E-GOVERNMENT AND LOCAL GOVERNANCE IN CANADA: AN EXAMINATION OF FRONT LINE CHALLENGES AND FEDERAL TENSIONS

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Abstract
The purpose of this article is to examine the impacts of e-government in Canada on both inter-governmental relations and local governance. The rationale for such an examination stems from the emergence, over the past decade of two parallel discourses in public sector and governance reform: first, e-government as primarily a set of national and provincial strategies for public sector reforms, and secondly, a discourse has focused on the rising importance of municipal government and local governance systems. The main problem at present remains the absence of more holistic thinking on the need for a new enterprise, federated architecture for collaboration that entails an overhaul of the existing political arrangements of the federation. An additional lesson to draw at present is that the weak status and limited capacities of Canada’s municipalities, a concern predating e-government’s emergence, risk amplification as a governance handicap for both individual communities and the country in adapting to a more digital age. However, the consequences of the weakness also depend on how provincial and federal governments respond to the erosion of public trust by adapting their own structures, as well as the effectiveness of emerging top-down mechanisms being deployed to strengthen the infrastructure of cities and communities.
Introduction

The purpose of this article is to undertake an examination of the impacts of e-government in Canada on both inter-governmental relations generally and local governance specifically. The rationale for such an examination stems from the emergence, over the past decade of two parallel discourses in public sector and governance reform that carry implications for one another. The first discourse, e-government, has primarily emerged as a set of national and provincial strategies for public sector reforms, whereas the second discourse has focused on the rising importance of municipal government and local governance systems. The first discourse views cyberspace as a virtual means to overcoming traditional spatial barriers across a national polity, while the latter one embraces proximity. The manner by which these two discourses either align themselves or are at odds with one another is an important matter for the future shape, suitability and effectiveness of both democratic and digital governance arrangements.

E-government is entering its second decade as a widely embraced agenda for public sector reform. Although there are many varying definitions of e-government, we adopt the following as a starting point: The continuous innovation in the delivery of services, citizen participation, and governance through the transformation of external and internal relationships by the use of information technology, especially the Internet. Building on this definition, we offer four distinct but inter-related dimensions of change: service delivery, security, transparency and trust (Roy 2005a). All of these dimensions are related, directly or indirectly, to the widening presence and rapidly expanding importance of a digital infrastructure encompassing information and communication technologies and online
connectivity (and they are explained more fully in the subsequent section).

The methodology underpinning this article is exploratory by adopting the Canadian polity as a single critical case study for which context and empirical evidence have been gathered from a variety of sources. First, a review of relevant research literatures comprises the following three areas: i) e-government’s evolution (in Canada and elsewhere); ii) the municipal perspective on online and ICT adaptation as well as relevant inter-governmental developments; and iii) matters of local governance capacities more generally in terms of resource distribution and power relations in a multi-level, domestic environment. In addition to the various studies and surveys referenced in this article, empirical evidence has also been gathered in Canada from an online review of the 25 largest local governments in Canada, as well as interviews with more than 40 managers from the Canadian public sector. Although this paper is situated in Canada, there are lessons for many countries grappling with traditional jurisdictional separation and boundaries on the one hand, and emerging opportunities and pressures for interoperability, integration and coordination on the other hand.

The article unfolds as follows. Section two conceptually maps e-government’s four dimensions while also addressing the nexus of both tensions and opportunities between different levels of government in a digital era. Section three probes the local and inter-governmental perspectives on service delivery and security. Section four considers transparency, trust and e-democracy, once again from local and inter-governmental planes. Section five then examines the degree of alignment between e-government’s emergence and debates surrounding fiscal resources and municipal authority.
Section six draws together the main conclusions from this assessment.

**E-Government in a Multi-Level Environment**

With regard to e-government’s four dimensions, service and security are primarily focused on adapting the internal decision-making architecture of government, in response to pressures and opportunities associated with the Internet. Indeed, delivering services online became the hallmark of e-government during the 1990s: as more and more citizens conduct their personal and professional affairs online, these ‘customers’ of government look to do the same in dealing with state, whether it is paying their taxes or renewing permits and licenses of one sort or another (Curtin and al. 2003).

