



### Canadian Digital Government

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## ABSTRACT

Using information technologies and the Internet to improve communication and service delivery are key processes of government modernization in North America, Europe and parts of Asia. In response to shifting political, economic and social demands, governments around the globe have designed online policy agendas. Canadian e-government is well established, currently providing secure access, electronic service delivery, and integrated information coordinated across government departments and agencies with evaluation conducted through standardized benchmarking tools. While state-sponsored online initiatives supplement internal and external communications among governments, decision-makers, interest groups, citizens, clients, partners, and sectors, these strategies also create political and administrative pressures to adapt to new democratic processes that promote legitimacy and accountability. However, this has not required a significant reorganization of the state, but rather a reevaluation of how services are best delivered to citizens and a shift toward using the Web to promote accountability and trust.

## INTRODUCTION

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Using information communication technologies (ICTs), the Internet, and the World Wide Web (Web) to improve communication and service delivery between government and citizens is a key aspect of modernization in North America, Europe and parts of Asia.<sup>1</sup> In response to shifting political, economic and social demands, governments around the globe have designed online policy agendas to integrate information among government agencies (Affisco and Soliman, 2006; Dunleavy, 2006). The ability to instantaneously connect citizens to the state via the Internet has generated a number of new programs that depend on ICTs to deliver services to citizens that modernize the public sector and improve democratic transparency, accountability and trust. This shift from bricks and mortar to networks and modems is accompanied by an implicit assumption that e-government possesses the potential to enhance democracy, revitalize civic engagement, and increase state legitimacy (Evans and Yen, 2006; McCullagh, 2003; Thomas and Streib, 2003; Torres, Pina and Acerete, 2006; Vedel, 2006).

Digital government is comprised of two related components: e-government and e-governance. E-government provides the institutional basis for policy-making on the Web and Internet, while e-governance refers to the public administration's management of information in online environments. The capacity for e-governance to effectively organize information online requires an institutionalized system of e-government and a well-coordinated implementation program. Even with an institutionalized structure, a state's commitment to online democratic forums and policy deliberations often lacks policy commitment and political will (Welch, 2005). E-democracy, which refers to how e-government and e-governance will enhance and/or depreciate democratic systems, is difficult to measure empirically; however, an emerging body of scholarly research suggests that digital government initiatives have the potential to enhance democracy (McCullagh, 2003; Vedel, 2006).

As an expansion of government, digital government does not reduce the significance of the public sector but enhances services and opportunities. There is a direct link between the Canadian digital government and the norms and practices of the Canadian system of government. ICTs provide a new communication medium, augmenting traditional political and policy-making settings. Digital government includes various aspects of e-government, e-governance and e-policy-making. E-government is traditionally defined as an internal reorganization process motivated to fully assimilate ICTs into the function of the state. Alternatively, e-governance is concerned with managing the transition to ICTs by providing strategies for using networked technologies to collaborate with various stakeholders. Finally, e-policy-making is a recent consequence of the intersection between online policy practitioners, digital government and informational governance practices on the Web. Policy-making on the Internet and the Web is by far the least studied of these digital government components.

The e-government policy agenda in Canada is well established, currently providing secure access, various types of online transactions (income tax services, applications for student loan, change-of-address forms, etc.), and public access to government information. Canada is recognized as having one of the most advanced systems of e-government in the world (Accenture, 2003; United Nations, 2005; West, 2005). The goal of the federal Government On-Line (GOL) project was to transform service delivery and institutionalize the "whole of government" approach. The transformation of service delivery refers to a policy agenda that intends to restructure government services and establish e-channel delivery mechanisms as the principal mode of communication between the state and citizens. The policy objective is to create a vertical, integrated, virtual governing system. The "whole of government" approach is "an umbrella term describing a group of responses to the problems of increased fragmentation

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of the public sector and public services and a wish to increase integration, coordination, and capacity” (Christensen and Laegreid, 2007: 1060). This approach seeks to integrate information and promote institutional coordination across departments, sectors and jurisdictions.

The aim of this paper is to provide a review of current digital government initiatives in Canada and stimulate discussion on the need to expand Canada’s e-democracy projects. The first section considers the institutional changes brought on by advances in technology and provides a contextual introduction to the components of digital government: e-government and e-governance. The latter sections of this paper assess each of the components individually, beginning with Canadian e-government policies designed to deliver services to Canadians and transform the “whole of government” approach. The second dimension of digital government is e-governance, which uses ICTs, the Internet and the Web as tools of governance. The concluding section addresses the Canadian experience with e-democracy initiatives, provides comparative examples and addresses the implementation challenges that exist. The goal of this discussion is to provide the reader with a summary of recent research on the Canadian government’s use of ICTs to increase transactional efficiency, access to information and the transparency of decision-making processes, and to support the aims of democratic participation.

