

# The Digital Public Service: Opportunities in Canada



High performance. Delivered.

# Contents

Executive Summary	3
Introduction	4
Canada: The digital landscape	5
The Drive to Digital	9
Personalization of Services to Meet Citizen Demands	9
Improved Use of Data to Provide Insights and Drive Informed Decision Making	10
Collaborative Orchestration of the Delivery of Public Service	12
Changing Business and Operating Models	13
The Way Forward	14
Five Recommendations for Governments	14



# Executive Summary

The public sector in Canada is changing fast to meet increased citizen expectations. However, the gap between these expectations and the government's ability to deliver is widening. There is also a lack of orchestration among disparate partners in a convoluted delivery chain of public services.

Social media and mobile technologies are revolutionizing how people work and how businesses operate. Canadians expect easy and convenient access to government services using any device, anywhere and anytime. Their expectations, values and service demands are becoming more sophisticated, and calls for more responsive and customized public services are on the rise.

There is a growing demand for cost-effective delivery, long-term rather than near-term planning and better understanding of citizen needs. Public-sector organizations too are looking for more efficient and flexible ways of working with effective tools and technologies to serve Canadians better.

The public sector must move forward. Tailoring traditional service models more closely around the citizen and pursuing cost savings through operational efficiencies will enable governments to contribute significantly to innovation and economic growth.

Embracing a digital strategy is essential to public-sector productivity and progress. Business and information technology (IT) must be involved in the application of digital technologies and processes to drive value: in the personalization of services to meet citizen demands; in the improved use of data to provide insights and to drive informed decision making; and in the collaborative orchestration of the delivery of public services.

## Accenture recommends five key focus areas to help the Canadian public sector develop a digital strategy:

### 1. Personalize services

By orienting services directly to citizens, transactions are streamlined, selfserve becomes a more cost-effective and viable service option, and direct and real-time feedback is obtained.

### 2. Use data to provide insights and make better decisions

Augmenting the power of analytics across broadly held data sources by adding "social listening" could help the public sector draw better insights and make more effective decisions.

### 3. Collaborate in the delivery of services

Building on existing shared services models that reduce costs could lead to collaboration across multiple jurisdictions. Extending this model across the whole economy and developing partnerships with all delivery partners (including the private sector) could enable the government to better focus on core policy and service delivery competencies

### 4. Reinvent business and operating models

Public-sector organizations that move from IT-focused value to business benefits, adopt fast and iterate often, and are not afraid to fail early will be able to fully embrace new methods for project delivery and rethink capital investment planning to focus on innovation.

### 5. Develop a value-driven strategy

Developing a digital strategy enables a long-term view. Defining a vision and a road map of tangible outcomes will allow leading organizations keep pace with the competition and invest strategically.

# Introduction

Digital trends are revolutionizing how governments, citizens and businesses interact with each other and the world. Fundamental shifts to digital technology such as rapid rise in the use of smartphones, ubiquity of broadband Internet access, social information sharing, vast amount of data and emergence of "everything as a service" have the potential to drive deep changes in the established business and operating models. Each of these trends is significant, and together their impact is even more powerful.

Over the past decade, leading-edge public-sector organizations have applied technology to existing business process and workflows to yield efficiency savings and cost reductions. To achieve more than incremental efficiencies, the public sector—like the private sector—should also fully incorporate technology to become a digital business, generating revenue and achieving results through innovative strategies, products, processes and experiences. This would require moving beyond the simple application of information and communications technology (ICT) to existing processes and turning already digitized resources into sources of operational results and growth. Forward-thinking public-sector organizations will consider the opportunities that digital provides as a means to reinvent their operating and business models.

## From

- Traditional work silos, defined by organizational departments, functions and processes
- Reactive
- Captured
- Government experience



## To

- Citizen-facing and focused
- Predictive
- Competitive
- Retail experience

Accenture's research—*Achieving Digital Excellence in Public Service*—charted the digital capabilities and opportunities for public services across 30 countries. The research findings provided a thought-provoking and insightful picture of individual country's digital maturity.

The research highlighted that governments need to play an orchestration role in delivering public service for the future—and the mass adoption of digital technologies is essential to productivity and progress. By understanding the digital capabilities and opportunities, governments can be better positioned to deliver positive outcomes that impact business, the society and the economy at large.

The research grouped the countries into three categories: Cutters, Builders and Enhancers.

Figure 1. The categories of digital maturity

Canada falls in the Enhancer category



**Cutters**

- High GDP and public debt
- Base digital infrastructure in place
- Focus on reducing government expenditure to balance the budget



**Builders**

- Growing GDP and low public debt
- Seek to build infrastructure to serve their economies and society in the future



**Enhancers**

- High GDP but low public debt
- Base digital infrastructure ready
- Potential for digital capability enhancement given the strength of the economy

Source: Accenture's research—Achieving digital excellence in public service

Digital trends are revolutionizing how governments, citizens and businesses interact with each other and the world. Let's take a closer look at how Canada fits in.

