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Overview of the Government's Digital Service Transformation



OFFICE OF THE PARLIAMENTARY BUDGET OFFICER
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The Parliamentary Budget Officer (PBO) supports Parliament by providing economic and financial analysis for the purposes of raising the quality of parliamentary debate and promoting greater budget transparency and accountability.

This report is in response to a request by Senator Colin Deacon to estimate the financial cost of Motion No. 107 – That the Senate call on the Government of Canada to replace its outdated program delivery and information technology systems by urgently accelerating the implementation of user-friendly, digital solutions that transform the public service delivery experience of Canadians, and ultimately reduces the cost of program delivery.

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Highlights

This report is in response to a request by Senator Colin Deacon to estimate the financial cost of Motion No. 107 – That the Senate call on the Government of Canada to replace its outdated program delivery and information technology systems by urgently accelerating the implementation of user-friendly, digital solutions that transform the public service delivery experience of Canadians, and ultimately reduces the cost of program delivery.

Given the scope of the motion, the Parliamentary Budget Officer (PBO) has narrowed the focus of the report to highlight some of the key areas where the Government has made investments in digitizing services.

Summary

This report is in response to a request by Senator Colin Deacon to estimate the financial cost of Motion No. 107 – That the Senate call on the Government of Canada to replace its outdated program delivery and information technology systems by urgently accelerating the implementation of user-friendly, digital solutions that transform the public service delivery experience of Canadians, and ultimately reduces the cost of program delivery.

Given the scope of the motion, the Parliamentary Budget Officer (PBO) has narrowed the focus of the report to highlight some of the key areas where the Government has made investments in digitizing services.

Over the past number of years, the Government has taken steps to modernize and adapt services to make them more responsive and accessible to its citizens, with the goal of better serving its citizens. Some of the key services discussed in this report are:

- Canada Revenue Agency's My Account for individuals;
- Employment and Social Development Canada's My Service Canada Account; and,
- Immigration, Refugees and Citizenship Canada's Online Passport Renewal.

While the Government has made improvements, there is still inconsistency in the ease of access and use of services. There is also no centralized information on the total amounts that have been spent or saved on these initiatives, as the latter is generally not tracked.

This report outlines issues that parliamentarians may wish to consider to enhance fiscal oversight of the Government's digital service transformation spending plans and results.

Introduction

This report is in response to a request by Senator Colin Deacon to estimate the financial cost of Motion No. 107 – That the Senate call on the Government of Canada to replace its outdated program delivery and information technology systems by urgently accelerating the implementation of user-friendly, digital solutions that transform the public service delivery experience of Canadians, and ultimately reduces the cost of program delivery.¹

The initial objective for this report was to provide a government-wide perspective; however, there is no centralized information on the total amounts that have been spent or saved on all government initiatives.

The Parliamentary Budget Officer (PBO) has narrowed the focus of the report to highlight some of the key areas where the Government has made investments in digitizing services.

Therefore, PBO highlights a few key services in this report, which are:

- Canada Revenue Agency's My Account for individuals;
- Employment and Social Development Canada's My Service Canada Account; and,
- Immigration, Refugees and Citizenship Canada's Online Passport Renewal.

With respect to the final part of the motion which speaks to cost reductions (or savings), there is very little information currently available as it is not universally tracked. Immigration, Refugees and Citizenship Canada (IRCC) did provide some savings estimates for its Online Passport Renewal program, but this was not the case for most other programs.

Current Landscape of Digital Government

The Government of Canada is responsible for providing many different services to millions of Canadians. There is an increasing expectation that these services, which range from filing taxes to accessing certain benefits, will be easy to access and use, and specifically that these services be available digitally. This was highlighted during the COVID-19 pandemic, when many people needed to access government services online.

Over the past number of years, the Government has taken steps to modernize and adapt services to make them more responsive and accessible to its citizens, with the goal of better serving its citizens. Some notable changes include:

- The creation of Shared Services Canada, which “delivers digital services to Government of Canada organizations”²;
- The establishment of new senior leadership positions overseeing government-wide digital transformation efforts and programs;
- The implementation of digital identity pilot programs with Alberta and British Columbia so that individuals and businesses can sign in once to securely access Government of Canada online services; and,
- The launch of GC Notify, a platform tool that provides any Government of Canada department with the ability to send email or text notifications to staff and members of the public.