## DIGITAL GOVERNMENT

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The Canadian government has sought greater institutional coordination, improved transactional efficiency, and expanded public access to government information using ICTs and Internet-based communication channels. Overarching federal e-policy goals are to facilitate the increased engagement of stakeholders in the policy process through a well-developed, multi-channel info-structure (GOL, 2002). Fully functional e-government requires coordination and collaboration across departments, sectors, jurisdictions and policy domains. It also necessitates changing relations and communication patterns between government and stakeholders. The eventual policy aim of digital government is horizontal, seamless government, accompanied by a technologically able bureaucracy, and a fully connected user-citizenry.

Digital government is an amalgam of processes, relationships, institutional structures, and technological applications; each element is driven by political priorities, administrative decisions and policy purposes. Built out of software and computer networks, digital government is a virtual institution that does not possess temporal or geographical boundaries. Politically, the ideal digital government supports democratic relationships premised on full access to information, increased public participation in the decision-making process, and advances in communication opportunities between users. The policy actions necessary to achieve these political aspirations include improved organization, access, privacy and security of information, the establishment of interagency networks across levels of government and among sectors, full provisioning of online services, and opportunity for interactive democracy.

E-government is the institutional dimension of digital government and operates as the electronic platform on which government activity is transposed. Many models of e-government implementation focus on technological solutions and policy implementation, and often use linear stages of development (Coursey, David and Norris, 2008). Gupta and Jana (2003) argue that e-government is “an evolutionary phenomenon, and therefore e-government initiatives should be accordingly derived and implemented” (373). ICTs are particularly important to

Canada's embrace of New Public Management, an administrative approach that assumes "public service management will be improved to the extent that it adopts private-sector management practices" (Aucion, 2002: 38). Through this approach, networked technologies are prescribed as remedies to existing policy problems and public sector reforms, often focusing on marketing solutions and business-driven models of design (Accenture, 2003; Grant and Chau, 2005; Keng and Long, 2005). This focus produces e-government models that apply networked technologies to support the internal reorganization of service delivery and information management, with little concern for expanding democratic opportunities or ameliorating the digital divide.

For example, the Layne and Lee (2001) model, often cited in related literature, identifies four key stages of government evolution: cataloguing, transacting, vertical integration, and horizontal integration. The operational measurements used to determine the maturity of a nation's e-government portfolio are limited to integration (departmental coordination with a range from sparse to complete) and complexity (technological and organizational interdependencies ranging from simple to multi-faceted). The first stage of developing a functional e-government is cataloguing, which is characterized by low-level technological and organizational complexity, with limited integration. The primary objectives in this initial stage are Web-development and online cataloguing of government information. The second stage of maturity is concerned with service delivery and the establishment of government as "active responder" to clients' needs and citizens' requests for information (128). Internal organization of the state is restructured as necessary, with governments now requiring both intranet and Internet capabilities. The third stage of e-government development is vertical integration in which Internet-mediated technologies connect local, regional, and national levels of government. Complexity during this stage mushrooms rapidly, as various levels of government coordinate activities and services across jurisdictional boundaries, and user-citizens access the state through a single portal, the Internet. The final stage of e-government is horizontal integration in which "databases across different functional areas will communicate with each other and ideally share information, so that information obtained by one agency will propagate through out all government functions" (132).

Scholarly analysis of digital government advances two major propositions. First, it suggests that ICTs could open up democratic practices, which will increase civic participation, expand parameters of citizenship, and establish an open, participatory policy environment and a model of decision-making premised on process management (Hacker and Jan van Dijk, 2000). The implicit assumption associated with this supposition suggests that ICTs, through their potential as a social technology, will alter participation patterns and the parameters of decision-making. The second proposition associated with digital government contends that communication technologies will alter the structural and institutional arrangements of the polity, and optimize citizen-centered services and administrative capacities. The primary assumption associated with e-government is that the employment of functional technologies will encourage Internet use and various online opportunities, which will serve to democratize institutional and organizational structures that regulate the relations of the state (Allen et al., 2001; Marche and McNiven, 2003; Mattila, 2003).

