



The Government of Canada's Digital Ambition

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President's Message

Annual Update on the Government of Canada Digital Ambition

As President of the Treasury Board, I have a mandate to lead Canada's digital government transformation to ultimately provide better services to Canadians, and the Digital Ambition is central to this vision.

As the world continues to evolve, so too do our priorities, opportunities, and challenges in the digital space. Technologies like quantum computing and artificial intelligence are already impacting society in many ways, and Canada must continue to lead throughout this evolution by embracing a digital-first mindset.

We need to make it easier for citizens to interact with the Government of Canada. Those we serve expect government services that are not only easy to use, but also secure and focused on privacy. They expect high quality, accessible, and efficient government services. Most importantly, Canadians want to be able to trust that their personal information is protected. We have a responsibility to continue to build and maintain trust with Canadians in everything that we do.

This is what the Digital Ambition is all about. It lays out how the government will provide secure and modern digital services in four main ways:

1. by maximizing the effectiveness and value of technology investment across government
2. by improving cross-government data and services for clients and employees
3. by setting clear strategies, policies, and guidance for safe, secure, and reliable operations
4. by evolving how we fund projects and recruit the best of the best

I'm encouraged by the important progress made over the past year in getting government organizations aligned to the Ambition, which will ensure a unified approach for all of government. In this work, I continue to be inspired and motivated by the work of my provincial and territorial counterparts, and their collaboration with municipalities and the federal government. There is still a lot of work to do, but together we are building on this momentum to provide a better digital service experience.

I invite you to read this report, which provides a year in review and an update to the Government of Canada's Digital Ambition, to learn more about how government is improving digital service delivery.

The Honourable Mona Fortier, P.C., M.P.

President of the Treasury Board

Message from the Chief Information Officer of Canada

As the Chief Information Officer of Canada, I am pleased to present the 2022–23 Year in Review and update of the Digital Ambition (Ambition), a Government of Canada (GC)–wide strategy published in 2022 that guides the delivery of government in a digital age.

The Ambition fulfills my responsibility as the Chief Information Officer of Canada, as outlined in the *Policy on Service and Digital*, to approve an annual, forward-looking three-year enterprise-wide plan that establishes the strategic direction for the integrated management of service, information, data, information technology (IT) and cyber security. It remains informed by ongoing collaboration and communication across the digital and service delivery community within the federal public service and will continue to be refreshed annually to address a dynamic environment.

The Ambition remains grounded in the same four strategic themes that are supported by a set of government-wide priorities. The purpose of the Ambition continues to focus on outcome-driven, action-oriented approaches that address the challenges of digital modernization.

Over the past year, we have made progress toward achieving these goals in the Ambition. We have focused on addressing the challenges government faces in establishing new digital services, while managing aging IT systems. Modernizing our IT systems is key in making government services simpler for those who use and deliver them. At the same time, maintaining aging

technology consumes significant time, money and resources, and presents inherent risk for service disruption such as what was experienced in the 2022 summer travel season.

Moving forward, we have one option: continue to deliver the services that Canadians rely on today while accelerating our move to modern services that are secure, reliable, user-centric and barrier-free, and that meet the need for privacy and transparency. This is essential to maintaining trust in Canada's institutions.

For the Ambition to be successful, we must instill a digital mindset across the GC to ensure that government policies and programs consider digital service delivery needs right from the start and that the people we serve and how we serve them are at the centre of our work.

Looking ahead, the lessons learned and success stories to date will inform implementation of the Ambition moving forward. There is much more work to be done. In the coming year, the Ambition will prioritize:

1. operations that are safe, secure and reliable in an ever-evolving cyber-threat landscape
2. delivering measurable progress on multi-year, foundational and transformational programs managed across government to modernize the technology and processes used to deliver our immigration, benefits programs (for example, Old Age Security, Employment Insurance and Canada Pension Plan), and our GC pay system; prioritization will be key to how we achieve this
3. delivering the foundational technology for "one front door" to create a consistent and personalized service experience and entry point for federal government services
4. enabling solutions that support the transition from a highly analog environment to one that leverages digital opportunities to support the

outcomes of the Access to Information review that was completed in late 2022

5. driving a systemic shift in culture across government that continues to look at evolution of policy and programs through the service lens with a digital-first mindset
6. attracting, retaining and developing the GC's digital talent to build a diverse community that reflects those we serve, with the right skills to undertake critical and purpose-driven work

These six key priorities do not take away from the work that needs to advance across the Ambition; however, they focus the government on foundational elements that will allow future years to accelerate. We remain committed to building this all on a foundation of privacy and accessibility.

In closing, I am encouraged by what we have accomplished as a community in the last year; however, I acknowledge the limits that our current digital environment has created in delivering services to Canadians. Notably, this year, I have seen a shift in momentum to drive modernization in our core environment and to give consideration to digital delivery as programs are designed. This combination creates a renewed rally cry that will launch us into the next year. As we move forward, we will encounter setbacks and we most certainly will face new obstacles, but I am confident that we are on an improved path that will allow us to approach these challenges in a bold and courageous way together.

Bottom line: performance is what Canadians expect and deserve.