The Government has also indicated that digital government is a key area of focus for improvement.³ In 2017, the Government established the Canadian Digital Service, which works with departments to improve how they deliver their services digitally.⁴ The Government has also dedicated its attention to modernize key services on legacy systems, such as Old Age Security and

Employment Insurance benefits, the immigration and border case management system, and implementing the Next Generation HR and Pay initiative for federal public servants. A new role of Minister of Citizens' Services was also created in July 2023 changes to the Ministry.⁵

The President of the Treasury Board's 2021 mandate letter states that one of her priorities is to "lead our Government's work to advance digital government to better serve Canadians".⁶ In June 2022, the Prime Minister also announced the establishment of a new task force, comprised of Cabinet ministers, with the goal to improve government services for Canadians.⁷

The Government has also published its [Data Strategy for the Federal Public Service](#) and [Canada's Digital Ambition](#), which builds on the ideas set out in the [2022 Digital Ambition](#), the [2022-23 Year in Review](#), and [Canada's Digital Government Strategy](#). The Digital Ambition highlights four key themes, which are:

1. **Excellence in technology and operations:** maximize effectiveness and value assurance 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; and,
4. **Structural evolution in funding, talent and culture:** advocate for changes to policy and governance that prioritize and unlock the full value of digital investment.

While the Government has made improvements, there is still inconsistency in the ease of access and use of services. As highlighted in Canada's Digital Government Strategy, some services "still involve paper-based processes or the lack of clear online information resulting in clients moving to the phone

or in-person service channels. Others are using complex PDF forms for simple procedures, such as informing the government of a change of address or marital status.”⁸

Based on data from the GC Service Inventory, which contains service data from 72 departments and agencies, only 23% of these federal government services in 2020-21 were available online from end-to-end (319 of 1,375 services). However, the majority (81%) of applications for these services were completed online.⁹

From a financial perspective, while the Digital Government Strategy and Digital Ambition documents provide a government-wide list of priorities and achievements, there is no centralized information on the total amounts that have been spent or saved on these initiatives.

From a cost perspective, most organizations are able to estimate and track the technical costs; however, the costs associated with business transformation and reengineering of processes is much more challenging. From a savings perspective, there is very little information currently available as it is not universally tracked.

Globally, Canada has some unique challenges in its digital transformation. It is a geographically diverse and large country with two official languages and different levels of government which are responsible for different services. In the OECD's 2019 Digital Government Index, Canada ranked 6th out of 33 countries on the maturity level of digital government strategies.¹⁰ However, in the United Nations E-Government Survey 2022, Canada ranked 32nd, which has followed a trend of decline over the past twelve years, falling from a 3rd place ranking in 2010.¹¹

Examples of Organizations Implementing Digital Services

Canada Revenue Agency

The Canada Revenue Agency (CRA) is responsible for administering tax laws for the Government of Canada and most provinces and territories, as well as various social and economic benefit and incentive programs.¹² As highlighted in their 2023-24 Departmental Plan, CRA's strategic priorities include delivering "seamless client experiences and tailored interactions that are digital first".¹³

CRA has implemented many different initiatives which have e-service components, such as filing tax returns for individuals or businesses, receiving email notifications, and submitting documents. CRA is also continuing to invest in expanding its digital services, such as the e-Payroll project, which was announced in Budget 2021.¹⁴ As these services become more digital, the importance of strengthening security to protect Canadians' private information is critical, and it is one of the strategic priorities outlined in the Agency's Departmental Plan.

One of the key digital services provided by CRA is its My Account, which is a secure portal that allows individuals to view their personal income tax and benefit information and manage their taxes online. As highlighted on CRA's website, My Account can provide information to an individual before they receive an official document from the CRA, such as when CRA reassesses a return. The most up-to-date information regarding the reassessment will be displayed immediately in the individual's My Account, while the notice goes through additional manual processes before it is received by mail.¹⁵

As part of this analysis, PBO sent CRA an information request (IR0690) seeking information on the cost to implement CRA's e-services, including any ongoing costs and savings realized from implementing these services, as well as the costs and savings from integrating other partners.¹⁶ CRA completed this request and provided PBO with the information for which data was available. However, they indicated that it could not be publicly disclosed, and therefore, PBO is unable to highlight this information in this report.

Employment and Social Development Canada (ESDC) was sent a very similar information request (IR0691), and in their response, they indicated that the information can be publicly disclosed.¹⁷ Based on the information provided by both departments, it is unclear to PBO why CRA refused to publicly disclose the information and no rationale was provided in their response. ESDC's information is included in the following section.

Employment and Social Development Canada

Employment and Social Development Canada (ESDC) is the largest federal service delivery organization in Canada and is responsible for delivering key programs and services to Canadians, such as Employment Insurance (EI), Canada Pension Plan (CPP), and Old Age Security (OAS). Given the size and importance of these programs, it is essential that ESDC continues to ensure that they are delivered on a timely, accessible, and high-quality basis. This includes investing in technology as Canadians' expectations to access these services through digital means continues to grow.