During the 1990s - as countries and other jurisdictions began to develop a web presence, it became intuitive that an online reiteration of traditional government structures would not suffice for efficient transactional and interactive capacities (Fountain 2001; Gronlund 2002; Hart-Teeter 2003). Thus, the notions of life events and service streams were developed, with Singapore often credited as being the first nation to organize its public sector online in such a manner and many others quickly following suit (Allen and al. 2005). As more and more citizens have flocked to the Internet for online services in areas such as banking and retail shopping, many in government began to identify online channels as worthy of exploration. Initially, the impetus for utilizing online channels to deliver information and services was often couched in terms of financial savings. Yet, many such models proved exceedingly optimistic due to forecasts predicated on massive transaction cost savings from Internet communication (relative to paper and telephone) or
strong, short-term growth in demand for online services (relative to other channels) (Roy 2003). Functionality also remains limited, particularly with respect to the processing of financial payments. This is a limitation due in large measure to the concerns about security (Bryant and Colledge 2002; Holden 2004).

The ability to interact effectively with customers online requires a reliable architecture, particularly for the handling of personal information – such as credit card numbers – that often underpins financial transactions. Yet fostering government-wide capacities for receiving, storing and sharing secure information is a complex undertaking. In areas such as health care, the benefits of more efficient and integrated care through networked information systems are entirely dependent on secure and inter-connected governance architectures (Joshi and al. 2002; Pavlichev and Garson 2004).

Security issues have also risen to the top of political agendas as of late for other reasons, as governments become conscious that more citizen-centric manners may not always be consistent with a philosophy of friendly and efficient customer service. For security can mean surveillance as well as service. It may entail extracting and sharing information not only in response to requests by citizens, but also as a way to better forecast potential actions and choices (Denning 2003). The trade-offs between privacy, freedom and convenience have therefore become more politicized, particularly in a post-9-11 context which has seen the security dimension of e-government expand from being largely a technical precursor to better service to a more over-arching paradigm of public sector action (Brown 2003; Hart-Teeter 2004; Roy 2005b).
The first two dimensions shape the way in which governments organize internally to address opportunities and threats in the external environment. Transparency and trust speak to changes rooted less in the internal structures of government and more in the evolving democratic environment within which governments operate – as the Internet has facilitated the creation of new channels of political mobilization and interaction between citizens and their governments. A fundamental challenge is a clash of cultures between the expectations of an increasingly open and online society and the traditions of secrecy and information containment that prevail in many public sector settings (Reid 2004; Roberts 2005).

While e-government drives interest in democratic reform, a chasm exists between the emphasis on citizen engagement as a principle and the difficulties in effecting a meaningful application of this principle (Lenihan 2002a). At issue is here the notion of trust as a basis for democratic legitimacy (Oliver and Sanders 2004). Whereas service and security focus primarily on retooling the public sector to better deliver information and services within existing political structures, transparency and trust reflect widening pressures to rethink the structures themselves – particularly from the perspective of public participation (Geiselhart 2004).

These four dimensions can prove useful in understanding how a system of government is adapting holistically to online connectivity and the widening pervasiveness of digital technology. At the same time, however, any consideration of a public sector as a whole, for a given jurisdiction (most commonly a country), must recognize that there are many different governments whose actions may or may not be similar and aligned. In the case of federal environments, formal separations shape
governing contexts at each level of power, while various inter-governmental arrangements, both formal and informal, add further complexity. The local perspective in such a setting varies considerably across jurisdictions, and one interesting irony of local government is that municipal authorities in formal federations may have less autonomy than those in more unitary systems. The Canadian system examined in this paper will be presented as a set of three government levels, although only two – federal and provincial, enjoy formal constitutional recognition: local government resides under the provincial domain.

The emergence of e-government over the past decade has inserted a new variable into what had already been a complex governance equation. In many parts of Europe – and most certainly in Canada, the final two decades of the twentieth century were a time of local renaissance in many aspects of governance from both political and economic perspectives: regional clusters and localized systems of innovation were complemented by a growing interest in Europe in particular in providing more formal political recognition to subnational entities (that in turn vary in scope and status across different European countries) (Loughlin 2001). The results have been evident at both national and supranational levels. It is within such a context that the seeds were planted for current debates in Canada pertaining to a new deal for cities and communities in order to bolster municipal capacities in a manner that recognizes the increasingly strategic importance of local governance systems (Paquet 2000; OECD 2002; Andrew 2002; Patterson and Biagi 2003).