Catherine Luelo

Chief Information Officer of Canada

Executive summary

The role of the Office of the Chief Information Officer (OCIO) within the Treasury Board of Canada Secretariat is to provide strategic direction and leadership in the pursuit of excellence in information management, information technology (IT), security, privacy and access to information across the Government of Canada (GC). This direction is contained within the GC's Digital Ambition (Ambition).

Specifically, **Part I** provides an overview of:

- factors shaping today's fast-changing digital landscape
- work that is ongoing
- challenges facing the GC within this landscape
- opportunities for the GC to overcome and move beyond those challenges

Part II highlights the themes of the Ambition, detailing the priority-based actions the GC will take toward building a safe, responsive and robust digital government over the next three years.

Four themes frame the Ambition first developed in 2022:

1. excellence in technology and operations
2. data-enabled digital services and programs
3. action-ready digital strategy and policy
4. structural evolution in funding, talent and culture

Focusing on priorities and actions provides clarity on where, how and when the GC can best place its attention and resources to gain maximum value and benefit. They are each pieces of a larger picture that work together to improve the GC's overall digital environment and delivery of modern services that are secure, reliable, user-centric and barrier-free, and that

meet privacy and transparency needs. In other words, it will optimize the work being delivered across the GC and improve the quality of services being provided to individuals.

Part I: current reality

► In this section

Canada, like most other countries, is experiencing a rapid transformation in the delivery of digital services and must keep pace with expectations. The complex flow of data and information can make it difficult for people to find, navigate and use these services, and this can get in the way of a positive user experience. In fact, nearly 70% cited one or more problems with digital government services, including technical difficulties or issues with signing in, long completion times for tasks, and the inability to find the help they are seeking.

Additionally, despite being one of the most connected countries in the world with over 94% of people having Internet at home, ¹ Canada has the lowest usage frequency for digital government services among a 2020 survey of 36 countries. According to the 2022 United Nations E-Government Survey, Canada ranked 32nd in the E-Government Development Index, which is a drop from 28th in the 2020 survey.

The online service experience is increasingly becoming the face of the GC, as individuals continue to access more services through their devices than they do in person. When accessing GC services in 2021–22:

- 54% of citizens indicated that their main method of contact was by using websites
- 34% used the telephone as their main channel
- 4% visited offices, service counters or kiosks

A rapidly changing digital landscape

Today's digital landscape is marked by change of accelerating pace and scope. The world is constantly evolving, and new advancements are being made every day. Rapid technological, digital and data transformation have become part of daily life. The following is a list of current trends that will be used to adapt and frame current and future plans. The Ambition responds directly to some in the planned actions, while others play a more contextual role. We will continue to track their progress and evolve our plans as needed.

Artificial intelligence (AI)

The evolution and adoption of AI come with great potential to improve efficiency and reduce bias. However, there is a corresponding risk of causing harm or disadvantage to individuals who are affected by the unintended consequences of AI systems, which can include bias. We are harnessing the ability to support fairness and transparency through responsible AI where algorithms are shared and calibrated openly. We are ensuring responsible use of AI in government programs and services through a suite of products, such as the Algorithmic Impact Assessment tool, which are guided by clear values, ethics and laws.

Automation

We need to strike a reasonable balance between:

- managing the legal, ethical and technical risks of automation
- leveraging automated systems to improve the effectiveness of government services and to modernize operations

Cloud adoption

Digital services across the public and private sectors are increasingly moving toward the use of the cloud to take advantage of the benefits that it brings. The GC is at the beginning of its essential journey to cloud adoption as part of its modernization efforts. The implications of operating in a hybrid environment, coupled with the ability to determine a cost-efficient operating model, while maintaining flexibility of providers in an environment where a few hold significant commercial power, will be critical. The re-skilling of existing employees and building talent in a tight labour market will be a pacing item on how the GC capitalizes on cloud.

Cyber security

The threat landscape is continually evolving. The continued commoditization of driving attacks (ransomware as a service) creates a low cost of entry. State-sponsored activity continues to drive a level of sophistication that requires consideration as we evolve new digital tools and fortify existing systems.

Digital literacy

There is an opportunity to work with agencies, other levels of government and businesses across Canada to improve the skills of Canadians. A timely example is the discussion that is underway across Canada on social media usage and the privacy implications of participating in platforms. It is critical that the GC:

- is part of these conversations
- provides leadership through action
- uses its workforce as an example of digital citizenship

The GC also needs to identify and develop the core set of skills that Canadians need to support better interactions with technology and engagement with government.

Disinformation and misinformation

The spread of inaccuracies and the polarization of public discourse can potentially undermine the legitimacy of public institutions and disrupt democratic processes.

Quantum computing

Quantum computing:

- is an emerging technology that is intended to overcome the physical limitations of conventional computing through the application of quantum physics
- creates a significant opportunity to solve complex problems at speeds never considered before

If it is a “big data” problem, quantum will be game changing given this technology can process large volumes of data far more rapidly than traditional servers. However, we will need to remain aware of the risks that come with this new technology and adapt appropriately to prevent any unintended impacts on decision-making. Quantum computing also comes with implications specifically related to encryption. Quantum computing threatens methods for ensuring the cyber security of information systems and the protection of sensitive data transmitted over the Internet.

Metaverse

The metaverse is a more immersive Internet where we'll be able to work, play and socialize on a persistent platform. Augmented reality and virtual reality technology will continue to advance. One area to watch is the work environment in the metaverse and the implications for how GC both works and delivers services.

