

E-Government: The Canadian Experience

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Abstract: The Canadian government was one of the first administrations to adapt to an online service delivery model and was distinguished early on as one of the most innovative in the development of its e-government tool. This article explores the Canadian government's experience with going online and utilizing an e-government tool to deliver government services. This paper will reflect on the birth and evolution of the e-government tool in the Canadian context and will also investigate the initial forecasts and promises made by the Government of Canada in terms of reducing costs of service delivery, increased accessibility for citizens, improved information retrieval, and security concerns of users, to determine what the Government of Canada's e-government initiative has accomplished.

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Introduction

The Internet has revolutionized the world we live in. It has altered how people search for information and the way information is being delivered. As people started to connect to the information highway, they wanted to be able to access more and more of the important resources required to conduct their business online. These desires were first answered by the private sector, as companies made more of their information and services available to the public through online websites (Roy, 2004; Accenture, 2005, 2006). As citizens around the world began to experiencing these new possibilities for easy and convenient information dissemination and retrieval, they began to expect their governments to provide similar information and services via the Internet (Roy, 2004).

The government of Canada expressed a goal of “becoming a model user of information technology and the Internet” (Government of Canada, 1999) for its citizens, and attempted to achieve this goal by making all governmental information and services available online. Thus, all Canadian citizens are provided convenient and secure access regardless of location or time (Privy Council Office, 1999). This paper will examine the goals set by the Canadian government for going online, and how these goals evolved over time. It will also evaluate the success thus far of the implementation of the online tool in terms of its ability to reduce costs (OECD, 2005; Roy, 2003; Accenture, 2002), simplify retrieval and provide accessibility to governmental information and services. In addition, citizen's concerns regarding the online government tool will be examined.

The Birth of e-Government in Canada

Canada's initial e-government initiative was born from the October 12th, 1999 Speech from the Throne in which the Government of Canada announced that Canada's “Information Infrastructure” (Privy Council Office, 1999) was a priority. The speech outlined the government's commitment to “improving Canada's information infrastructure [to] support the exchange of ideas and the conduct of business over computer networks, connect[ing] Canadians to the information highway, and accelerate[ing] the adoption of electronic commerce” (Privy Council Office, 1999).

In order to accomplish this commitment, the Government of Canada proposed to “make Canada a centre of excellence for electronic commerce and encourage its use throughout the economy, re-introduce legislation to protect personal and business information in the digital world and to recognize electronic signatures,” and to “become a model user of information technology and the Internet” (Privy Council Office, 1999). By 2004, the Canadian Government intended to be internationally recognized as the government most connected to its people, “with Canadians able to access all government information and services on-line at the time and place of their choosing” (Privy Council Office, 1999). From here the Government of Canada's Government Online initiative (GOL) was born, its activities coordinated by the Government's Chief Information Officer while centrally coordinated by the Treasury Board Secretariat (TBS) (Accenture, 2002).

e-Government Beginnings

In the preliminary stages of the government online initiative during the 1990's, government websites mainly “focused on the production and dissemination of information over the Internet resulting in a huge number of governmental websites with static information” (OECD, 2005, p. 11). In the 21st century, the face of e-government began to change along with technological advances allowing for a more e-commerce style of e-government (Roy, 2007), with interactions flowing from citizens to government and vice versa.

By 2001, a new Government of Canada website was launched with a new emphasis on creating a “one-stop shopping” environment for government information and services. The website was a single point of entry for citizens by providing access to 450 federal websites, along with email correspondence options (Accenture, 2002). In the following year Accenture (2002), a management consultant group, ranked Canada as an “Innovative Leader” in the realm of e-government and positioned at Canada number one in their evaluation of 23 countries from around the world, followed closely by Singapore and the United States. At this time Canada was recognized for its client focus, information clustering, and whole-of-government approach to e-government (Accenture, 2002). Canada also took steps to implement the “Secure Channel” which was set to “deliver the common infrastructure needed to assure secure, private and seamless transactions across government [being the] first of its kind to be built in the world” (Accenture, 2002, p. 45).

In the 2003 Annual Report from Accenture, Canada was again ranked number one in the e-government realm. Taking the lead in “Service Transformation” Canada's focus shifted to improved customer service delivery by using the “take-up” of client services as key measures of accomplishment, and adopting a multichannel integration for service delivery providing telephone, in-person, or mail options. The Government of Canada also began promoting a more horizontal approach across departments, with a common look and common technologies, such as the “Secure Channel” (Accenture, 2003). This new direction differed slightly from Canada's initial vision of total online government service provision and was not exactly what citizens wanted or required. During this time most Canadians believed that GOL would improve how citizens would receive government services, and that the GOL was a good investment of taxpayer dollars and would improve citizen interaction with their government (Accenture, 2003).