# Canada: The digital landscape

With a high gross domestic product (GDP) and an evolved digital infrastructure, the public sector in Canada falls in the Enhancers category. The Canadian government makes a conscious effort to use digital solutions to deliver leading-edge policy and public services.

Figure 2. Digital maturity: Where Canada stands

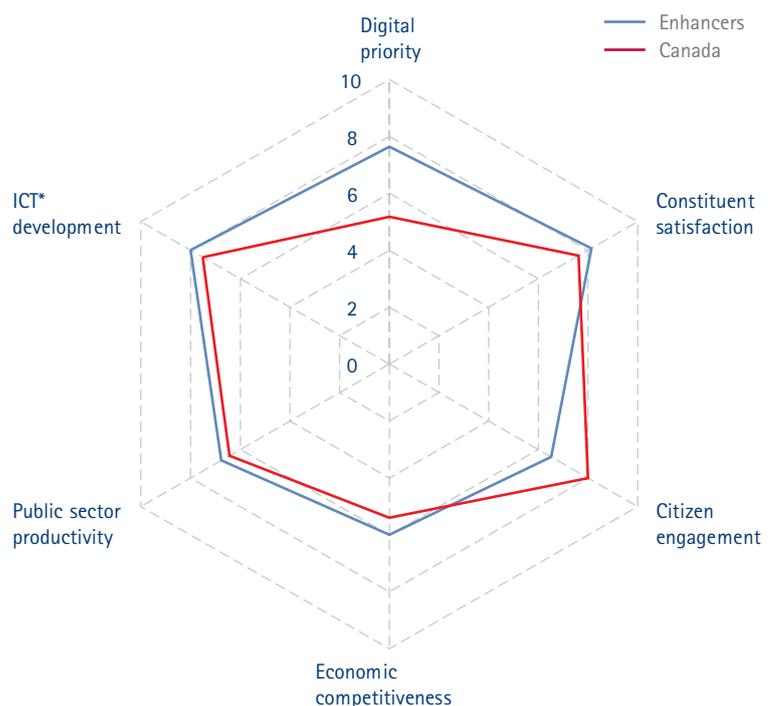
**Enhancers Characteristics**

- Moderate GDP Growth
- High per-capita GDP
- Low budget deficit; surplus in some
- Moderate growth in government ICT spending

**Canada**

Average GDP growth (%) (2008-11), World Bank	1
GDP per capita (2011), World Bank (\$)	\$50,345
Budget surplus / deficit (% of GDP), CIA World Fact book 2012	-3.8
Average growth in government ICT investment (2008-11), WITSA	2.00%
Public debt balance 2012 (% of GDP), CIA World Fact book	84.10% High