Sustainable technology and focus on greening

The GC is focusing on building a more sustainable government to combat climate change, and this includes technology. Careful consideration of the carbon footprint of how and what we procure and deploy will help this effort, as will investing in technology that is more energy-efficient, resilient and circular.

Bridging the digital and physical worlds

There are two components of this merger: digital twin technology and 3D printing. Digital twins are virtual simulations of real-world processes, operations or products that can be used to test new ideas in a safe digital environment. Designers and engineers are using digital twins to recreate physical objects inside virtual worlds, so they can test under conceivable conditions without the high costs of real-life experiments. The GC can leverage this high-opportunity area to simulate government operations in normal or emergency scenarios.

Foundations of enabling digital government delivery

Build trust in government

Trust is a critical factor to ensuring that the public uses government services. Without trust, they may be less likely to use them. As the world shifts to a more digital landscape, the realization that information is available at the click of a button can become overwhelming for some.

To build trust, the GC will continue working to increase transparency and adopting open government principles and guidelines and working toward the commitments in Canada's 5th National Action Plan on Open Government.

Current efforts by the GC include:

- updating how to make an access to information or personal information request through the online portal by using Sign-In Canada, which makes the entire process more efficient
- trialing approaches to declassification of government documents (as outlined in the Access to Information Review) and developing proactive disclosure approaches
- providing GC organizations the capacity to update individuals quickly, consistently, reliably and securely by email or by text message through GC Notify, which will reduce the risk of misinformation by sending information from a valid and credited source

Building and maintaining trust with Canadians

Protecting personal information and upholding a person's right to access their information and correct it if necessary are also essential to building and preserving trust in public institutions. Most agree that personal information and data should be shared between GC organizations to enable faster, simpler services while being protected with mechanisms in place to address any breaches.

The GC must balance the need to work in the open with the protection of privacy. This means the GC will continue to:

- properly safeguard through partnerships and data and information-sharing agreements
- limit the collection, use and disclosure of information
- retain information for only as long as necessary
- maintain the accuracy of information
- ensure transparency in its practices

In building privacy into new digital initiatives from the start, the GC will:

- ensure that the protection of personal information is considered throughout the life cycle of programs and services
- foster trust among those who increasingly expect digital services

Deliver efficiency by leveraging existing tools

To continue to foster digital transformation, the GC will continue to embed its Ambition into existing government-wide policies, strategies, frameworks and governance bodies.

The efforts to embed the Ambition include:

- the Government of Canada Digital Standards: Playbook, which:
 - outlines the guiding principles for how all public servants must work in the digital age
 - will continue to be refreshed as the environment changes
- the Policy on Service and Digital and the Directive on Service and Digital, which articulate how GC organizations are to manage service delivery, information and data, IT, and cyber security in the digital era
- adjusting and extending the existing policy suite, including the development of new directives and standards, while working to simplify and bring the *Policy on Service and Digital* to life to:

- accelerate digital transformation
- address emerging needs and priorities
- the new *Directive on Digital Talent*, which:
 - operationalizes digital “workforce capacity and capability development” requirements in the *Policy on Service and Digital*
 - is designed to deliver improvements in data collection, interdepartmental collaboration, planning, talent sourcing and talent management for the GC digital community
- the GC Enterprise Architecture Review Board, which:
 - defines current and target architecture standards for the GC
 - reviews departmental proposals for alignment
- the GC’s *Service and Digital Target Enterprise Architecture White Paper*, which will continue to:
 - help better coordinate transformation efforts
 - focus on users and service delivery when considering modernizing and onboarding IT solutions
 - align IT investments with business services
 - be the primary architecture reference for more departments (as applicable) for the digital enablement of GC services
- the *Policy on Government Security* and the *Directive on Security Management*, which:
 - support trusted delivery of government programs and services through a modern hybrid environment and a broad-spectrum approach to security, including physical, personnel, data, IT, contracting, training, business continuity and incident management aspects
 - are related to other instruments, including the *Standard on Security Screening*, which will be refreshed as needed to enable digital outcomes

- the 2023-2026 Data Strategy for the Federal Public Service, which:
 - re-establishes priorities for a unified and collaborative approach to managing government-wide data as an asset while respecting privacy
 - will continue to be refreshed as the environment changes
- the Greening Government Strategy, under which the GC:
 - is investigating ways to reduce the environmental footprint of the government's digital operations in an era when digital technology is one of the leading contributors to greenhouse gas emissions
 - will develop targets, standards and procurement criteria for government IT that supports the Policy on Green Procurement
- Deputy Minister committees, which:
 - will continue to promote a whole-of-government approach to management, human resources and policy planning related to the Ambition
 - include committees on GC-wide priorities and planning and core services, which focus on issues such as privacy, data use and procurement for complex programs

Ongoing challenges

Complex structural reality

The GC is structured as multiple departments and agencies. Often, the vertical operations lead within each organization has their own siloed and independent systems. However, from an IT point of view and user point of view, GC service delivery often goes beyond any individual organization or area of operations.

Currently, service delivery in the GC has multiple entry points, which reflect the need for whole-of-government digital infrastructure in Canada. People need to know where to go to access services and while many do, some do not. Asking them in inconsistent ways to provide proof of who they are to access services further exacerbates some frustrations. Making their sign-in experience easier and improving the overall end-to-end experience of accessing government services are key to ensuring and, importantly, showing that the GC's digital transformation keeps user needs at the forefront.