From a practical perspective, ICTs represent human advancement. They are instruments of modern life and functional technologies. However, the capacity of ICTs to accommodate communication among people, institutions, and power-brokers suggests that these technologies have also altered patterns of social interaction (Snyder, 2005). ICTs are not only tools of human operation, their use and application is also a method of organizing human activity and exchanging ideas, suggesting that ICTs are also a social technology. The use of ICTs as both a

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functional technology directing structural features of the state and as a social technology guiding human interaction and exchange has had a significant effect on processes of organizational learning, community participation and political deliberation, often challenging traditional views of individual information processing (Zuurmond, 2005).

As shown above, the state does not use ICTs to promote new forms of political participation and deliberative democracy; rather, it adopts these technologies to support existing relationships. As a result, these models miss important political considerations including the state's responsibilities in increasing the accessibility of the Internet for all Canadians and providing opportunities for citizens to participate in the policy-making process. As Andersen and Henriksen (2006) suggest, the Layne and Lee model has "done little more than replicate the stage model from the e-commerce area focusing more on technological capacity, than on case handling and effectiveness in the public administration" (241). E-government applications, such as developing a Web presence, do not necessarily require changes to administrative culture "because they do not entail substantial changes in the style of the government-to-citizen (G2C) relationship" (Torres, Pina, and Acerete, 2006: 296). Both generic models of e-government implementation and a tendency to promote business applications for public sector services fail to incorporate the complexity of the state's response to social and economic influences, the cultural implications of information, the participants involved in e-government activity, the management of e-government processes, and the nature of information (Andersen and Henriksen, 2006; Jaeger, 2005).<sup>2</sup>

E-democracy pilot projects, often initiated by the state, have produced positive outcomes including increased participation from local communities and collaboration across private, public and nonprofit sectors. These projects, however, tend to focus on a narrow audience of specific stakeholders engaged in local decision-making, as opposed to e-government that supports large-scale changes to representative democracy (Evans and Yen, 2006; Stefanick and LeSage, 2005). The political will necessary to achieve an information infrastructure that enhances democracy and decentralizes decision-making processes requires significantly reformed public management tools, intensified interagency integration and a renewal of state relationships. While both federal and provincial governments have clear mandates to use ICTs to deliver public services, optimize organizational capacity and expand inter-jurisdictional collaborations, substantive commitments to democratizing the policy process are largely absent.

## CANADIAN E-GOVERNMENT

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The federal government has emerged as the digital government policy leader in Canada, establishing an extensive information infrastructure by organizing various integrated service delivery projects across jurisdictions to provide comprehensive information online. The Canadian Government On-Line (GOL) agenda seeks to provide Canadians with front-end seamless service, including improved horizontal integration that is able to enhance harmonization and organizational integration throughout the federal government. In non-technical terms, the Canadian government's main policy goal is to implement ICTs to deliver public services through a single interface (the front end) and to improve the collection, storage, integration, and sharing of information among governments, departments, and the private and non-profit sectors (the back end).

As outlined in the introduction, the Canadian e-government's current policy objectives have been largely based on a "whole of government" approach that seeks to integrate service



delivery, establish a secure info-structure and expand accessibility to government information. The “whole of government” approach refers to fully integrated information and service channels that span federal and provincial jurisdictions and sectoral boundaries, and are designed to improve operational efficiencies and increase communication among stakeholders. The transformation of service delivery is concerned with the restructuring of state-sponsored services and the advancement of a system of client-centric support and functionality. These policy goals are mutually dependant on a significant internal reorganization of information, and a commitment to various types of integration and collaboration among governments, citizens, businesses and stakeholders. According to Canada’s first Chief Information Officer, Michelle d’Auray (2003):

The vision guiding the Government of Canada’s e-government effort is to use the e-channel and the technologies associated with it to enhance Canadian’s access to improved user-centered, integrated services, anytime, anywhere, in the official language of their choice. To implement this vision, we are pursuing a ‘whole of government’ approach that puts individuals or businesses first and that directly engages Canadians in a process of continual service improvement to deliver what they need and want. We have learned that fulfilling this vision demands unprecedented ‘back end’ integration and horizontal management across the full spectrum of what government does. It also means forging a stronger relationship between the citizens of Canada and their government ensuring a high level of transparency and responsiveness. (33)

Both the “whole of government” approach and the service transformation agenda have required the state to adopt a number of policy enablers, including service performance measures, shared databases among federal, provincial and local governments, and mechanisms to distribute information online. The facilitation of electronic service delivery (ESD), organizational integration, and the development of a common technological infrastructure have thus dominated the e-government policy agenda in Canada (Canada, 2004). While changes to service delivery and public sector reforms are significant dimensions of e-government, these technological “solutions” do not necessitate the changes required to support inter-organizational collaboration across sectors and among governments.