**Government Digital Maturity**



\*ICT= information and communications technologies

Source: Accenture's research—Achieving digital excellence in public service

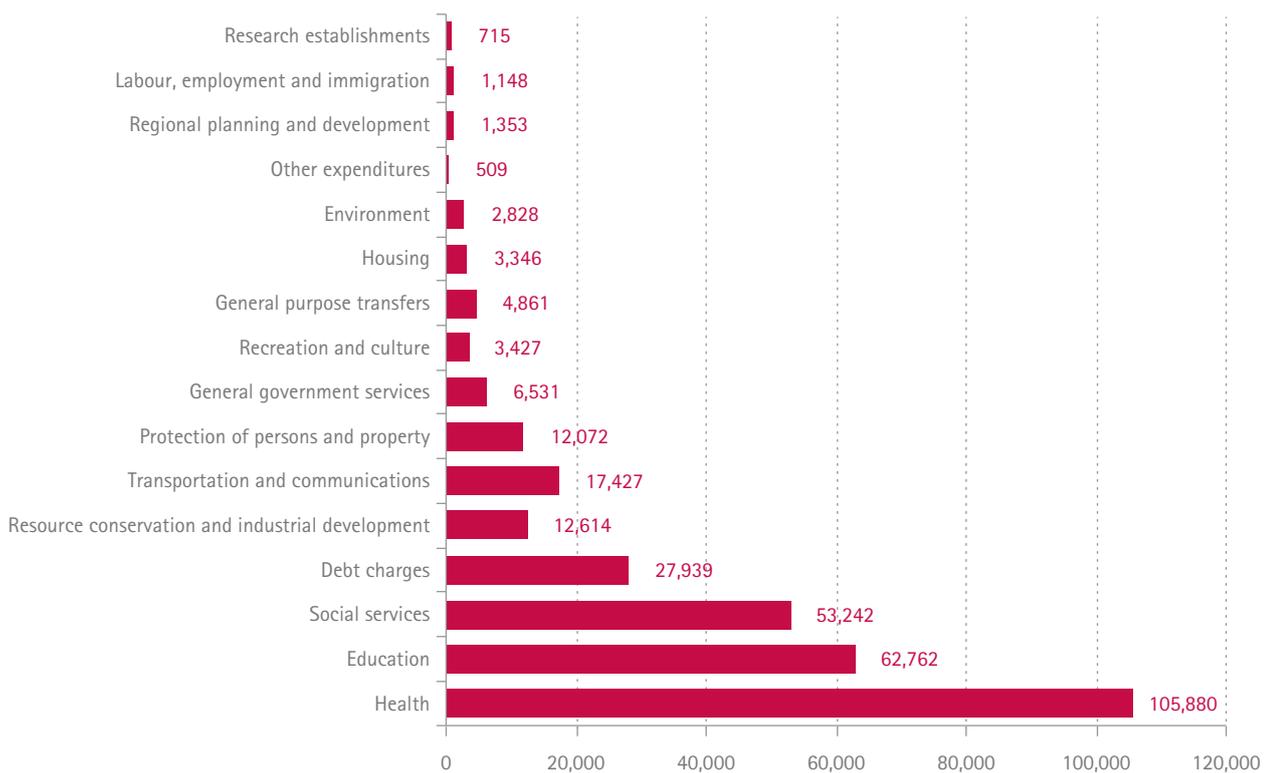
Canada is a decentralized federation—powers highly diffused, with provinces and territories controlling primary areas of public policy and service delivery. The Canadian Federal government is responsible for taxation, international/interprovincial trade and commerce, communications and transportation, banking and currency, foreign affairs, defense, criminal law, First Nations as well as unemployment insurance and old-age pensions.

Canadian provincial and territorial governments provide key services including health, education, welfare, transportation and administration of justice. The provincial governments provide almost two-thirds of the services of the government sector in Canada and administer hundreds of billions of dollars annually. In 2009, revenue for all provincial and territorial governments totaled approximately Canadian \$308 billion, while provincial/territorial

governments spent approximately C\$316 billion (Statistics Canada, 2010). By 2025, the total costs to fund Canada's public services at the federal, provincial, territorial and local levels are projected to grow to more than C\$745 billion<sup>1</sup>.

Figure 3. Canada's public service spends

More than \$316 billion was spent by governments in 2009



Source: Statistics Canada, 2010

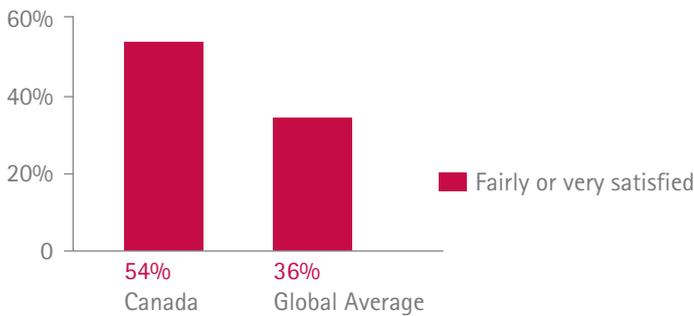
With its relatively robust economy (an anticipated surplus of C\$3.7 billion starting April 2015) and well-developed ICT infrastructure, Canada has already made significant investments in digital government to improve citizen satisfaction and public-sector efficiencies. The country is well positioned to improve performance through the continued deployment of citizen-centric services.

For years, Canada has been recognized as a global leader in public service delivery. The country ranks high in various e-government global ratings and Canadians continue to express higher than average satisfaction with public services.<sup>2</sup>

<sup>1</sup> Oxford Economics modeling through to 2025. Public services expenditure is defined as total government spending at the federal, provincial, territorial and local levels less debt interest payments and unemployment-related benefits

<sup>2</sup> *Delivering Public Service for the Future: Canada Government Profile*. Accenture 2012