By contrast, e-government’s first decade is most prominently a national exercise (Heeks 1999; Fletcher 2004; Roy 2005a). In many counties, such as Canada, national (or federal) governments have embraced
Technological connectivity as a national project within which cyberspace enables national organizations to better reach out and encompass the country as a whole, overcoming to some extent traditional limitations of geographic space (Paquet and Roy 2004), limitations that inherently favour, determine and necessitate subnational governing structures. The degree to which this trend is evident depends not only on the decisions and intent of governments at the national level, but also the federalist structures shaping them. Notably, even in a highly decentralized federal country such as Switzerland, there is some early evidence of creeping centralism at the federal level due to the deployment of new digital infrastructures, albeit in a tentative manner reflective of the entrenched powers of local authorities (Manz and Trechsel 2004).

While such dynamics suggest a competitive environment – in which different government levels seek an upper hand over one another, there is also a more collaborative perspective to e-government and inter-governmental relations. This view is predicated on the logic of citizen-centric governance that suggests a public with declining tolerance for jurisdictional distinctions and boundaries and a correspondingly greater in interest on outcomes, particularly those involving information and services. Accordingly, the same pressures that drive a single government to transcend its internal boundaries can also apply to a jurisdiction’s public sector as a whole. A more seamless public sector is the vision in this case, predicated on varying levels of coordination and integration across jurisdictions to either better share information, begin to align and inter-link programs, or even jointly execute sets of transactions that have up to this point necessitated separate yet highly similar transactions at different government levels (Lenihan 2002b).
While better service typically frames such directions as an opportunity, other areas may entail more collaborative action due to common threats and shared risks. The emergence of the SARS epidemic in Toronto in 2003, for example, revealed the systemic difficulties in different government levels – each with relevant and important responsibilities for containing and managing this type of public health crisis, acting concertedly to achieve shared outcomes. A similar focus has emerged in the wake of significantly bolstered anti-terrorism strategies since 9-11, strategies that increasingly represent an important new dimension of e-government given their central reliance and usage of information management and digital infrastructure. In brief, service and security both share an emphasis on the potential value of more coordinated and in some cases, integrated inter-governmental action, despite ongoing challenges rooted in jurisdictional separateness.

Transparency and trust – as the more externalized dimensions to e-governance and public sector reform, can be seen as having the potential to replicate either one of these competitive and collaborative perspectives on federalism and inter-governmentalism. In terms of the former, much as the Internet and cyberspace accords national governments new opportunities to serve a geographically dispersed public, the same is true for both one-way communications and more interactive forms of democratic outreach and engagement. Furthermore, an increasingly instantaneous (and multi-channel) media environment better informs citizens of issues and processes at all government levels, but it is reasonable to presume at least some potential for a digital advantage of sorts to favour national level issues that are often more conducive to commercialized media forms, sound-bites and the ‘spin wars’ of a heavily and digitally politicized environment (Ridel 2001).
At the same time, however, local governments have typically been viewed as the most accessible in terms of public participation and the direct ability of individuals or grassroots groups to influence decisions (Graham and Phillips 1998). Here proximity plays a powerful role, one underscored by the 1990’s movement to create so-called, ‘smart communities’ that reflect the potentially positive coupling of the transformational potential of new technologies with the traditional advantages of localized confines and familiarity (Eger 1997; Coe and al. 2001; Paquet and Roy 2004). Supporting this localized perspective is evidence suggesting that the Internet is perhaps most effective at strengthening community ties where relations previously existed – and where they can be further nurtured through a mix of online and offline encounters (Oates 2003). In short, different government levels may once again choose to seek some advantage through their own relative strengths of wider technological reach or stronger local familiarity and responsiveness.