Furthermore, many IT systems and infrastructure components are:

- outdated, complex and costly to maintain
- difficult to change quickly and carry additional risks

In addition, limitations in core capabilities related to delivering on these large, complex components remain barriers to digital change.

Shortage of talent and under-representation

There is a worldwide shortage of technical specialists, particularly in areas such as data science and cyber security. The GC is in a very competitive situation in attracting the workforce needed to deliver on the Ambition.

The GC needs to:

- represent the population of Canada
- reduce systemic barriers to people trying to access government information and services, no matter where they live and how they identify

Building a diverse and inclusive workforce helps the GC:

- better understand the needs of individuals
- deliver quality, user-centric service

Under-representation is another challenge facing the digital community.

These needs are identified in the *Accessibility Strategy for the Public Service of Canada* and *Building a Foundation for Change: Canada's Anti-Racism Strategy 2019-2022*, and the Clerk's *Call to Action on Anti-Racism, Equity, and Inclusion in the Federal Public Service*. To achieve these objectives, it is necessary to work with employment equity groups and equity-seeking groups to better understand their needs and expectations, to attract and retain more talent from these important groups that will support our effort to design more inclusive and accessible digital services for all.

Value-driven investment

Investment in technology and digital initiatives has continued to grow over the last decade; however, the highly decentralized nature of IT investment management and decision-making in the GC creates high complexity. This is consistent with large complex organizations around the globe in both the private and public sectors. There is no target state or destination in managing these investments; rather, it is an ongoing journey to evolve delivery, funding and value creation. Focused work is underway to calibrate the right balance between centralization and decentralization with an eye to maximize efficiency to take advantage of the cost savings that modernization can create. There is opportunity to provide both self-service and full-service means to support Canadians and be methodical about how we invest collectively to achieve efficiency of delivery.

Part II: themes of the Digital Ambition

► In this section

The following section of the report dives deeper into the four themes of the Ambition, explaining their importance, why each one is a theme, the priorities under each theme and the actions needed to achieve their expected outcomes.

The four themes of the Ambition are:

1. **Excellence in technology and operations:** maximize the effectiveness and value of technology investments across government
2. **Data-enabled digital services and programs:** drive cross-government improvement in client and employee services, data and cross-agency integration
3. **Action-ready digital strategy and policy:** set strategy, policy and guidance that enables safe, secure, reliable and privacy-enabled operations
4. **Structural evolution in funding, talent and culture:** drive changes to policy and governance that prioritize and unlock the full value of digital investment

Theme 1: excellence in technology and operations

This theme defines the priorities and actions required to ensure a safe, secure and reliable IT operational environment to support the delivery of policy, programs and services to individuals. We will deliver on multi-year, foundational and transformational programs managed across the GC to modernize the technology and processes used to deliver our services.

The current health of GC applications varies, but a high percentage are in a poor state of health and create barriers and complexity to delivering government in a digital age. A single system failure could impede the GC's ability to deliver benefits and services in times of need, which could impact public trust.

Cyber security threats are increasing, and so must the GC's risk response. The integrity and security of the GC's data and IT environment are essential to providing services. With the increasing sophistication and frequency of cyber attacks, the GC must remain vigilant and continue to:

- strengthen the GC's defences by taking a whole-of-government approach to how initiatives are funded and resourced to defend against those increased cyber risks
- bolster a collective ability to adopt the "build once, use many" approach to IT development and innovation
- expand the usage of cyber-defence services, such as those offered by the Canadian Centre for Cyber Security.

Priority 1.1: strengthening the overall health of the government's application portfolio

Thousands of software applications are used to run the systems that deliver GC programs and services, such as Employment Insurance, passports and Old Age Security, to millions of Canadians every day. The good health of these applications is essential for reliable and secure service.

To manage current technical debt and avoid accumulating more in the future, the GC should look toward modernizing the application portfolio by:

- making decisions, as outlined in the Cloud Adoption Strategy, to modernize for short-term and long-term value
- building a roadmap for retiring and decommissioning legacy technology
- leveraging common enterprise and cloud-based solutions, such as software as a service

Such collective action will be enabled by:

- enhancing the GC Application Portfolio Management Framework and tools to provide better data-driven insights for GC organizations to use in managing the health of their application portfolio and for senior leaders to use in prioritizing enterprise investments
- supporting funding to GC organizations to modernize applications and migrate to modern hosting environments
- ensuring a GC-wide approach to drive common adoption of solutions and global processes
- making enhancements to tools and guidance for a developer-centred approach to security and privacy that embeds such an approach in the application development process

Actions to achieve the priority

To tackle technical debt and improve the health of its application portfolio, the GC is:

- releasing a roadmap that sets out a vision of target architecture and a plan to reduce technical debt across the GC
- applying plans to remediate technical debt alongside modernization plans in order to fortify older systems and update technology to eliminate the failure risk of mission-critical applications
- using current development practices to attract and retain top talent in the areas of development, security and operations (DevSecOps) to help drive technical excellence
- developing frameworks and tools for GC organizations to plan, and be accountable for, the life-cycle management of their systems and assets

Priority 1.2: strengthen delivery of the GC digital transformation

As the GC continues its digital transformation, there remain key challenges that require horizontal solutions and prioritization. To this end, it will be necessary to deploy senior transformation leaders, provide key digital resources, and leverage agile ways of working to deliver cross-enterprise programs with a focus on outcomes. Dedicated teams will continue to act as liaisons with central agencies and project teams for complex and multi-year transformation projects.