GOL originally expected to wrap up in 2004 but was extended to 2005 and became a “service vision to redesign services, service delivery and the public service itself to achieve dramatic improvements in client satisfaction, cost savings and efficiencies, policy outcomes and accountability, and transparency” (Accenture, 2005). According to Accenture (2005), Canada continued to lead the e-government movement as a “Trendsetter” and sustained high standards of customer-oriented service. 2005 marked the end of GOL with steps toward “truly client centric and whole-of-government approach[es], and to capture the full benefits and efficiency gains possible, Government On-Line has to be just one part of a larger, cohesive strategy for a knowledge-based economy and society” (Accenture, 2005). At this time cross jurisdictional partnerships were beginning to form multi-jurisdictional unions, as well as the formation of private, nongovernmental and volunteer organizational online partnerships (Accenture, 2005).

During the same year, Service Canada was introduced as another multi-use point of entry that citizens could use to access a wide range of government programs and services. This new “one-stop shop” consisted of more than 595 points of service located across the country in the

form of either call centers or online access points (Service Canada, 2008). In the beginning, the Service Canada online tool was mostly information based rather than an interactive tool, evolving much like earlier e-government instruments. It later incorporated more transactional options for clients such as online address changes, registration of businesses, government document purchases and income tax return capabilities (Roy, 2006). Even though Canada was still the international leader in e-government, it was noted for the first time that the service delivery being provided was not meeting citizens' expectations and more work would be needed for Canada to retain its leading position (Accenture, 2005).

In the years following, Canada fell behind in the rankings and Accenture noted repeatedly that government was not keeping up with citizen's expectations for service delivery (Accenture, 2006, 2007). The change in political leadership was seen as a major challenge for the evolution of e-government at this time (Accenture, 2007). Accenture (2006) stated that Canada now needed to gain its citizens' confidence in order to move forward.

Evaluating Canada's e-Governance Tool

Targets set by the Government of Canada for its e-government tool were expected to reduce costs, improve government information and service retrieval, make information and services more accessible (anytime, anywhere), in the manner users demanded them, in a secure fashion (PWGSC, 2007; OECD, 2005; Privy Council Office, 1999; Roy, 2006). The following discussion will explore how well the e-government tool is managing in these areas.

Reducing costs

The efforts made by the Canadian government to move online were expected to reduce costs. First and foremost, government online was expected to reduce the costs in the delivery of information and services to citizens. These savings were to originate from individuals switching from their usual service delivery channels to the new online option (OECD, 2005, Roy, 2006). This shift proved to be a challenge for the Canadian government, as with many other governments around the world (OECD, 2005). Roy (2006) confirms this challenge when he suggests that the Canadian government did not realize the expected cost savings because

many of the initial models put forth proved to be excessively optimistic due to inflated forecasting in terms of upfront investments, maintenance and transition costs, and demand for online services. (p. 9)

Another reason cost reductions were hard to realize was the constant evolution of e-government initiatives, which went from simply posting government information online, to the establishment of transactional e-government, and then later to the 2001 broadband access commitment and public sector reform initiatives. As well, Roy (2006) notes that in the evolution of Canada's e-government tool it was quickly realized that online uptake was over-estimated and that citizens preferred multi-channel service options that were available to them (p. 297).

This public preference meant that reduced transaction costs from using an online format rather than another more expensive service channel were not realized because the public demanded to have all of the channels available to them, not just one or the other. Therefore, there were several reasons why true overall cost reduction through the implementation of e-government was hard to realize for the Canadian government, which is accountable to its citizens for providing the services they require in the fashion they desire.

A reduction of time and energy costs was also expected to be seen by users. This cost savings would happen once clients adopted the online tool to conduct their governmental interactions, since they would no longer have to visit government offices or wait for postal deliveries to conduct transactions with the Canadian government. The online tool would allow them to access the same information and services they required from any place, at any time, saving them time and energy. A good example of this type of user time and energy savings would be passport applications; prior to the online application process citizens requiring a passport would have to acquire a paper application from a post office or Passport Canada, complete the required forms, contact the office for any inquiries either by telephone, in-person or by mail, then submit the application again in-person or by mail. All these steps added up to a huge amount of time and energy, and the client had not even yet received their passport. Cost savings could only be experienced by those individuals who had either access to the e-government tool or who felt confident and comfortable using the online tool (Statistics Canada, 2007).

