on the current momentum for “whole of government” approaches to establish cross-government fusion teams with co-ownership and co-creation responsibilities.

## Trend: Decision Intelligence

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*Analysis by Ben Kaner, Dean Lacheca*

### Strategic Planning Assumptions:

- By 2023, more than 33% of large organizations will have analysts practicing decision intelligence (including decision modeling).
- By 2023, composable decisions that use a data fabric will reduce operational costs and speed time to insight by 20%, while improving explainability.
- By 2024, 60% of government AI and data analytics investments aim to directly impact real-time operational decisions and outcomes.

### Description:

Decision intelligence in government is a practical discipline that improves decision making by explicitly understanding how decisions are made and how their outcomes are evaluated and improved by feedback. To support that, it systematically adopts data-driven technologies such as artificial intelligence (AI) and advanced analytics at each stage of government activity. Decision intelligence applies to all major levels of decision types: one-off strategic decisions, managerial decisions and high-volume operational decisions.

### Why Trending:

- Governments are making service delivery more responsive and timely by embedding decision intelligence deeper across the entire value chain through to operations.
- The need to deliver government outcomes through the global pandemic has exposed the problems with relying on data that is neither timely nor always accurate.
- Planning and decisions should be increasingly predictive and proactive, using AI, analytics, business intelligence and data science to significantly reduce the cost due to late intervention.
- Governance of data use requires increased maturity to reduce the risk of unintended consequences created by poor practice such as inadvertent bias or inability to identify “edge” cases requiring escalation.

## Implications:

- AI and data and analytics (D&A) capabilities are often treated separately from service delivery and operational processes, frequently in separate organizations. Decision intelligence requires this to change.
- Engineering decisions for precision, transparency, traceability, flexibility, reusability and explainability will significantly empower and improve governance.
- The ability to identify, prioritize and then model and (re)engineer decisions for improvement are critical competencies for a future-ready organization.
- Changing how decisions are made can significantly impact the role of decision makers. Government CIOs must anticipate and proactively manage these decisions through coaching and training.
- Data analytics with decision intelligence has become a core business function in government.

## Actions for Government CIOs:

- Develop a future-state vision of the business value and public benefit of decision intelligence by building a D&A strategy with integrated policies and focus on desired policy outcomes.
- Improve decision making by incorporating human and/or AI decision-making capabilities and a feedback loop for measuring results.

- Start where business-critical decision making must be improved – requiring more data-driven support or AI-powered augmentation – and determine where decisions can be scaled and accelerated through automation.
- Alternatively, start where there is the greatest dissatisfaction with current decision making, driving a willingness to change how those decisions are made.
- Create a role for decision engineers by hiring or upskilling experts who can work with decision makers to identify critical decisions to be improved through decision intelligence.
- Plan to close gaps in skills and compute capacity by contracting with suitable service providers or academic institutions and leveraging cloud-based AI and analytics services.

## Trend: Data Sharing as a Program

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*Analysis by Ben Kaner, Arthur Mickoleit*

### Strategic Planning Assumptions:

- By 2023, 50% of government organizations will establish formal accountability structures for data sharing, including standards for data structure, quality and timeliness.
- By 2023, organizations across all industries, including government, that promote data sharing will outperform their peers on most business value metrics.

### Description:

Data sharing brings together data sources to allow cross-analysis in order to create additional value for outcomes across government. Data sharing in government overall is often ad hoc, driven by high-profile incidents. By contrast, data sharing as a program is a systematic and scalable approach to enable data reuse and services innovation.

### Why Trending:

- The quality of many government responses to the pandemic was determined by the ability to share data beyond organizational boundaries. This has brought home to policymakers how important it is to leverage timely and accurate data across multiple fronts to address the continuing challenges of recovery and renewal.
- The big value in government, as in the commercial arena, has been gained from data using consent and (near) real-time access.
- Previous obstacles and barriers to data sharing have proven to be surmountable, so it is now clear that acting at scale is achievable.
- Tools that are usable by nonspecialist analysts and business technologists across the organization are now available to improve the quality of data and increase the impact from reuse across sources.
- We see data sharing in government becoming more programmatic, rather than project-based.

## Implications:

- Sharing requires compromise, strong sponsorship and political leadership. This means proactively working with stakeholders, accepting risks in return for benefits and developing responsibility for delivering value from data sharing.
- Some ethical governance challenges are different in government than in the commercial sector and need to be addressed.
- The prominent culture of compartmentalization for security reasons needs to be shifted to use of data to serve citizens and accelerate improvements.
- Agencies without a strong track record in data sharing should identify “quick win” opportunities that illustrate tangible value beyond mere compliance.

## Actions for Government CIOs:

- Establish senior leadership support by identifying the main policy or executive-level beneficiaries from early use cases within the pipeline and recruiting them as political sponsors.
- Balance control, which should be consistent across organizations, with incentives to collaborate by establishing funding and other support mechanisms (for example, incubators or catalysts) to stimulate innovation and cross-organizational activities.

- Develop demand by supporting the maturity of data and analytics skills, tools and capability outside traditional specialists.
- Ensure continuing support of the initiatives through changes in leadership or administration with a constant emphasis on discovering new value from existing or accessible data.

## Evidence

<sup>1</sup> End the Confusion About Who Is Accountable for Digital Government

<sup>2</sup> Government CIOs Must Tackle These Top Barriers to Digital Transformation

<sup>3</sup> Predicts 2022: Governments Scaling Gains From Disruption

## Document Revision History

Top Technology Trends in Government for 2021 - 1 March 2021

Technology Trends in Government, 2019-2020 - 16 September 2019

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Predicts 2022: Governments Scaling Gains From Disruption

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Top Trends in Government for 2022: Digital Identity Ecosystems

Top Trends in Government for 2022: Accelerated Legacy Modernization

Top Trends in Government for 2022: Anything as a Service

Top Trends in Government for 2022: Case Management as a Service

Top Trends in Government for 2022: Adaptive Security

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Top Trends in Government for 2022: Hyperautomation

## Top Trends in Government for 2022: Total Experience Top Trends in Government for 2022: Decision Intelligence

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**Table 1: Gartner's Top Technology Trends in Government for 2022**

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Digital Identity Ecosystems	Accelerated Legacy Modernization	Decision Intelligence
Total Experience	Case Management as a Service (CMaaS)	Data Sharing as a Program
	Composable Government Enterprise	

Source: Gartner

# Actionable, objective insight

Position your government organization for success. Explore these additional complimentary resources and tools for digital transformation:



**Research**  
2022 CIO Agenda:  
A Government Perspective

Only 2% of governments are identified as highly composable.

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**Research**  
Resist Transformation Hype and  
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Essential Piece of the Digital  
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