Political scientists and public administration scholars have produced models that expand on this vision of e-government considerably, demonstrating that online government activities must consider not only technological functions but also the users’ requirements, and the structure, purposes, and processes of the online service (Chadwick and May, 2002; Kernaghan and Gunraj, 2005). By considering these various factors, the context in which digital government evolves is as significant as the emphasis placed on electronic service delivery and vertical and horizontal coordination. While service integration and the provision of information are important aspects of e-government and public sector operations, new opportunities for democratic participation in the policy process are largely lacking.

While there is a real opportunity for the Canadian, provincial and territorial governments to democratize policy-making through the used of ICTs and e-government, current evidence suggests that the act of implementing e-government programs does not translate into substantive democratic reform. For example, providing information on the Web is traditionally considered the first step in implementing e-government programs. It is thought that this will increase transparency by allowing citizens to follow government activity; however, information cataloguing is designed to shift citizens’ perceptions of government accountability, not change

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policy outcomes. In this case, e-government is a substantive policy tool. Alternatively, if governments were to supply information on competing policy alternatives, the purpose of that information would be to invite debate on competing solutions. Actions taken to implement e-government and encourage citizens to use electronic channels to communicate with government do not, in themselves, constitute democratic reform as the purposes of supplying information for direct consumption are clearly different than providing information that invites democratic debate. Information on program operation, government legislation, case law, and public education largely reproduces the traditional mode of government communication based on a single source communicating to many (i.e., the general public). The only real difference is the channel of communication to deliver the information. Alternatively, supplying competing information encourages mass communication and increases debate on the best policy options.

## CITIZEN-CENTRED PORTALS

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Conventional communication between a state and its citizens is conducted in person, through written correspondence, or by telephone; these routes are now supplemented with electronic technologies or e-channels that use Web-based applications to facilitate dialogue among stakeholders. The number of online services provided to Canadian citizens and businesses has grown significantly in recent years. According to Klaus Lenk (2002), the aggressive adoption of ESD “is about supporting all types of business and deliberation processes within the different branches of government, as well as among them and within their environments” (87). By the end of 2005, Ottawa had committed to offering the 130 most used federal services online in a secure environment (TBSC, 2003). Through its site, the Canadian federal government provides three audience-based portals (for Canadians, international clients, and Canadian businesses) to direct user-citizens and other stakeholders to the various online services. Some of the most commonly accessed online services for Canadian citizens are for filing personal income taxes, applying for employment opportunities and Employment Insurance, calculating pension income benefits, and applying for student loans (d’Auray, 2003). The Canadian business gateway provides access to business licensing, regulation, government procurement opportunities, corporate online document filing and registration, applications for patents, and a fully integrated system of human resources forms. The non-Canadian gateway offers various services to international clients including applications for Visas, citizenship and immigration submission kits, social insurance number applications, and change-of-address forms.

Behind the curtain of e-government is a complex network of service providers, policy communities, department agendas, and political will. The modernization of service delivery and the adoption of a next-generation public management approach, such as the “whole of government” approach, reveal the extent to which various technological and administrative shifts characterize contemporary policy agendas (Canada, 2003). Organizational integration entails the replacement of old, outdated computer systems with common technological structures, a shift in institutional culture, and the introduction of new management techniques, which require both back-office cooperation and national e-policy coordination.<sup>3</sup> Thus, organizational integration will be horizontal between policy fields and departments, and seamless between levels of government, offering one-stop shopping to user-citizens. Currently, of the 130 federal services scheduled to be fully functional, 61 percent are already vertically integrated and 53 percent are horizontally harmonized (Canada, 2004). While examples of fully integrated organizations remain sparse, the pilot project of the Canadian Public Safety

Portal is currently facilitating both vertical and horizontal integration. Although it has not yet become seamless, this topically based, horizontally integrated portal heralds a new service experience for user-citizens and other state clients.