Accessibility

With the diffusion of the Internet into Canadians homes steadily increasing in the 1990's, going from 16% in 1997 to 28.7% two years later (Statistics Canada, 2000), adopting e-government tools seemed like a natural move for the Government of Canada to provide government information and services to its citizens.

More recently, though, according to the 2005 Canadian Use Survey, Internet uptake in Canadian homes has only increased by 1%, from 60% in 2004 to 61% in 2005 (Statistics Canada, 2006). Although this household uptake of Internet use is higher than it is in other countries, such as in the United States where home Internet adoption was only 42% as of 2006 (PEW/Internet, 2006), home Internet use has still not totally penetrated the Canadian population, allowing for equal access to e-government for all citizens. If this trend continues and uptake of household broadband in Canada continues to grow at the same rate it grew from 2004 to 2005, equal access to government information and services for all citizens online will not be achieved until sometime around 2047.

Aside from the impressive initial uptake of home Internet use, another factor behind government going online was to allow citizens unlimited access to government information and services regardless of time or location (Privy Council Office, 1999). This goal for e-government

as quite idealistic. Access to online services at any time for all citizens has proved to be impossible at the present. Even the most recent statistics show that not all areas of Canada have access to broadband connection. For example, as of 2006 only 89% of Canada had broadband access (Canadian Chamber of Commerce, 2006) and of those communities with broadband access not all households are connected for financial or personal reasons, also making it difficult to accomplish the second criteria, access at any time. E-government being available at any time would only be obtainable to those who live in large urban centers with 24/7 private broadband provision and even though this access is available, for the most part, it is available only on a fee basis that some citizens may not be able or willing to pay for.

The Government of Canada has taken steps to address the issue of accessibility to e-government in two ways. First, it has developed Community Access Points (CAPs) throughout Canada. This initiative, started in 1995, was intended to provide affordable Internet access to all citizens in every province and territory (Industry Canada, 2008). As of the end of 2007 the Government of Canada had provided some 3800 CAP sites through Industry Canada's Regional and Rural Development Initiative from which citizens could access e-government services (Industry Canada, 2008). Secondly, the Canadian government committed "to work with the private sector to determine the best ways to make broadband Internet access available to all communities in Canada by the year 2004" (The Speech from the Throne, 2001, para. 33). Both of these initiatives provided some access to those citizens who would not have had access previously but still does not provide the 24/7 access to e-government set as a governmental goal in the 1999 Speech to the Throne. Today, Industry Canada continues in its commitment to "provide Canadians with affordable public access to the Internet and the skills they need to use it effectively" with both a youth initiative program and support for expanding the access points throughout the country (Industry Canada, 2008).

In reality, the initiatives taken by the government of Canada to resolve accessibility issues have not yet been successful. Internet and e-government access at any time, anywhere has not been fully achieved as hoped (The Canadian Chamber of Commerce, 2006).

Retrieval

One of the goals of the government online initiative was to make the retrieval of governmental resources more effective and efficient by allowing Canadians to retrieve the information they wanted, at their own convenience (Roy, 2006; Service Canada, 2008, Treasury Board Secretariat, 2005). The e-government initiative has been successful in achieving this goal. The Government of Canada has taken numerous steps to ensure that its public could access the governmental information and services it required online. Accenture (2002) identified Canada as a keen leader in the use of extensive client research which helped to ensure that innovations reflect user needs when creating the government online tool; numerous national and international stakeholder groups were consulted in the creation of the new 2001 Government of Canada web site alone.

For those citizens who access government information through the Internet, the use of information clusters made it much easier to locate the resources they needed, since similar information could be found in one place. Examples of this type of clustering are seen on the refurbished Government of Canada and the International / Non-Canadian web sites. The Government of Canada website, Canada.gc.ca, provides information clusters including subject areas such as Canadians, Canadian Business and Non-Canadians, the most popular link at that time being the Job Bank (Accenture, 2002). The Non-Canadian web site, created around the same time, canadainternational.gc.ca, offered information clusters as well, which divided information into four categories: Going to Canada, Doing Business with Canada, Canada and the World, and Arts and Culture (Accenture, 2002).

Another change that simplified online information retrieval was the streamlining of all federal department web sites. In 2002, the government of Canada made it mandatory for all departments to have a “common look” format (Accenture, 2003, Treasury Board Secretariat, 2004). This decision also made information retrieval more user friendly because once clients are familiar with one federal government web site, they can navigate through all federal government websites with much greater ease.