Figure 4. Customer satisfaction: Where Canada stands



Source: Accenture's research—Achieving digital excellence in public service

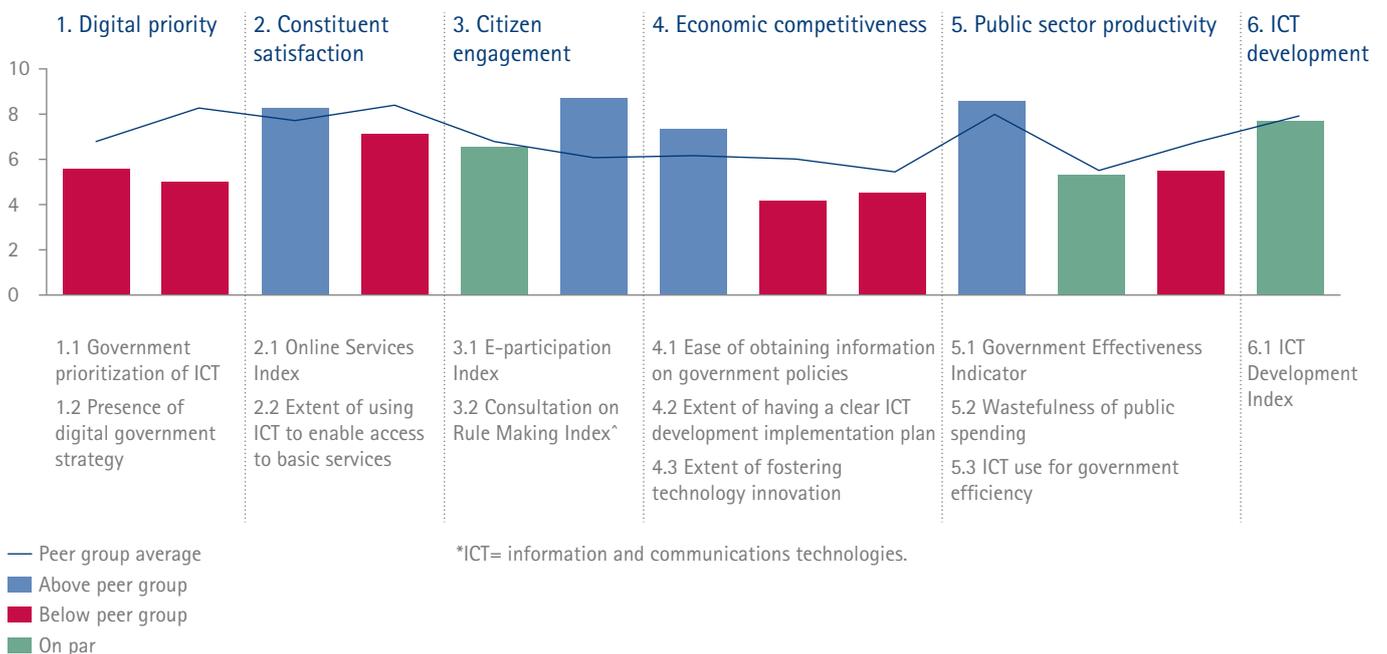
The numbers are a percentage of respondents who said they were "very satisfied" or "fairly satisfied" with the government's online services.

## Government On-Line

- In 1999, the Government of Canada announced its plan to become "known around the world as the government most connected to its citizens" with the release of its Government On-Line (GOL) initiative.
- This government-wide initiative, led by Public Works and Government Services Canada (PWGSC), had many successes, and generated a common look and feel for all government websites and online availability of the 130 most commonly used services.
- It resulted in significant cost savings. While an in-person transaction costs on average C\$30 per person and C\$10 via telephone, it costs C\$1 or less per interaction via the Internet. And, as the federal government conducts about 400 million transactions each year, the savings add up.

Canada is reasonably digitally mature in terms of citizens' access to and use of ICT, and the availability of the latest technologies and digital content. The country is ranked above its peer group in the provision of online services, consultation on rule making and ease of obtaining government information.

Figure 5. Digital maturity focus areas: Where Canada stands



Source: Accenture's research—Achieving digital excellence in public service

The Canadian public sector has been relatively successful at digitizing processes—applying technology to existing business processes and workflows to yield efficiency savings and cost reductions—and has a strong citizen focus across many areas of government service delivery.

Canadians show eagerness for more digital services. In a survey by Ipsos MORI, nearly seven out of 10 (69 percent) Canadian respondents say that it is important for the government to provide more services through digital channels in the future and 58 percent would prefer to have a single website to deal with the government.<sup>3</sup>

Over the last decade or so (particularly since the economic downturn following the 2008 financial crisis), program reviews in government have emphasized across-the-board budget cuts, shifting capital expenditure to private sector “partners” and postponing major infrastructure expenditure.

Yet, this has created a downward spiral where little or no investment leads to higher long-term operating and maintenance costs associated with legacy systems that are subject to further cuts. In this environment, innovation is stymied entirely or the purview of isolated departments and a large proportion of the available budget is expended on “keeping the lights on” as the risk of critical failure increases.