Here too, as with service delivery, a more collaborative inter-governmental approach may also be sought, premised on the notion that the citizenry is more concerned with strong, integrated outcomes than with respect for individual jurisdictions. In many areas such as health care reform or environment management, it may well be increasingly difficult for the public to assign specific accountabilities to different governments given the widening complexity and interdependencies of many policy fields, particularly highly visible, strategic and overarching aims such as public health, safety and security, economic and sustainable development (etc.). One very specific challenge that many governments face in such an environment lies in public consultation – where different levels of government may feel compelled to undertake their
own studies and outreach strategies on issues that have been, or are being addressed in similar manners by other governments. Consultation fatigue can thus result from a public invited to contribute to multiple governing levels on matters of overlapping interest, or from a public confused as to which level should be the proper forum of engagement.

In short, there are pressures that may lead us to expect governments to act more competitively in pursuing e-government reforms, and there are likewise pressures and opportunities for more concerted, holistic approaches to public sector governance. How these forces play out are important at all government levels, but particularly so locally since it is of interest to determine whether their evolution is aligning itself with — and thereby reinforcing the devolutionary and localizing movements emphasizing the empowerment of communities, or instead, whether e-government represents a new deviation in public sector governance that seeks to lessen the rising prominence of local governance in favour of more centralized, national-based strategies and mechanisms.

Service and Security

Like their provincial and federal counterparts VI, Canadian municipalities have actively pursued e-government agendas over the past decade. An examination of the largest municipalities in Canada reveals a sophisticated online presence, having made large strides in creating portals that are highly informative, easy to use, and functional in a variety of ways. For instance, most municipalities have organized their online portals around streams of common services defined by user type (i.e. resident, business, visitor etc.), while also offering a set of ‘life events’ or ‘key topics’ to facilitate quick and
convenient navigation. For less obvious requests, site maps, search engines and alternative inquiry methods (such as telephone or email follow-up) are common characteristics of local government web-sites.

In terms of specific offerings, portals are being utilized to offer a variety of services to local citizens. For instance, many municipalities now accept the online completion of various functions: examples include applications for business permits, online payment of property taxes, pet registration, recreational reservations and so forth. Many cities also allow residents to tailor more interactive information sources to their specific needs: e-mail notifications of parking restrictions and traffic web-cam updates are but two examples. As with their federal and provincial counterparts, capacities for the completion of financial payments online are often limited. For instance, all of the 25 municipalities reviewed for this paper allow for online payment for such items as parking violations (but the processing of larger amounts is more sporadic). In some cases municipalities are able to circumvent the need for creating such an in-house capacity - where the creation and maintenance of a secure architecture denotes a significant expense, by relying on indirect channels of online payment: Vancouver residents for example can pay their property taxes online via their financial institution.

The early stage of e-payments across Canadian municipalities is not out of line with trends elsewhere, notably in the United States. One unsurprising correlate of such functionality is size – as larger municipalities tend toward more sophisticated digital operations internally in direct comparison to smaller communities. The concentration of broadband Internet access and use in urban dwellings creates some pressure for moving in such a
direction (relative to rural and remote areas in particular). \textsuperscript{IX} Beyond providing information and common services for their citizens online, municipalities are also posting employment opportunities on their web-sites and in some instances, allowing for online applications to be submitted. In larger communities, residents can also tailor their online experience to specific neighbourhoods in order to receive information on local construction projects, community events, or details on who to contact regarding an issue or request of some sort.

This strong security emphasis is very much in line with US findings from the 2004 Digital Cities Survey in the US:

The survey of 183 city mayors, managers and chief information officers found that the growing use of information technology is chiefly focused on \textit{service}-oriented, \textit{business}-driven and \textit{cost-effective} outcomes. City leaders, however, are facing increasing challenges to expand and maintain the use of information technology due to escalating budget pressures as well as public expectations for self-service. \textsuperscript{X}

This latter point, greater expectations for self-service, is partially the rationale for the importing of the ‘311’ service from the US by several Canadian cities at present. The emergence of ‘311’ systems in North America is a good illustration of both the need and the potential for alignment across different service delivery channels – notably, the telephone and the Internet. The City of Calgary is Canada’s pioneer for 311. Having set out to develop a world-class presence on the Internet, a strategy for Calgary on the Web was proposed in December 2000 to ensure the
creation of a strong and flexible Web presence that supported sharing of information through universal access to efficient, effective products and services.\textsuperscript{XI}