As mentioned in their 2023-24 Departmental Plan, improving digital services is a key area of focus for ESDC.¹⁸ This includes:

- Modernizing Information Technology (IT) and addressing technical debt.
 - ESDC is the lead organization on the Benefits Delivering Modernization Programme, which looks to improve how it

will deliver these key programs. OAS will be the first benefit to migrate to this new platform, with the remaining programs to be rolled out at a later date. The estimated budget for this project, as of December 2020, was \$2.2 billion.¹⁹

- ESDC is also looking to continue to expand the Digital Identity Projects. This will be discussed further in a later section of the report.
- Improving the client service experience and outcomes, supported by increasingly seamless digital services.
 - This includes the continued review and improvement to the My Service Canada Account (MSCA).

The MSCA is a secure online portal which allows Canadians to view and update their information online for EI, CPP and OAS. This system was initially implemented in 2005, and as part of ESDC's response to PBO's information request, they indicated that they do not have information on the initial costs and savings realized from implementing the service digitally.

ESDC has indicated that enhancements costs for MSCA amount to \$9.1 million, with additional annual ongoing maintenance costs of \$3.3 million for salary and technical costs. Additional one-time costs of \$0.7 million and \$6.5 million ongoing are needed for implementing identity and access management measures to protect the personal information and privacy of MSCA users.

ESDC has indicated that the purpose of MSCA was to improve the quality-of-service delivery to Canadians by offering access digitally. Their considerations did not include potential cost savings, and therefore they do not track this information and are unable to provide it.

Integration Between Platforms

Both CRA and ESDC have highlighted the need to provide better and more seamless client experiences through their digital services. As part of this goal, the federal government created a link between CRA's My Account for individuals and ESDC's My Service Canada Account. This allows for a single sign-in and is based on a "tell us once" principle.²⁰ For example, if an individual is registered with CRA's My Account, they can securely access MSCA without having to log in or register again with MSCA.

In addition to being able to connect between CRA's My Account and ESDC's My Service Canada Account, the federal government also partnered with certain financial institutions (Sign-In Partners) and some provinces to access Government of Canada services. The purpose of offering different choices of login credentials, according to the Government, is to make its online services "more convenient for clients to access" and having "one less username and password for clients to remember".²¹

Sign-In Partners are a group of private financial institutions which have partnered with SecureKey Technologies which enables customers to use their online banking credentials to access Government of Canada services.²² The log in process and security requirements for Sign-In Partners are the same as the Government account login.

The federal government has also partnered with the provinces of British Columbia and Alberta to leverage their provincial digital credentials to access Government of Canada services. The province of Quebec is currently in the process of being integrated, with the expectation that other provincial partners will be added in the future.

The use of digital credentials, which are essentially electronic equivalents of physical documents such as a driver's licence or health card, to prove identity is something the Government of Canada has indicated as a key area of focus. It is highlighted in both the President of the Treasury Board's

mandate letter and Canada's Digital Ambition, with the latter specifically mentioning the integration with provincial and territorial partners to further enhance the work already underway.

The use of digital credentials, or digital IDs, to access government services has also gained traction in other countries. One example is Ukraine and its Diia ecosystem, which is further described below.

The Government of Ukraine's eServices

A Political and Legal Framework to Support Digital Transformation

In 2019, the Government of Ukraine identified the digitalization of public services as a fundamental priority. A new Ministry of Digital Transformation, led by the Deputy Prime Minister of Ukraine, was established. Additionally, Chief Digital Transformation Officer positions, equivalent to the Deputy Minister level in Canada, were created in each Government Ministry to steer the digitalization process.²³ Ukraine also passed a law, which made it illegal for any organization or business to refuse to accept digital documents.²⁴

By early 2020, the Government of Ukraine had successfully developed and launched a web portal and mobile application that allow its citizens to access digital documents and government services. Used by around 19 million citizens, the mobile application called Diia, which translates to 'Action' in English, has simplified many public services and digitized numerous documents, allowing users to do everything from paying their taxes and applying for social benefits to registering a vehicle.²⁵

Immigration, Refugees and Citizenship Canada

PBO also sent an information request (IR0693) to the Department of Immigration, Refugees and Citizenship Canada (IRCC), which is currently in the process of implementing an online passport renewal service.²⁶ Phase 1 of the project, which is planned to start in Fall 2023, will allow a select number of Canadians to renew their passport online.²⁷ IRCC estimates that Phase 1 costs will be \$46.1 million, which is incremental to the \$4.8 million spent by IRCC in its pilot project.

IRCC projects that 3.8 million eligible Canadians (simplified adult renewal applicants) will renew their passport using the online service over the next five fiscal years, with 600 thousand renewals in the first fiscal year (2023-24). This represents only a portion of projected overall passport renewals that is expected to total 4.6 to 5.3 million in 2023-24.

The department has indicated that they do not yet have valid metrics on the cost to process a passport renewal online, given that the program is still being implemented. However, based on the pilot program, IRCC estimates that the online renewal could reduce the unit level of effort, for the department, for 5- and 10-year passport renewals by 1% to 5%. This would be approximately between \$1 and \$5 reduced per passport based on pre-pandemic unit costs (2017 to 2019).