With a rise in costs to fund Canada's public services, the gap between citizen expectations for public services and the government's ability to meet these expectations is also widening. Oxford Economics shows that meeting future demand for public services in Canada across the three levels of government will cost an additional C\$93 billion (US\$90 billion) in 2025. This gap is among the highest out of the 10 countries Oxford Economics analyzed. To close the gap, Canadian public services will need to realize 0.9 percent annual efficiency gains. Yet, public service expenditure is already outstripping revenue, and many of the “low hanging fruit” related to program efficiencies have already been gathered.

**Canada's public sector is subject to the key pressures of: tailoring traditional service models more closely around the citizen, achieving significant cost savings and improving efficiency while contributing to innovation and economic growth.<sup>4</sup>**

**Embracing a digital strategy is essential to future public-sector productivity and progress. Business and IT must be aligned to the digital technologies and processes to drive value: in the personalization of services to meet citizen demands, in the improved use of data to provide insights and to drive informed decision making, and in the collaborative orchestration of the delivery of public service.**

<sup>3</sup> *Delivering Public Service for the Future: Canada Government Profile*, Accenture 2013

<sup>4</sup> *Best of All Worlds: How hybrid models of public-service delivery can improve citizen outcomes and stimulate growth*. Accenture 2013

# The Drive to Digital

## Personalization of Services to Meet Citizen Demands

Canadian citizens are demanding more tailored and cost-effective services, focused on them rather than on a process or government department. They want government services to be delivered the way other services such as online banking and online retail are delivered—where the consumer is the focus.

In Canada, consolidated service delivery entities have been created in a number of provinces and the federal government to provide in-person, phone and online services that are more personalized, citizen-focused, accessible and convenient. Most offer an array of services such as driver and vehicle licensing, birth and death registration, and outdoors licensing and permits through a single customer interface such as Service Alberta or Service Canada.

By bundling services across federal, provincial and local governments, registration and application processes for citizens have been simplified and streamlined. For example, many provinces allow parents to complete birth registration and consent to their child's birth information being shared with other government departments through a bundled process to access multiple programs including social insurance, child benefits and provincial medical cards as well as registration for savings plans, learning bonds and education grants.<sup>5</sup>

In Canada, organizations such as the Institute for Citizen-Centred Service support the public sector in achieving high levels of citizen satisfaction through interjurisdictional collaboration, sharing

research, tools, resources and knowledge, and building organizational capacity through the development of the service profession. This allows advances and best practices in one jurisdiction to be leveraged across many.

Some governments and public-sector entities in Canada have started to consolidate government websites, making it easier for citizens to navigate to the relevant information or services without understanding the organizational hierarchy and the role of each department. This has ushered in changes to existing operating models, with a new reliance on open-source software and changes to procurement directives to accommodate the provisioning of software at no cost.

Citizens are responding well to these initiatives and show willingness to undertake government transactions online. Service Canada provides a single point of access for a range of government services including Employment Insurance (EI), Canada Pension Plan (CPP) and Old Age Security (OAS) transactional services. The Service Canada homepage had more than 1.9 million monthly logins in 2011–12, peaking at 3.6 million during the tax season as citizens filed their taxes online.

Since it began operations in 2005, Service Canada has achieved cumulative net savings of C\$38 million, and plans are in place to further consolidate and enhance online transactional services—expanding program agnostic, transactional, secure online services to citizens—enabling greater levels of self-service.

After the special payments task force recommended in 2011 that Canada should move into the digital age, governments in British Columbia and the federal government started using brokerage services for digital identity verification: allowing citizens to present online banking credentials (B.C.) to access government services and information.

In February 2013, the B.C. Services Card was introduced to replace the old Health Services CareCard. It can be combined with the B.C. driver's license into one card. The card serves as a government-issued photo ID. It also includes a contactless chip and passcode system, serving as a person's authentication credential when accessing digital services.

Progressive public service entities recognize that citizen convenience and personalization of services can be catalyzed by applying digital technologies. A combination of mobility (any device, anytime, anywhere), social sentiment analysis and analytics can help tailor services to meet specific and unique individual citizen requirements. And, conversely, the public sector can utilize citizen data—from mobile devices and through sentiment analysis—to improve decision making and responsiveness, especially in the public health and disease management setting where point-of-care is often the first alert on public health problems.

<sup>5</sup> Newborn registration processes link to the Registered Education Savings Plan and other Government of Canada benefits such as the Canada Education Savings Grant and the Canada Learning Bond.