The development of the portal would prove instrumental in solidifying the profile of e-government and IT management at the political level, thereby creating an important foundation for subsequent, more recent initiatives such as 311. Accordingly, in his 2005 State of the City Address, Mayor Dave Bronconnier delivered a public commitment to the 311 concept – as a means to continually improving municipal performance in terms of a timely and leading edge approach to citizen service:

3-1-1 will provide our city managers better tools too. They will know exactly how long it takes to respond. They'll know where resources are being underutilized, and where resources are stretched. And we can adjust service to improve. 3-1-1 is as much about accountability as it is responsiveness at City Hall. It's the new kind of thinking that Calgarians want for the 21\textsuperscript{st} Century.\textsuperscript{XII}

In 2003, Calgary led a coalition of Canadian cities in submitting an application to the CRTC to approve the designation of the 311 code for access to municipal non-emergency services – in a manner similar to the use of this code in several American cities.\textsuperscript{XIII} For many city officials, 311 denotes a shift toward a model of citizen service via transparency and empowerment accorded through not only the single-point access to all municipal services but also the ability of citizens to then track their requests and the processing of such requests by the municipal authority. Calgary officials view 311 as an enabler of a self-service
approach where citizens can leverage the existence of multiple digital channels that can be complementary. Calgary’s portal and the 311 system are therefore complementary means to an integrated objective – better service outcomes (Dutil and al. 2005). On May 18th 2005, the new system went live and City staff began fielding the first calls and service requests from citizens.\textsuperscript{XIV}

This type of local initiative, however, predicated on simpler and more seamless governance for citizens locally, raises a quandary inter-governmentally. As a federal government official recently acknowledged in Canada’s pre-eminent e-government forum, 311 should be a wake up call for provincial and federal governments engaged in their own service transformation efforts: what happens, the official, asked, when a citizen dials 311 with an issue that is partly or fully provincial and/or federal in scope?\textsuperscript{XV} The absence of seamless inter-governmental coordination will be exposed, creating a gap between the rhetoric routinely espoused by government leaders that such integration is the aim and the reality of separate initiatives within jurisdictional boundaries.

In parallel to the 311 movement, some cities have thus begun to experiment with integrated service portals aimed at transcending jurisdictional boundaries. One such example is the ‘Senior’s Portal’\textsuperscript{XVI}, first piloted in Brockville, Ontario as a partnership between the three government levels in order to provide a single online source of information and services for Brockville residents 65 years of age and over. The level of inter-governmental coordination is modest, more informational and cross-referencing in scope (via web-links) as opposed to providing fully integrated programs and transactions involving multiple governments.
The situation is similar in terms of the modest efforts to date to better coordinate provincial and federal programs and services online. In the Province of British Columbia, for example, new companies can now register once online via an integrated federal-provincial registration scheme that replaces previously separated processes. Similarly, the Province of Ontario and the federal government have signed a memorandum of understanding to explore joint service integration through online channels. This agreement is owed largely to the respective managers of both government levels and a growing amount of administrative interest in pursuing inter-governmental collaboration via shared digital infrastructures.\textsuperscript{XVII}

Yet despite such efforts, the political climate between provincial and federal leaders has been highly antagonistic, largely due to accusations by Ontario’s Premier of a fiscal imbalance creating federal government surpluses at the cost of rising provincial deficits.\textsuperscript{XVIII} The funding needs and financing of capacities of cities and communities are also central to such discussions (a theme returned to more fully below).

The security imperative:

The pressures for more integrated online service delivery offerings across jurisdictions are rooted more in opportunity than necessity. In the post 9-11 security environment, however, an absence of stronger inter-governmental capacities could well translate into dramatically higher costs – measured not only in lost efficiencies and less convenience, but also public safety and for some, survival itself. A recent report, National Emergencies: Canada’s Fragile Front Lines, prepared by the Senate Committee on National Security and Defence (2004), underscores the problem:
Emergencies are local. The governments that design and control anti-emergency strategies, however, are federal, provincial and territorial. Canada’s constitution presents a formidable challenge to the development of a swift and comprehensive approach to dealing with national emergencies. The Committee believes that the best way to serve the citizen is by listening to first responders’ needs and wants to avoid suggestions that there is a hierarchy of greater and lesser governments.