Actions to achieve the priority

To continue the GC's digital transformation, the GC is:

- leading the development of a government-wide technology transformation program
- coordinating and governing activities across internal and external delivery partners
- providing strong independent assurance to program rollouts across the GC
- supporting allocation and prioritization of resources and key skills for programs related to this work

Priority 1.3: improve the service experience of all clients

A successful digital government is committed to continuously improving service delivery.

Digital government invests in:

- obtaining quality data
- gathering client insights
- understanding user experiences
- measuring and improving service satisfaction

By making these investments, digital government can build public trust.

For government, client focus means:

- developing and delivering client-centric service, as required by the *Policy on Service and Digital*
- making sure that services are:
 - accessible, inclusive, easy to use and secure
 - digitally enabled
 - configured to protect privacy
 - available in both official languages

Service delivery improves through commitment to the guiding principles and best practices set out in the Government of Canada Digital Standards: Playbook. To provide easy-to-access, modern and effective services, the GC must:

- increase the accessibility, availability, reliability and security of online end-to-end services
- meet the needs of everyone, including:
 - vulnerable populations who require specific forms of support
 - those who reside in areas with less connectivity
 - those who do not wish to or are unable to use technologies

Actions to achieve the priority

The GC is working to improve the service experience by:

- assessing gaps in the digital service experience
- identifying tools, such as user testing and feedback, and continuing to increase the availability and security of end-to-end online services, such as passports and ATIP online requests
- advancing the systematic review of services in line with the Government of Canada Digital Standards: Playbook to identify opportunities to close the gaps using client feedback tools in designing

and continuously improving services loops necessary (for example, putting developers directly in touch with end users in the feedback loop)

- developing central platforms and tool kits that enable GC organizations to automate manual processes and increase administrative efficiency

Priority 1.4: deploy modern and accessible workplace tools and devices

The COVID-19 pandemic increased the need for more modern work tools and ways of working. Day-to-day operations have undergone a seismic shift since early 2020, and the GC must continue to support public servants with the tools and devices they need to be productive and collaborate in this new reality.

Efforts in this regard will complement the *Accessibility Strategy for the Public Service of Canada* and its commitment to providing public servants with a new suite of accessible digital communication and collaboration tools.

Security safeguards will be implemented based on the sensitivity and value of information balanced with the user experience.

Actions to achieve the priority

The GC is working to deploy modern, accessible tools and devices for all employees by:

- providing them with a suite of accessible, modern and secure cloud-based tools for enhanced productivity, collaboration, web conferencing and email
- equipping the GC workforce with modern workspaces and secure workplace devices
- establishing enterprise standards for back-office tools and solutions

Priority 1.5: plan and govern for the sustainable and integrated management of service, information, data, IT, privacy and cyber security

Progress is being made on integrating:

- the planning and management of service, information, data, IT and cyber security
- input and direction from program officials

Integrated planning uses the right data, processes and technology to help provide data-driven insights across the GC portfolio of investments, assets and services.

The GC will respond to changes in business needs and better leverage new technologies by enabling agile product management approaches to meet evolving expectations. To address key challenges in the current ecosystem, including reducing silos, eliminating unnecessary redundancies and addressing the problems posed by legacy systems, a target-state model has been defined for the digital enablement of GC services. The *Service and Digital Target Enterprise Architecture White Paper* will:

- help align IT investments with user needs and underlying business services
- reduce unnecessary redundancies

When implementing this enterprise architecture, IT investments will be systematically considered from a whole-of-government perspective. New digital investments will be assessed against the criteria set out in the *Service and Digital Target Enterprise Architecture White Paper*.

Actions to achieve the priority

The GC is planning for the sustainable and integrated management of digital services by:

- implementing a GC-wide target enterprise architecture to digitally enable services
- providing decision-makers with horizontal visibility for the integrated management of service, information, data, IT, privacy and cyber security
- focusing cyber security priorities based on a whole-of-government strategy
- providing strategic direction on architectural topics to guide an enterprise approach (for example, prioritizing a “modernize-first” approach to cloud transition)
- developing enterprise patterns with flexibility for department-specific needs
- providing architecture resources to support the design of solutions for departments
- updating privacy risk assessment policies and tools and further integrating them in overall risk frameworks

Theme 2: data-enabled digital services and programs

The GC’s breadth of programs and services collect, generate and hold an increasing amount of data. Data is a strategic asset and is foundational for digital government. However, current legislation, governance, standards and practices do not fully enable consistent and effective sharing and reusing of data. Departments and agencies do not always know the full breadth and depth of their holdings (or those of other organizations), and the data needed to support service delivery, decision-making or operations is not always available in a consumable way.

The GC is leveraging the data and information it has to provide better and more accessible services and programs. For example, Statistics Canada is leading a disaggregated data action plan, alongside the GC’s commitment

to ensuring that data is appropriately disaggregated to enable increased understanding of clients to improve and tailor services, policies and programs. The GC is also working on cross-government initiatives that create a single front door to establish identity for access to all government services, as well as looking at ways to streamline the secure sharing of data across GC organizations to improve digital services and enable the achievement of priorities.