Not only has the Government of Canada held stakeholder meetings to consider the direction of their e-government tool but they have regularly conducted citizen surveys, such as the Citizen First and the Taking Care of Business surveys, to determine exactly what citizens want and need delivered to them, and in which format (Accenture, 2003). In contrast to initial government targets, these surveys showed that not all citizens wanted to use the online option. This finding shifted the focus from providing all government information and services online towards a multi-channel service option. While this did not improve e-government information retrieval it made acquiring government information and services much easier and more convenient for citizens.

Service Canada, another one-stop-shop for government services, was designed with information clusters, this time in life cycle clusters from birth to retirement with additional clusters for specialty groups. These clusters included persons with disabilities and aboriginal peoples (Service Canada, 2008). Service Canada's introduction of life cycle clusters improved the client's ability to retrieve online government information and services citizens required by organizing the information in a fashion that users could quickly and easily identify with.

Although the government has made great efforts to ensure e-government is an easy and straightforward tool to use and has retained its user focus since inception, these initiatives have not been enough for all citizens to feel comfortable with its use. This fact was identified by Accenture in 2006 when they stated that although Canada remains a leader in e-government, studies show that even the Government of Canada is having some issues with “converting high Internet penetration into real enthusiasm for the online channel” (Accenture, 2006, p. 35). In 2005, statistics showed that only 39.2% of Canadians were searching for

online government resources, and this rate increased by 13.3% in 2007 to 52.5%, just over half of the Canadian population (CANSIM, 2008).

During the same time period only 68% of Canadians found Canada's e-government tool easy or fairly easy to use and 30% still preferred the in-person option for service (Accenture, 2006). As well, 37.4% of Canadians reported that accessing government information and services online was still their most active use of e-government, with 32.7% of Canadians using e-government to download government forms, and only 18.5% submitting government forms online (CANSIM, 2008). Even though e-government use statistics have been steadily increasing over the years, the Government of Canada has more work ahead of it in order to entice citizens to use their e-government tool to interact with government in the future.

Security

With growing access and use of the Internet, there is a growing concern for the security of online transactions and the e-government tool (Roy, 2004, 2006). In the early years, when e-government was used as an information dissemination tool, the idea of user security was not a major concern since citizens were not conducting personal transactions over the Internet. It was only once e-government evolved into a more interactive tool that security of citizens' personal information became a looming issue (Roy, 2006). This shift to online resources coinciding with the 9/11 attack in 2001 on the World Trade Center in New York City increased the entire North American concern surrounding all types of security (Norris, 2007). To address citizens' concerns about e-government interactions, the Government of Canada developed the Secure Channel in 2002 (Accenture, 2003).

In creating the Secure Channel, Canada was once again considered an innovator. The Secure Channel was designed to “secure, private and high-speed access to all federal government's on-line services, and to provide an environment that enables and encourages departments to integrate with federated common services” (PWGSC, 2007, para. 1) and was

meant to assure citizens that their information and transactions with government [were] protected, to protect against network intrusions, to provide on-demand, broadband network services to departments and agencies and to provide identification and authentication of individuals and businesses with which government conducts business. (Accenture, 2003, p. 54).

The question remains today: has the Secure Channel been able to accomplish its goals in making Canadian citizens feel that their e-government tool is a secure online resource?

An Accenture (2005) citizen survey discovered that “on the whole, citizens are fairly comfortable with governments sharing a wide range of their personal information, if it would lead to better service for them” (p. 21). But in the same study Accenture found that 15% of Canadians remained pessimistic about using e-government while only 40% said they were

optimistic about using the online e-government tool (Accenture, 2005). Statistics Canada (2006) also reported on citizens' doubts about general Internet security and found that “three quarters of Canadians (both Internet users and non-users) expressed concerns about Internet privacy and security” (para. 33). But other than these basic statistics surrounding citizen e-government use and basic Internet privacy and security concerns, it is difficult to identify citizens' fears and concerns regarding the use of Canada's e-government tool. Almost the entire range of Canadian literature discussing government online security speaks solely to the government side of security and the challenges it face(d) rather than citizens' security concerns regarding the use of the e-government tool. This fact makes it difficult to understand how Canadians honestly feel regarding the security of their e-government tool. The lack of information also inhibits the drawing of any concrete relationships that might exist between the security concerns that citizens have about the e-government tool and the amount they are using it.