Information management has become a significant aspect of next-generation public administration (Kernaghan and Gunraj, 2005). Online state-sponsored information services must be both credible and reliable, and often are organized across institutional boundaries. One of the key policy initiatives for information services is the development of integrated Web portals that use a non-departmental, common-content approach to subject information and share standards across jurisdictions (Van Hulst, 2003). These Web portals will provide the user-citizen with a single point of access to integrated government information and services, while the back-office or internal systems necessary to host these portals requires shared policy objectives and extensive organizational integration. The development of subject clusters synthesizes various services and information across organizational boundaries and is presented to citizens as a single point for accessing information (McLeod, 2001).

These clusters are grouped according to client needs by providing information relevant to specific audiences such as seniors, youth, Aboriginal people, Canadians with disabilities, and other client groups.<sup>4</sup> To increase access to a wide range of information, ease navigation for user-citizens, and ensure continuity, the federal government implemented a standardized interface across their website. The “Common Look and Feel Standard” regulates the organization, placement, and content of the federal website, in addition to ensuring full accessibility for Canadians with varying technological needs (Canada, 2004). Information tools such as site searches, meta-database queries, mapping tools, real-time discussions, intelligent response systems, and similar interactive technologies provide diverse, harmonized sources of information, and require not only managerial synthesis across boundaries but also the implementation of a common infrastructure (Canada, 2004b).

The development of a common technological infrastructure is critical to the success of electronic service delivery, increased civic engagement and optimized inter-governmental interoperability (GOL, 2004). The technological infrastructure necessary to support government’s electronic priorities and eventual policy outcomes requires a government-wide telecommunications network and moderately high levels of security. In Canada, a critical mass of federal departments and agencies are now operating on the Secure Channel Network (SCNet), which is a state-sponsored extranet, providing secure access to public information and services. SCNet provides a common infrastructure with integrated databases, multi-channel service delivery, and various security options. SCNet connects the various departments and agencies’ intranet systems, supplies secure remote access, accommodates the encryption of payment information allowing government to accept online payments, and operates as the backbone for the Secure Channel Client Service Centre, a citizen authentication service that offers Canadians an epass, linking them to electronically mediated services and supports.

The Canadian government has also developed several standardized policy measurement tools to determine the maturity levels of each department’s transition to e-government in terms of information and service delivery. The informational service model is comprised of two major phases: the publication of basic information and the customization of information holdings (TBCS, 2004: 67). The first phase refers to the cataloguing process and includes activities such as creating a state web presence and cliental gateways, and integrating web portals to guide users to appropriate resources. The second stage of the informational service model is the deepening of informational holdings, in which government response is client focused, and online information is comprehensive and updated frequently. Alternatively, the transactional service maturity model is measured in terms of publishing activity, interactive capabilities, and

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automated transaction mechanisms. The ultimate policy objective of this model is to integrate service delivery across organizations and to acquire the technological capacity to “complete a binding transaction in real time without leaving the service provider’s web site. Confirmation of the transaction is instantaneous, and occurs either online or through an e-mail” (Ibid, 69).

In Canada, the national e-government trajectory has been partitioned into four phases that are overlapping and interdependent. Combining the digital government model, outlined in the previous section, with the specificities of the Canadian GOL project yields an explicitly Canadian digital government model. Levels of complexity and institutional coordination will fundamentally condition each stage of transformation and maturity. The first tier of digital government in Canada is concerned with developing the appropriate info-structure to support information dissemination, cataloguing and sorting. The GOL project refers to this stage as “grouping”, which requires nominal technological activity as this tier is predominantly concerned with web publishing, cataloguing, and initiating a common infrastructure.

This first tier is ongoing and crosses over into the second tier – the service integration level. This stage provides expanded service delivery and web-based transactional services. The Canadian government has coined this phase the “interoperability tier”; the more generic term would be “electronic service integration” because at this juncture governments at all levels connect to each other and to citizens using IT networking technologies. The third tier requires e-policy integration across departments and jurisdictions, including security, privacy and accessibility. The GOL project identifies this phase as the “seamless service stage”, requiring high levels of technological activity, extensive backroom policy integration and intergovernmental cooperation.

Public administrators will increasingly be expected to manage information, service delivery, and diverse partnerships. In the fourth tier – implementation, and e-channel integration – digital government will host a fully functional system of e-government infrastructure and info-structure to accommodate electronic democracy. Policy focus will shift to administrative practices and the appropriate governing mechanisms for electronically mediated relations between the state, citizens and clients. As mentioned earlier however, there are numerous roadblocks between where the current trajectory of e-government is and the outcomes the state is able to achieve.