There is a considerable level of uncertainty on these potential cost savings and efficiencies as they will be dependent on whether overall costs of the Passport Program return to pre-pandemic levels and if the efficiencies lead to processing more passports.

Key Considerations

Fiscal Transparency

Budget 2021 provided over \$1 billion in funding over seven years for digital service transformation initiatives, including the modernization of legacy IT systems and the repair and replacement of critical IT infrastructure. This amount included a total of \$648 million for Employment and Social Development Canada (ESDC) and the Treasury Board of Canada Secretariat (TBS) to invest in Service Canada's IT systems and related activities, and support service delivery to Canadians generally.²⁸

While this incremental funding addresses a few of the priorities listed on Canada's Digital Government Strategy Roadmap, it is unclear whether sufficient funding has been set aside in the federal fiscal framework to address most of the initiatives identified to advance the digitization of public services. It is possible that some of this funding may be used to maintain existing systems rather than to expand the digitization of government services.

Parliamentarians may wish to seek additional information regarding the Government's medium- and long-term financial plans to support digital service transformation initiatives as well as ongoing IT repair and maintenance costs.²⁹

Legislative Framework

Internationally, other governments have identified existing legislation as a potential obstacle to digital service delivery.³⁰

In Budget 2022, the Government confirmed its intent to "introduce legislative amendments to the *Financial Administration Act* to enable the Canadian Digital Service to provide its digital platform services more

broadly, including to other jurisdictions in Canada, and to clarify its responsibilities under the *Privacy Act* and *Access to Information Act* with respect to the services it provides.”³¹ The Government instead made regulatory changes to the *Financial Administration Act* in a December 2022 Order in Council.³²

Parliamentarians and legislators may wish to examine existing legislation to identify and address other potential barriers to service digitalization, data protection, security and exchange.

Financial Reporting

While federal departments were able to provide some information on the costs to implement and maintain the Government's major existing digital services, like My Service Canada Account (MSCA), information on the savings realized from the implementation of these initiatives is not currently tracked.

Further, although The Digital Government Strategy and Digital Ambition documents provide a government-wide list of priorities and achievements, there is no centralized information on the total amounts that have been spent or saved on these initiatives.

From a cost perspective, most organizations are able to estimate and track the technical costs; however, the costs associated with business transformation and reengineering of processes is much more challenging. From a savings perspective, there is very little information currently available as it is not universally tracked.

Parliamentarians may wish to request that the Government increase transparency by providing comprehensive information on IT investment costs and savings to strengthen the assessment of spending performance and guide decision making.

Notes

- ¹ [Motion No. 107](#) by the Honourable Senator Deacon (Nova Scotia).
- ² [Shared Services Canada](#).
- ³ The following items are not meant to be viewed as an exhaustive list, but provide some examples of actions the Government has taken.
- ⁴ The Canadian Digital Service was previously part of the Treasury board of Canada Secretariat, but has recently moved to ESDC.
- ⁵ [Changes to the Ministry](#).
- ⁶ President of the Treasury Board [Mandate Letter](#).
- ⁷ [News Release: Prime Minister announces new task force to improve government services for Canadians](#).
- ⁸ [Canada's Digital Government Strategy](#).
- ⁹ [GC InfoBase](#). Accessed July 10, 2023.
- ¹⁰ [OECD Digital Government Index \(DGI\): 2019](#).
- ¹¹ [United Nations E-Government Surveys](#).
- ¹² [About the Canada Revenue Agency](#).
- ¹³ [CRA 2023-24 Departmental Plan](#).
- ¹⁴ [The ePayroll project](#).
- ¹⁵ [About My Account](#).
- ¹⁶ The entire information request ([IR0690](#)) can be found on PBO's website.

¹⁷ [IR0691](#).

¹⁸ [ESDC 2023-24 Departmental Plan](#).

¹⁹ 2021 Reports of the Auditor General of Canada to the Parliament of Canada: [Report 1—Procuring Complex Information Technology Solutions](#).

²⁰ [Link between My Account and My Service Canada Account](#).

²¹ [Frequently Asked Questions](#).

²² [Frequently Asked Questions](#).

²³ [2022 CASE STUDY REPORT—Diia Mobile Application \(final\)](#).

²⁴ [Ukraine law](#).

²⁵ CIOSC Special Members' Event: [CIOSC Special Members' Event](#).

²⁶ [IR0693](#).

²⁷ [IRCC response](#) to IR0693.

²⁸ [Canada's Digital Ambition 2022](#).

²⁹ [Roadmap for a more Digital Government](#).

³⁰ [New European Interoperability Framework](#).

³¹ [Budget 2022](#).

³² [*The Financial Administration Act*](#).

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