Falling Behind

Recently, Canada has fallen behind in the e-government race, taking second place to Singapore, its long time competition (Accenture, 2007). Two main reasons have caused this reversal. First, Canada has experienced a change in its governing party to a minority Conservative government, thus altering the Government of Canada's political priorities such as e-government. Second, Canada had been such innovative leader in e-government since the creation of the Canadian e-government tool in 2002 that Canada became its own competition. Growth and innovation in e-government become increasingly difficult to sustain with each consecutive year (Accenture, 2007, p. 88).

In 2008, the United Nations conducted its own international e-government survey titled From e-Government to Connected Governance which presented an “assessment of the new role of government(s) in enhancing public service delivery, while improving the efficiency and productivity of government processes and systems” (United Nations, 2008, p. xii). The survey assessed 192 member states on their e-government readiness, web measurement, and e-participation and determined that Canada had fallen behind countries like Sweden, Denmark and another close competitor since 2002, the United States of America, ranking an average score of 8.7 out of ten (United Nations, 2008).

Actions and Aspirations for the Future

In the future, the Canadian government could pursue several ways to put itself back in the lead of international e-government rankings:

- Maintain its citizen-centered focus (Accenture, 2006)
- Provide more integrated service delivery (Accenture, 2006; Roy, 2007)

- Establish greater trust with citizens (Accenture, 2006)
- Expand the whole-of government approach to e-government (Accenture, 2006)

These initiatives would surely re-establish Canada as an e-government leader on the international stage. Perhaps Canada should be satisfied with its previous successes and place more of its focus on equal access and getting more Canadians to use the e-government tool that is already in place before committing more money to further evolving the e-government strategy. According to the previously cited statistics for household Internet uptake (61%), e-government usage (52.2%), ease of navigation according to the user (68%), and the optimism of citizens towards the e-government tool (40%), the government is not making equal access to e-government and usage of the online tool a reality.

Why should these statistics be considered passing marks for our government? Why should citizens accept anything less than equality for all citizens? Why should the Government of Canada put more effort into being the international leader than being the leader here at home for its citizens? The answer to all three questions is that they should not. Low statistical percentages should not be considered acceptable rates for Internet uptake, usage, or user opinions of the e-government tool. Canadians should not settle for less than equality for all citizens nor should the Government of Canada be more interested in being a world leader in e-government than it is with delivering information and services to the Canadian public. The Government of Canada needs to refocus on the e-government tool to ensure that it realizes some of the initial goals for which it was created. This focus should include:

- Cost reductions in its provision of its services
- Accomplishing equal access to e-government for all citizens who wish to use it
- Improving information retrieval and existing security concerns of users rather than trying to be an international leader

Conclusions

For a long time Canada was the international leader of e-government through the constant evolution of its e-government tool, a superb modern citizen-centric, “one-stop,” integrated, multi-channel tool. In the years since its inception, the Government of Canada put a lot of hard work and dedication into e-government for its citizens so they could have access to government information and services when they wanted, from wherever they were. The reality is that the e-government tool has not been able to meet its initial goals.

Cost reductions for service delivery were not actualized as originally anticipated due to citizens not adopting the tool as quickly as estimated, and because of overzealous forecasting in terms of initial investment costs, and maintenance of the tool (Roy, 2006). Equal accessibility for all

citizens was also not accomplished even after the Government of Canada implemented the CAP Program and committed to making universal broadband a reality by 2004. These programs provided improved “any time any place” access but was not able to fully eliminate digital divide issues. With a switch to online availability, the retrieval of government information and services was supposed to become easier for citizens through the streamlining of access points into two main “one-stop” portals, the creation of information clusters and the implementation of mandatory common interface designs. These initiatives have made access for those citizens with the necessary computer skills a reality but for those citizens who lack computer literacy skills, these projects have provided little benefit. Lastly, with the creation of the Secure Channel the Government of Canada aimed at reducing citizens' skepticism over using the e-government tool. This tool, in place since 2002, has yet to eliminate the concerns of its users, with Accenture (2005) reporting that only 40% of Canadians felt optimistic about e-government.

According to the four criteria (cost reduction, accessibility, retrieval, and security), the Government of Canada, although it has made valiant strides to make e-government in Canada a universal reality, has not yet been able to achieve the full potential for online government. The entire Canadian population should have equal access to this tool, feel comfortable looking for and retrieving government resources online, and have confidence in the security and cost effectiveness of their e-government channel. Unfortunately this is not the case. It will be up to the Canadian government to ensure this becomes a reality for the future, long before 2047.

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