Such methods also create the opportunity to release high-value open datasets for public use.

Unlocking the potential of all this data will help improve services, protect user privacy, support evidence-based decisions and create internal efficiencies.

Security must be paramount. The GC will therefore ensure the appropriate access, use and sharing of data by implementing robust data and information governance and stewardship that focus on security, integrity and the protection of personal information. By improving legislation, governance, standards and practices enabling the use of effective sharing and reusing of data, client and employee services and programs will be positively impacted as a result.

Priority 2.1: maximize public value of data and information

The GC needs to build the foundations that take advantage of work that has been advanced in the [2023-2026 Data Strategy for the Federal Public Service](#). To that end, the GC will:

- define roles and responsibilities for data stewardship
- implement standards for accessibility and interoperability, while protecting privacy and personal information

- build solutions to facilitate the secure exchange of data across levels of government and with trusted external partners, while upholding ethical and inclusive democratic principles
- advocate for a legislative framework that:
 - supports sharing and using data ethically and responsibly
 - protects such data
- develop data-sharing with a focus on enabling a prioritized sequence of use cases (both user-facing services and internal program design)
- prioritize the release of high-quality open data and information that is in demand to allow the public to generate their own economic and social value

Actions to achieve the priority

The GC is working to maximize the public value of data and information by:

- prescribing and implementing enterprise standards for data and information accessibility, exchange and reuse, while protecting privacy and personal information
- enabling the secure, seamless and real-time exchange of data across government departments and with external partners and trusted institutions to improve the service experience of Canadians
- increasing the maturity of open government practices through an evidence-based open government strategy, maturity models and assessment tools
- building an open data ecosystem by establishing an open data advisory group, which is made up of internal and external stakeholders, to inform open data priorities
- consulting on and developing service delivery standards for prioritizing and releasing high-value, publicly demanded open data and information

- developing action plans to address issues raised in the access to information review that was completed in 2022
- identifying ways to improve response times for access to information and personal information requests
- establishing clear guidelines on data quality, sharing, accessibility and ethics

Priority 2.2: build and use secure common solutions for digital service delivery

Over the past 50 years, most IT systems that help deliver government operations and services have been designed and built independently of one another. This system has resulted in:

- a complex technological landscape that makes it difficult to integrate systems to provide a seamless client experience
- high support and maintenance costs
- a lack of flexibility and agility, which are needed to deliver new services and benefits quickly

For users, this means they have to provide the same information every time they access a new service or benefit. They may also have to wait longer to confirm their identity when signing up for a new service and providing different information as proof of eligibility for different services.

The next step in enabling digital government is adopting a “government as a platform” service delivery model that relies on common components for common service interactions. Such interactions include:

- finding information
- applying for a service
- receiving a status update

- exchanging data within government to give clients a “tell-us-once” experience

We have also recognized that providing simple, secure ways of interacting with government services improves the experience for those using them. It is critical that the GC continue to demonstrate leadership at the federal level in developing and implementing a framework for using digital credentials to improve digital service delivery. At the same time, we will continue to work closely with our provincial and territorial partners to further enhance the work underway in their jurisdictions.

Actions to achieve the priority

The GC is working to build and use common platforms for digital service delivery by:

- continuing to scale applications created by the Canadian Digital Service (GC Notify and GC Forms)
- working collaboratively with stakeholders to develop a common and secure pan-Canadian framework to enable digital credential-sharing and a common way to prove identity
- delivering a GC Digital credentials program to enable one front door for all GC services
- embracing emerging and leading practices, including reusing data and using common components, where appropriate, to enable interoperability across services
- establishing classified cloud services for the GC’s high-security organizations
- building and testing additional platform components to address more of the interactions people have with government in order to enable departments to launch services more quickly and easily

Priority 2.3: manage and use data and information as strategic assets

In addition to maximizing the public value of data and information, the GC needs to improve how these strategic assets are managed, used and protected.

The vast amount and variety of data and information that the GC collects, creates and holds (including but not limited to personal, financial, geospatial, scientific and statistical data) can be used to improve decision-making, the development of advice, and the design and delivery of policies and programs. All this needs to be done with the user's service experience in mind. The 2023-2026 Data Strategy for the Federal Public Service has been refreshed as part of the work on the Ambition, and was sponsored by the Privy Council Office, Statistics Canada and the Chief Data Officer of Canada.