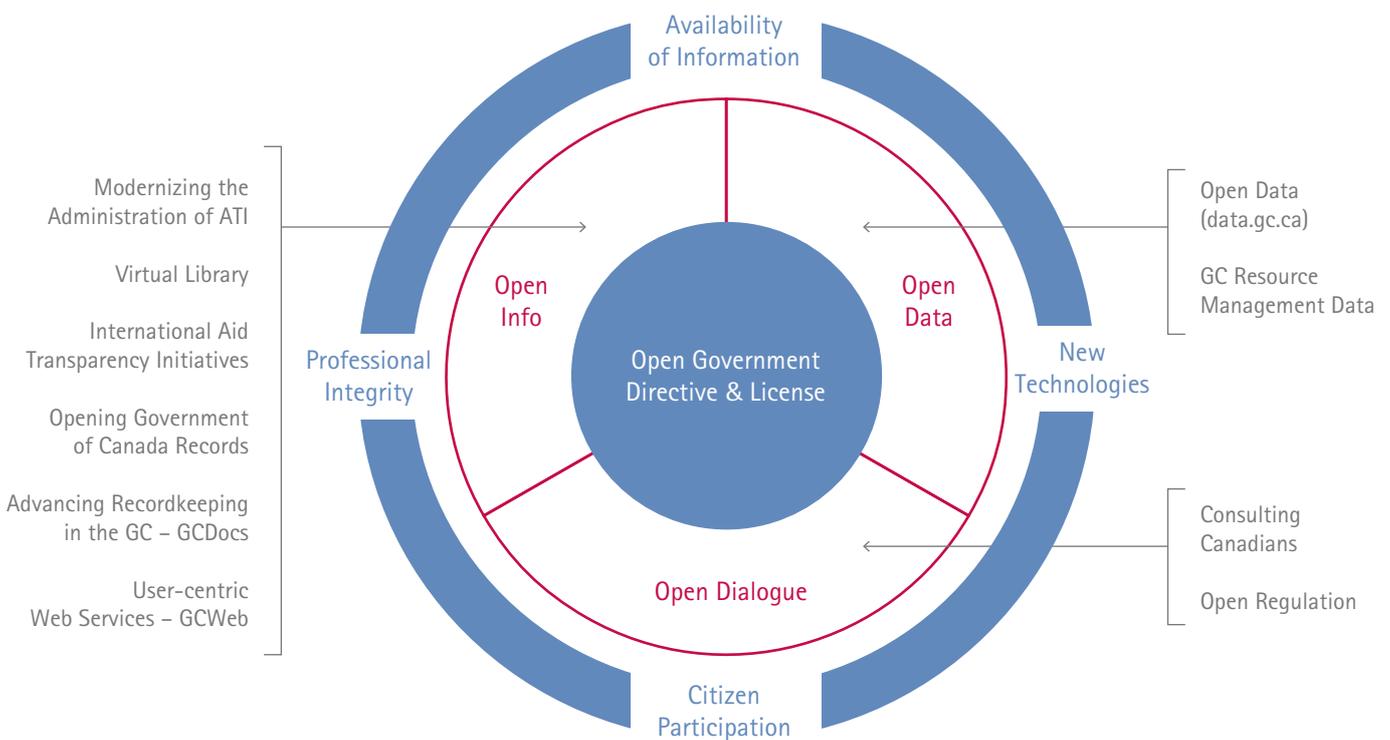
# Improved Use of Data to Provide Insights and Drive Informed Decision Making

The volume of data generated in the public sector related to citizens and businesses is extremely large, often dispersed across a myriad of systems that do not easily communicate with each other and in formats that do not readily translate. Records are dynamic and varied, and include structured (codified), semistructured (vocabulary) and unstructured (imaging and notes) data, and citizens often feel that they do not have ready access to the information and data they need.

Governments are foraying into open data and attempting through approaches such as common licenses and consolidated inventories to allow citizens easy and seamless access to government data. Canada's commitment to open government is part of the federal government's efforts to foster greater openness and accountability to provide Canadians with more opportunities to learn about and participate in the government.

Figure 6: Organizing public data effectively

Mining data collected through public interface can help in decision making



Source: Canada's Action Plan on Open Government (<http://data.gc.ca/eng/canadas-action-plan-open-government>)

To effectively unleash the power of data to derive insights and generate improved decision making, a new set of skills and practices in analytics needs to be developed. Traditional analytics focuses on data collected directly by governments at the point of engagement (for example, information systems, electronic records, and forms and applications); however, this does not give a holistic view. Useful data can also be captured from social media (citizen portals, social networks and online support groups) and mobile apps and devices. When citizens share their ideas with the government through social media, a much richer source of insight can be derived.

The Ministry of Health and Long Term Care in Ontario has made significant investments in automating public health surveillance management—with public health units monitoring disease outbreaks such as seasonal influenza and sharing the results. Yet, an opportunity exists around early detection and assessment to better respond to and control outbreaks. Tapping into the “social pulse” on population health can provide greater awareness of activities and sentiment expressed through digital channels, which can then be confirmed with point-of-care data to compile a more accurate and real-time view on outbreaks.