## CANADIAN E-GOVERNANCE

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The second dimension of digital government is concerned with the application of networked technologies as tools of governance. As the state adopts networked technologies to serve functional purposes, public managers have advanced network participation by employing technologies to shape governing processes (Danziger and Andersen, 2002; Mutch, 2002). In the context of public administration, technology is viewed as an effective instrument to manage state affairs, participate in the global community, and govern domestic citizenship (Prattipati, 2003; UNDPE, 2002; Waisanen, 2002). The Internet has had a significant influence on social relations, political activism, governance, and knowledge transfer activities (Bargh and McKenna, 2004; Vedder and Wachbroit, 2003; Vincent and Camp, 2004). Online activism is increasing and numerous political actors are generating cyberspace domains specifically designed to promote citizen participation. Thus, public administration has been propelled toward more decentralized decision-making, adopting collaborative networking technologies in an effort to govern a proliferation of interagency partnerships, joint ventures, and strategic alliances.

Although public sectors around the world are in the midst of transitions driven by the deployment of ICTs, cultural, ideological and historical context will shape the administrative approaches to each nation's e-government processes. The Canadian government's application of e-governance varies across policy fields; however, activities are typically either administratively motivated or policy driven (Marche and McNiven, 2003). Policy driven activities include public demands to move from ESD and other transactional Internet services toward a system premised on end-to-end processes.<sup>5</sup> Within the existing body of digital government literature, there is little discussion of what the institutionalization of e-government and the adoption of e-governance will produce in terms of external organization.

While digital government supplements internal and external communications among governments and stakeholders, it also creates political and administrative pressures to adapt to new democratic processes that promote legitimacy and accountability. Even where information appears fully accessible, e-governance initiatives may be strategically managed to endorse particular information and shape public perceptions. Paul Jaeger (2005) warns that an e-government website is neither neutral nor free of opinion. The way in which it is designed, what information is presented and how that information is presented all affect the messages conveyed by the website and, therefore, by the government. Research on e-government must move away from focusing entirely on the present state of e-government and must examine what it is doing and what it should be doing within society (703).

The state's intent is particularly germane on the Web, where governance requires the management of technologically embedded networks of stakeholders that may or may not be aware of each other. Web governance is defined as the use of procedurally based policy tools that are applied through e-government channels and strategically organized around e-governance principles. It is a significant new instrument in the current mix of policy tools.

The use of ICTs as external organizational instruments and the application of networked technologies in public sector administration have leveled government communication activity where interagency information sharing and communication are common, and multi-stakeholder collaboration has become the new administrative norm. In regard to service administration, ICTs are used to create efficient service delivery and interactive activity, while in the governing context ICTs are employed to connect various policy participants and share information in Internet-mediated environments (Asgarkhani, 2005; Kernaghan and Gunraj, 2005; Thomas and Streib, 2005). Digital government would appear to be more or less instrumental, focused on efficient service delivery, the collection of simple binary data (information that can be digitally reduced to ones and zeros) and the marketing of the system to encourage citizens to interact with the state electronically. However, if the purpose is given analytical priority, digital government can employ important process management techniques in which the state publishes information on the Web with intent, seeking to alter or sustain policy dynamics and informational content.

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## E-DEMOCRACY? CANADIAN CONNECTS AND DISCONNECTS

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While the use of networked technologies in governance activities has changed significantly in the last decade largely due to globalization and the increasing number of stakeholders participating in policy-making (Albrecht, 2006; Bogason and Musso, 2006), there are still many obstacles to a fully functional e-government. A significant body of research now identifies state-sponsored websites as a powerful tool for disseminating information and increasing

transparency, trust, and convenience (Parent, Vandebek and Gemino, 2005; Welch, 2005).

The first obstacle to successful e-government implementation is the take-up rates of information services and ESD. In Canada, user-citizens have increased their online communication, with 66 per cent of all Canadian Internet users visiting the federal government website in 2003 (TBSC, 2004). While the potential for these technologies to operate as catalysts for reducing political apathy is encouraging, a second major roadblock to e-government is providing full accessibility and ameliorating the digital divide (Mattila, 2003; Schultz, 2003). Although Canada has been celebrated for developing the most advanced system of e-government in the world (d'Auray, 2003), national progress is impeded by a range of bureaucratic cultures with varying commitments to online integration and partnership (Allen et al., 2001; Culbertson, 2004; Longford and Harrison, 2001), significant policy challenges in regard to privacy and security (Roy, 2006), and a lack of online collaboration (Carey, 2003). The final roadblock to e-government success is the failure to implement clientele preferences when developing information clusters.