Building on progress to date and work already underway across the public service, the strategy is organized into four mission areas focused on the following concrete, achievable and high-impact opportunities:

1. proactively considering data by design in all stages of government initiatives
2. effectively stewarding data for decision-making
3. improving user experience and maintaining trust by enabling data-driven services through data that flows securely where it is needed
4. empowering the public service with the talent and tools it needs

This strategy shifts the focus to implementation and engagement across GC organizations, notably by:

- embedding data activities and needs at the outset of initiatives
- striving to disaggregate data (Disaggregated Data Action Plan) to the lowest level needed to enable service improvement that continues to

- respect privacy and security requirements
- assessing the needs of managers and teams in terms of data skills

Actions to achieve the priority

The GC is working to better manage and use data and information as strategic assets by:

- creating effective governance structures, roles and responsibilities
- establishing a policy framework, guidance and tools that support the sharing of personal information between institutions
- building and using a common data reference model and working toward an inventory of government data assets
- defining a government data quality framework and baselining GC data sharing and management capabilities
- sanitizing data to comply with standards
- moving into a secure, integrated cross-departmental platform to enable digital data-sharing across the GC
- developing a data exchange platform to enable “tell-us-once” processes
- amending and expanding policy requirements for open government, including open data and the process for releasing information
- building and testing additional platform components that address more of the service interactions people have with government

Theme 3: action-ready digital policy and strategy

As the digital landscape continues to evolve, GC organizations require a flexible and action-ready strategy and a framework of policies to navigate change and move to a common look and feel. Digital government means modernizing and adapting the way the GC works so that it can:

- deliver in a fast-changing world

- remain responsive, resilient and equipped to deliver services and priorities

Action-ready policy aspires to provide a practical guide via policy that keeps important digital considerations at the forefront, including embedding components of digital standards into governing frameworks. For example, the world is moving toward using cleaner technologies. The Ambition goes hand in hand with implementing the *Greening Government Strategy*, which seeks to make GC operations low-carbon through green procurement and clean technologies. It is imperative to set strategy, policy and guidance that prioritize digital government, leverage partners and adopt agile work to enable secure operations.

Developing and issuing guidance for employees, digital practitioners and executives will enable solutions that support the effective transition of the GC from a highly analog environment to one that leverages digital opportunities to provide better service delivery.

Priority 3.1: embed GC priorities into governing frameworks and policy

Governance is a key enabler of effective policy. The deputy minister-level committees bring together internal and external experts who have experience in implementing modernization initiatives in order to enable and support the GC organizations that are responsible for transforming core services.

Actions to achieve the priority

- Enshrine priority Government of Canada Digital Standards: Playbook into policy
- Pilot the execution of initial digital policies
- Examining the potential for amendments to policy, legislative and governance frameworks to enable digital transformation

Priority 3.2: provide horizontal prioritization and portfolio management

Throughout its history, the GC has customarily managed its respective portfolios and priorities in silos, department by department. However, to deliver citizen-centric digital government services effectively, the GC needs to increasingly consider the broader government context when defining its priorities. Throughout 2022–23, the GC:

- reorganized how digital initiatives are managed
- shifted toward a cross-organization integration and allocation strategy

This shift will continue over the near term with a goal of maturing this approach.

Actions to achieve the priority

- Facilitate a GC-wide resource allocation and prioritization of digital initiatives
- Manage a GC-wide portfolio to elevate opportunities for cross-departmental integration and synergy

Priority 3.3: streamline partner portfolio

To address complex challenges, GC organizations are looking for solutions that can be implemented quickly. As departments and agencies face similar challenges, identifying solutions and negotiating contracts with vendors as a group for technically validated procurement vehicles can:

- facilitate the implementation of quality solutions
- enable organizations to benefit from economies of scale

Actions to achieve the priority

- Develop a vendor procurement strategy to drive further investment in priority technologies and divert funding from technology supported by predatory vendors

- Consolidate a portfolio of vendors, and select a “pre-approved” subset with committed cost/service profiles and spend capacities more easily accessed by the GC
- Perform an assessment of digital vendor procurement process and redesign streamlined flow, and improve flexibility to engage startup/scale-up enterprises

Priority 3.4: establish an agile operating model

There are many horizontal and cross-cutting digital mandates throughout the GC. To achieve these mandates requires a clear model of responsibilities and communication structures to ensure that outcomes are aligned to whole-of-government priorities. The maturing of an agile operating model to allow for better horizontal/enterprise solutions is a work in progress and will be an iterative activity. Excellent foundational work has occurred in the prior year and work will continue in current year to further mature approach.

Actions to achieve the priority

- Assess and redesign/adapt processes to better enable delivery of whole-of-government priorities
- Further clarify and delineate the responsibilities of key central support organizations to enable delivery of priorities

Priority 3.5: implement GC-wide architecture strategy and standards

To ensure the benefits gained from investments can be maximized, the GC will provide direction on architectural topics to guide a cross-enterprise approach. For example, continuing to prioritize a “modernize-first” approach to cloud transition. This, in turn, will allow the development of enterprise patterns while still being able to be flexible with departmental and agency needs.

Actions to achieve the priority

- Provide strategic direction on architectural topics to guide a GC-wide approach (prioritize a “modernize-first” approach)
- Develop GC-wide enterprise patterns with flexibility for department-specific needs
- Provide architecture resources for advisory support

Priority 3.6: provide modern, reliable and secure networks and infrastructure

Secure networks and infrastructure are the foundations of digital government and of all government services. Currently, the GC has a multitude of networks across the country consisting of a mix of old and new network infrastructure. Much of the older infrastructure cannot handle cloud, video and voice. Furthermore, the majority of the networks are based on old concepts, some of which are overly complex and labour-intensive to support or modify. They are also costly to maintain and lacking in their capacity to scale and deliver the services Canadians need and expect.

As the GC adopts alternative service delivery models, such as public cloud and hybrid cloud, it must continue to provide a secure, reliable and privacy-enabled interoperable service delivery environment for internal services and business applications hosted in cloud-based environments. To that end, the GC must create a secure and resilient enterprise digital security ecosystem that builds in privacy and security from the outset.