Public health organizations can be much more responsive by locating the most complete source of Big Data: across semantic data (“what is the meaning of being sick”), sentiment data (“how am I feeling”) and mobility data (“how citizens are acting, where they are going and who they are in contact with”). They can use tools and methods to analyze such large and disparate data sets and glean correlation insights, which enable rapid detection and control of communicable diseases with faster identification of new threats to public health. Significant benefits are achievable in healthcare costs, care management, inventory management, immunization management and investigation and outbreak management, and importantly, more effective and complete surveillance analytics leads to reduced mortality and morbidity rates.

The obvious benefits of using analytics and Big Data to solve complex public problems must be carefully weighed with citizen expectations of privacy. The public sector needs to be aware of the role it plays as a data custodian, ensuring that personally identifiable data remains private and secure.

# Collaborative Orchestration of the Delivery of Public Service

The delivery of health, education and social services represents the largest portion of government spending (approximately 70 percent in 2009). These services are delivered and operated through a web of entities, in a highly fragmented and often duplicative way. The scale of overlap and the costs associated with it can be estimated by considering the sheer number of government entities involved in services delivery. For example, there are more than 1,000 broader public-sector entities in Ontario (agencies of government, school boards, hospitals, health units, children's aid societies, universities and colleges, among others). Add to that municipal counties, cities and towns, housing authorities and utilities and the number increases further. In healthcare alone, Ontario has 82 health agencies with health decisions diffused across this complex landscape.

This fragmented services delivery model generates inefficiencies and compounds the problem of the widening gap between the citizen expectations for public services and the government's ability to deliver. The public sector must consider how to better orchestrate the delivery of services. This orchestration will require innovative approaches to service delivery partnerships and new collaborative models that break vertical delivery silos and piece together the highly fragmented service delivery landscape, harnessing the power of all parts of the economy—public and private sectors—to drive better outcomes.

The integration of service delivery is already underway across the public sector in Canada. Shared service organizations have been created, consolidating service delivery and common functions previously distributed across ministries and departments. The consolidation of IT services in Ontario in the early 2000s saved C\$100 million per year; savings could be even greater if this were pushed out to the broader public sector.

Shared services for back-office functions (payroll, financial transactions, procurement, collections and insurance) and common administrative services (printing, mail, translations and asset management) generate cost savings and improve efficiency, and have been adopted, at least in part, with the creation of Shared Services Canada and provincial shared services organizations.

In February 2012, the Drummond Commission on the Reform of Ontario's Public Services exhorted Ontario to adopt a standardized procurement framework to enable the broader public sector to leverage its immense purchasing power through collaborative purchasing and to standardize products and processes. Such consolidation could reduce fragmentation, and eliminate unnecessary integration and support costs.

# Changing Business and Operating Models

The increased use of open-source software and the sourcing of software-as-a-service signal a change in how government uses IT to support the delivery of services. Traditionally, government IT departments used legacy methods of designing and building applications, employing waterfall, sequential development approaches, often taking years and large capital investments to implement. Increasingly, governments in Canada are exploring “everything-as-a-service” and piloting cloud-hosting services. Yet, concerns remain around data privacy, especially the sovereignty and residency of Canadian data.

In April 2012, the City of Edmonton became the first major Canadian municipality to use cloud-based e-mail—Google Apps. The city employees access their e-mails and other resources online, and collaborate across locations on any device. This has changed the operating model and supports the city’s vision, *The Way Ahead*, embracing digital technologies that allow employees to self-serve and self-support, while maintaining strong privacy and security standards. Employees who previously had no access to e-mail or productivity apps are now enabled through convenient and cost-effective means with more time to dedicate toward servicing the citizens of Edmonton.

Embracing digital means making fundamental changes to business and operating models: combining business and IT strategy development and leveraging technology as a disruptor; focusing on both efficiency (digitize) and revenue (digitalize); and emphasizing quick pilots that can catalyze adoption or allow for “fast failure.”

In all large entities, especially in the public sector, there is a prevailing perception that traditional large-scale, complex transformation projects experience issues with delivery timelines, budgeted cost and change enablement. Often, misaligned expectations between IT teams and program areas hinder the organization in achieving objectives and delivering business value.

By adopting an agile methodology to “adopt fast and iterate often,” public-sector organizations can successfully deliver greater transparency, flexibility and increased value over the traditional approaches. But this requires significant and sustained change and cultural shifts. Business organizations should prepare to become more intimately involved with IT in the introduction of new products and services, and IT should be closely aligned with business drivers and outcomes. Aligning the strategy and the operating model—so that it is intrinsically shared between business and IT—ensures that digital opportunities can be fully embraced and value can be realized in shorter time frames without sacrificing quality.