Whether or not the current technological solutions will increase democratic participation, depends on accessibility and citizens' awareness of the government programs and services offered online (Hirji, 2004; Lusoli, Ward and Gibson, 2006; Molesworth and Denegri-Knott, 2005; Orgad, 2006). While online public consultations are ongoing, participation remains limited, with the Canadian government perpetuating civic alienation through its narrow marketing campaign and thin dissemination of democratic opportunities. Canada's current e-consultation website ([www.consultingcanadians.gc.ca](http://www.consultingcanadians.gc.ca)) was created in 2005 and designed to provide access to all on- and off-line public consultations. The federal government decided at the time of the site launch that the e-consultation website would have a low profile (Borins et al, 2006). Comparatively, the Government of Ireland has taken the opposite approach. The public consultation website ([www.e-consultation.ie](http://www.e-consultation.ie)) for the Houses of the Oireachtas (the Parliament of Ireland) has a direct web-link from the home page of the Houses of the Oireachtas' website. The e-consultation initiative in Ireland began in 2006 with a test pilot consultation on a proposed Broadcasting Bill. This pilot e-consultation was supported by an extensive advertising campaign, including radio advertisements, to broadly promote the new communication tool. Traditional methods of civic engagement were used to complement the online consultation. The outcome of the consultation process showed that four times as many citizens participated online compared to the traditional methods (Breaking Barriers to eGovernment Project, 2007). The experience of the Government of Ireland offers relevant lessons to the Canadian project, particularly as an example of the type of promotion tactics that increase accessibility to and public awareness of e-consultation.

Academic attention to these manifestations of deliberative democracy through e-channel enablers is scanty. In this sense, the democratic accountability of e-channels remains relatively unchallenged in Canada. Of the sparse research that has been conducted on e-policy approaches, studies expose serious risks to social inclusion, equality and empowered citizenship (Menzies, 1996; Carey, 2003). While the Canadian e-policy framework has expended considerable resources on client satisfaction (Canada, 2004), only minor attention is paid to strengthening the current democratic forums through information dissemination and information technologies. E-democracy, for government, should be "an obligatory, unavoidable part of democracy's evolution since the empowering potential of the Internet is consistent with the evolving aspirations of those seeking to create, maintain, and/or expand political freedoms, mechanisms of public accountability, and self-governance capacities" (Roy, 2006: 241). To overlook the need for the development of e-consultation on Government of Canada websites would be detrimental to the advancement of the democratic process in Canada.

When considering the implementation of an e-democracy initiative, government officials should consider four key challenges: knowledge, perception, connection, and scope. The first issue, knowledge, could be easily misconstrued as referring to knowledge of government structures and actions – it is not. In order for e-democracy to succeed, citizens must know about e-democracy programs. They need to know how to become involved in the decision-making processes and deliberations of Parliament and its committees. However, an assumption can be drawn that citizens logging on to a Government of Canada forum will increase their knowledge of government actions and why decisions are made, thereby creating more informed voters.

The second challenge to e-democracy is perception, which relates to citizens' concerns about information usage and disclosure. This is certainly a secondary concern to knowledge: once citizens know where to participate on-line, if they perceive that their participation is not valuable or will not be utilized, they likely will be less inclined to engage in e-consultations. Governments need to ensure that the public perceives their e-consultation initiatives as valuable and worthwhile. Citizens are busy with family and work commitments; therefore, if the Canadian government would like Canadians to take the time to engage in consultation about policy decisions, they must communicate the value of participation to citizens.

The third challenge of successful implementation involves collecting the information posted online by citizens in e-consultation forums and ensuring that it reaches the relevant government actors (departments and standing committees). Ensuring this step will solve the challenges associated with the perception of e-consultation outlined above and mitigate the possibility of information loss. This particular challenge in implementation relates to the political infrastructure of a proposed initiative.

The last challenge is to reach a broad segment of the population. If e-consultations only include identified, interested stakeholders, or citizens who would participate in e-consultation regardless of the online initiative, then, in a sense, the initiative has failed and democratic participation is no further ahead in Canada. The ultimate goal of online initiatives should be to gain a broader perspective on the views of Canadians and to learn how government decisions affect their lives and beliefs. This technology should reach out to Canadian youth who may not write letters to their Members of Parliament, but who would be open to posting a note on an online forum or completing a survey. Online initiatives should reach out to busy parents and young professionals, to engage them in a manner that is efficient with their time and resources to ensure that government hears their concerns. The design of e-consultations and other e-democracy initiatives need to consider this challenge in the initial design. By addressing these four challenges, the government will develop an effective and efficient public forum for the voices of all Canadians.