Shared Services Canada is in the process of consolidating and modernizing the GC network infrastructure. This consolidation and modernization include the recent expansion of external network connectivity, which was set up with a focus on access to cloud environments and software as a

service. The needs of the GC's high-security organizations will be considered as the work continues to make government networks and infrastructure more secure.

Actions to achieve the priority

- Transition to a single, modern, secure and end-to-end GC-wide network that users can access anytime, anywhere and from any device
- Increase network security, including classified cloud networks

Theme 4: structural evolution in funding, talent and culture

Technological change is hard. The supporting changes required to adapt how work is done is often even more difficult. To realize the Ambition, both changes must be managed. Outdated approaches, complex processes and governance structures make it difficult for GC organizations to deliver on their digital modernization. This impacts on the delivery of services and programs directly.

To drive this digital transformation forward, the Office of the Chief Information Officer (OCIO) will continue to focus on the broad culture shift and the diverse workforce required to deliver the Ambition. This means:

- attracting, retaining and deploying digital talent to where it is most needed across the GC
- intensifying the development of skills required for digital program and service delivery, data literacy and cyber security
- promoting enterprise-wide recruitment and talent management initiatives
- striving to hire the best talent
- amplifying diversity and inclusion approaches to build and develop a GC digital workforce that reflects the population served

Changing the public service culture and processes requires flexibility, collaboration, digital knowledge and active support from leaders who facilitate and enable the transformation. The OCIO will continue to work with partners across government to tackle longstanding institutional barriers that hamper change and innovation, including governance systems and procurement practices. There is also work underway to improve digital skills across the public service so that all public servants – no matter what they do – will:

- think digitally about how they can better serve Canada and Canadians
- take a user perspective from the outset
- incorporate diversity and inclusion as part of design, consultation and collaboration
- bring data to the forefront of decision-making

Priority 4.1: drive a systemic culture shift across government to a digital-first mindset

Everyone has a role to play, and leaders must create the space for their employees to thrive, learn and adopt a digital-first mindset to better serve the population.

Applying a digital lens to all government policy development and program design requires focus and discipline, innovative thinking, skills, governance and work practices.

The GC Digital Skills Strategy, which is being developed as part of the Skills Strategy for Public Servants, will establish:

- evolution of digital skills for all public servants
- organizational-level supports, learning and outcomes that will fundamentally enhance the GC's ability to lead with a digital mindset

- a common foundation for digitally enabled discussions with partners in other areas of government, including human resources, finance and procurement

The Government of Canada Digital Standards: Playbook, which places the client at the centre of design, development and change, remains a resource that helps public servants understand how they can approach work differently in the digital age. These standards, which will continue to evolve over time, support the government's shift to making its operations more iterative, agile, open and user-focused.

Actions to achieve the priority

The GC is working to manage a government-wide culture shift to support digital delivery by:

- developing and implementing the GC Digital Skills Strategy for all public servants that will embed and enable a digital mindset across government
- creating guidance and tools to help departments fully adopt the Government of Canada Digital Standards: Playbook
- building an agile management framework
- adopting approaches to manage products in order to manage funding, procurement and governance
- articulating a digital community culture

Priority 4.2: attract, retain and develop diverse digital talent

To make digital government a reality, GC digital practitioners must adopt a digital mindset, with the right knowledge and skills. This mindset requires investing in training and professional development that will attract and retain top talent. There is currently intense demand for such talent nationally and internationally.

The digital workforce needs to reflect the diversity of the people it serves to make programs and services inclusive and accessible by design. The GC Digital Talent Strategy, which is being implemented, will ensure that digital recruiting, retention and skilling efforts are coordinated across departments. Within this, the OCIO will continue to:

- expand its talent acquisition and management efforts in concert with GC organizations
- mobilize to make tangible progress in closing the talent gap

Such efforts will further include:

- seeking new sources of talent, such as apprenticeships
- increasing diversity through functional partnerships with advocacy organizations across Canada
- developing career pathways

The efforts will ensure workforce development and skilling so that digital practitioners have the right digital skills for today and tomorrow.

Data will also inform decisions about talent mobility and career management and enable the GC to respond strategically to gaps in critical skills. The OCIO will also work to proactively create a working environment that promotes psychological safety, for example, by improving onboarding processes and supports. The GC Digital Talent Strategy outlines activities led by the OCIO related to the digital workforce, including enabling the GC, building the community and harnessing innovation.

Actions to achieve the priority

The GC is building a workforce for digital delivery by:

- continuing to implement the GC Digital Talent Strategy with priority of effort toward closing the talent gap on critical enterprise initiatives

- developing learning paths and offerings for digital delivery, accessibility, data literacy and cyber security
- attracting and retaining diverse talent for a representative digital workforce
- developing and enhancing “tours of duty” opportunities for private and public sector interchange
- standardizing job descriptions, career progression and compensation across individual organizations to enhance a GC-wide approach
- assessing gaps in working models and tools necessary to enable hybrid and distributed ways of working across departments
- expanding the suite of flexible working tools
- baselining digital capabilities, talent and culture across the GC to enable measurement of progress in the future
- deploying product-centric teams to priority projects across the GC

Footnotes

1 [Access to the Internet in Canada, 2020](#)

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