Adoption is the litmus test for success with any government endeavor. The high-performance government organizations that embrace digital technologies and take a “adopt fast and iterate often” approach will successfully confront adoption challenges and achieve results faster.

In many areas of the public sector, this will require a transformation in workforce skills and capabilities. With the publication of *Blueprint 2020: Building Tomorrow’s Public Service Together*, the Canadian government is embarking on broad consultations around how the public service can innovate, meet new standards of excellence and address the demands of the modern world. The report proposes key questions on where the public service should be by 2020 and solicits input on the necessary changes and best practices that should be adopted to get there.

Governments must demonstrate innovation, agility and productivity in improving services and delivering greater resource efficiency. This means that the public-sector workforce needs to adapt; exploring new ways to provide meaningful policy advice, effective program design and better services while upholding accountability, values and ethics. To fully embrace the potential of the digital business, the public sector must develop the competencies and leadership skills needed to harness talent and new ideas to meet the evolving needs of Canadians.

# The Way Forward

As our research globally suggests, digital government can help deliver four vital outcomes:

- Constituent satisfaction
- Citizen access and engagement
- Economic competitiveness
- Public-sector productivity

Using the impetus provided by the relatively high level of digital maturity, Canadian public-sector entities could benefit from redefining themselves as digital businesses, leveraging technology-enabled processes to drive long-term value.

Effectively melding IT and program areas, focusing on the citizen outcomes and strategically deploying digital services efficiencies will result in cost savings and improved service outcomes. The Digital Public Sector extends beyond the provision of e-services to bring far-reaching benefits to businesses, society and the economy as a whole, but challenges lie in redefining the business and operating models to reflect this new focus.

The public sector in Canada can move forward to develop a digital vision and improve digital maturity by investing judiciously in the right infrastructure and making commitments to innovate in tough times, as part of a long-term investment in public service for the future.

The Accenture framework offers a practical starting point to clarify Canada's current status and develop an objective benchmark for the future. Leveraging our experience and ongoing discussions, we look forward to taking public-service organizations ahead on their journey toward digital excellence.

Different countries may be at different stages of the digital maturity curve. For Canada, understanding its current position as an "enhancer," and continuing to improve its levels of digitization can realize significant returns.

The public-sector entities in Canada should collaborate to develop road maps setting out their vision. Priority should

be given to programs and activities that invest in the future, policy development should be more evidence based and data driven, and services delivery should be orchestrated across jurisdictions and leverage all areas of the economy.

Canada has a history of leadership in delivering public service and a strong global reputation for e-governance, but looming realities make it imperative for the country to continue to move forward. Improving citizen engagement and satisfaction, economic competitiveness and public-sector productivity will require strategic investments and a change in approach—pushing past choices that may be comfortable for the short term to establish stronger long-term solutions.

## Five Recommendations for Governments

### 1. Personalize services

By orienting services directly to citizens, transactions are streamlined, self-serve becomes a more cost-effective and viable service option, and direct and real-time feedback is obtained.

### 2. Use data to provide insights and make better decisions

Augmenting the power of analytics across broadly held data sources by adding "social listening" could help the public sector draw better insights and make more effective decisions.

### 3. Collaborate in the delivery of services

Building on existing shared services models that reduce costs, collaboration across multiple jurisdictions is possible. Extending this model into the whole economy and developing relationships with all delivery partners (including the private sector) enable the government to better focus on core policy and service delivery competencies.

### 4. Reinvent business and operating models

Public-sector organizations that move from IT-focused value to business benefits, adopt fast and iterate often, and are not afraid to fail early will be able to fully embrace new methods for project delivery and rethink capital investment planning to focus on innovation.

### 5. Develop value-drive strategy

Developing a digital strategy enables a long-term view. By mapping out a vision and a road map of tangible outcomes to get there, leading organizations will be able to keep pace and invest strategically.



## About Accenture

Accenture is a global management consulting, technology services and outsourcing company, with approximately 281,000 people serving clients in more than 120 countries. Combining unparalleled experience, comprehensive capabilities across all industries and business functions, and extensive research on the world's most successful companies, Accenture collaborates with clients to help them become high-performance businesses and governments. The company generated net revenues of US\$28.6 billion for the fiscal year ended Aug. 31, 2013. Its home page is [www.accenture.com](http://www.accenture.com).

## About the Author

**Samantha Liscio** is managing director for IT Strategy. Based in Toronto, Samantha leads the Health & Public Service, Enterprise Architecture and Application Strategy practice, and has more than 15 years of business consulting and IT strategy experience in the Canadian public sector. Prior to joining Accenture, Samantha was the corporate chief strategist with the government of Ontario.

E-mail: [samantha.liscio@accenture.com](mailto:samantha.liscio@accenture.com)