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## CONCLUSION

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Digital government is currently designed to deliver services, with the Canadian e-government policy agenda overwhelmingly focused on electronic service delivery (ESD). The number of online services rendered to Canadian citizens and businesses has grown significantly in recent years. ESD provides public sector clients with access to various government services at any time from any place convenient for the user, with associated costs considerably less than conventional service delivery approaches. The implementation of ESD does not suggest enhanced democracy; it suggests enhanced efficiency of government service delivery and a cost savings for government. For instance, a cost comparison of the four modes of service delivery

shows a significant reduction in capital and labour expenditures by providing government services online. For example, Internet service is \$0.84 per transaction while in-person service is \$38.24, letter service is \$18.86, and telephone service is \$2.99 (Borins, 2004: 8). However, as Fountain (2001) points out, “dramatic efficiency gains and cost saving in the economy are rewarded through profit, promotion, stock price increase and market share, similar gains in government are rewarded with budget cuts, staff reductions, loss of resources and consolidation of programs” (13).

Scholarly explanations of the evolution of digital government vary; however, there is a broad consensus that the structural transformation of governments and fundamental changes in public administration are necessary to achieve the integration and delivery of government services through e-channels such as the Internet and the Web. The federal government has emerged as the e-policy leader in Canada and has been responsible for organizing various integrated service delivery projects and collaborating across jurisdictional boundaries to provide a common source of information. The Canadian Government Online agenda has achieved front-end seamless service with increasingly improved horizontal integration that is able to enhance harmonization and organizational integration throughout the federal government. While the Canadian e-policy framework has expended considerable resources on client satisfaction, limited attention has been paid to strengthening current democratic forums through direct participation in decision-making processes.

The technological platforms and information strategies necessary for managing digital government vary across sectors and government agencies. As organizational forms are increasingly catalyzed toward complex networks and computer-mediated communication, the traditional hierarchies associated with twentieth-century bureaucracy and the institutional arrangements embedded therein, may truncate the implementation of networked technologies as parochial attitudes in the public service resist transformation. Digital government is thus determined by the extent to which the state and decision-makers embrace the new realities of ICTs and exploit the potential of networked relationships. In Canada, public administrative culture is adapting to Internet-mediated service delivery and the technological infrastructure increasingly used to facilitate new models of power sharing and collective decision-making. However, this has not required any significant reorganization of the state, but rather a change in how to facilitate market-based exchanges with public sector clients, and how to use the Web to promote accountability and trust.



## ENDNOTES

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1. The Internet is the carrier of digital content with the Web providing the interface through which digital content is reconstituted as images, text, sounds, or services. The Internet is a network of networks and is a physical communication infrastructure. The Web is a document delivery system that rides atop the Internet and is comprised of a single massive network with a topological structure determined by the arrangement in which webpages are connected through hypertext. The Web provides points of access to various Internet services, allowing users to search for information and communicate.

2. E-government literature rarely recognizes that information is a complex, organic phenomena flowing from one agent to another through both informal and formal structures and across institutional cultures. This is a radical departure from traditional government information systems that collected data to be used internally to design new policies, evaluate existing programs and improve policy instrument applications.

3. Fully functional service delivery depends on the coordination between the front and back-offices. The front office (also referred to as front room portal) is the interface developed for the user, which appears as a single window. The back door refers to the various processes necessary to support the services being provided, and may include the participation and resource of public, private and non-profit participants (OECD, 1998: 11).

4. Government of Canada Portals: Non-Canadian: <http://canadainternational.gc.ca>; Seniors: <http://www.seniors.gc.ca/index.jsp>; Disabled Canadians: <http://www.pwd-online.ca/>; Aboriginal Canadians: <http://www.aboriginalcanada.gc.ca/>; Youth: <http://www.youth.gc.ca/>; Business: <http://businessgateway.ca>; Public Safety: <http://www.safecanada.ca/>.

5. End-to-end processing refers to the capacity to serve clients' service needs including providing information, responsive communication channels, and real-time service transactions, which require extensive, flexible infrastructure to respond to citizens' requests, and ensure cooperation and coordination among federal, provincial and municipal governments.

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