Despite the Committee’s view, many signs suggest a federal government viewing itself very as a ‘greater government’ – thereby focused primarily on its own capacities rather than new coordinating mechanisms and partnerships across government levels. For example, Canada’s first-ever National Security Strategy is largely a ‘federal’ set of initiatives, coupled with limited promises to reach out and ‘inform’ other government levels. Despite a much belated effort in early 2005 to create a federal-provincial dialogue on security matters, there remains an absence of willingness on the part of these two levels of government to incorporate the municipal presence.

Such criticism – underpinned by the Senate Committee’s findings, would seem to have at the very least sensitized federal leaders to this issue. In a May 2004 address to the Federation of Canadian Municipalities’ Annual Conference, the Deputy Prime Minister acknowledged the Senate Study and its surveying of municipal leaders across the country and pledged to address the shortcomings revealed in it. In an effort to laud the
importance of local government in security and safety efforts, however, one example offered by the Minister served to underscore the severity of the gap in terms of funding.

The initiative invoked as an example of municipal involvement was the Joint Emergency Preparedness Program, a $5 million annual commitment of matching funds to help finance the purchasing of equipment, the development of emergency plans, and the conducting of local training. In light of an annual operating budget of Canada’s largest city, Toronto, that exceeds $8 billion, the limited scope of such financing becomes apparent - all the more so in light of nearly $8 Billion in new spending commitments announced by the federal government since 2001 (Fife 2004).\textsuperscript{XXII} In light of the July 2005 London bombings, Canada’s federal Minister (and Deputy Prime Minister) responsible for public safety and security publicly acknowledged that Canadians are ill-prepared for such a threat at home, a weakness partly attributable to insufficient inter-governmental coordination and local support.\textsuperscript{XXIII}

The resulting weaknesses in the county’s governance architecture are thus due to: a) limited local capacities for first responders (as the Senate report makes clear); b) an absence of municipal voice within the federal arena where so much of the program decisions are made; and c) no meaningful effort to create stronger inter-governmental mechanisms to share information and better coordinate planning and preparation. In a more informational and interconnected environment, where interoperability is becoming more essential for all governments levels to address common threats both proactively and reactively, the significance of these weaknesses rises. Clearly, in the realm of security the imperative for a more collaborative view of federalism is sharpening, even though many
Security is also a key dimension of service delivery, to the extent that more administrative collaboration is sought in the future since here too, interoperability is critical in order to align standards and systems in either a unified or at the very least jointly orchestrated platform for processing and sharing information and executing transactions via shared processes. Yet, the creation of the secure channel at the federal level, a centrepiece of the federal strategy for online service delivery, illustrates the absence of collaborative governance between federal and provincial governments. Built at considerable cost and effort within the federal apparatus in concert with a private sector consortium, federal officials have been seeking interest at the provincial level to have these governments adopt the secure channel for their own service delivery strategies, the cost of which would be negotiated as essentially a contractual arrangement through which the provinces purchase the usage of this service infrastructure from the federal provider.

To date, there has been widespread reluctance amongst the provinces to pursue such an arrangement, largely due to a feeling that – i) the secure channel was configured for federal government purposes and therefore it may not be ideally suited for provincial needs; ii) cost overruns at the federal level are a key factor in federal efforts to ‘sell’ this infrastructure to the provinces; and iii) other models and solutions may be available that are more efficient and suitable, either via the marketplace in terms of off-the-shelf solutions or through the internal construction of a secure channel more appropriate for a provincial scale. In short, the absence of upfront collaboration in terms of planning and deploying the
channel as a shared infrastructure across jurisdictions is now an impediment to doing so despite federal eagerness for such directions.

This fragmentation is increased at the municipal government level where the absence of a national framework to coordinate security provisions means that municipalities are pursuing a diversity of approaches in line with their own objectives such as ‘311’, online payment schemes and emergency preparedness and coordination. Although such experimentation may be positive in some respects (in yielding tailored solutions and a network of experimentation that is often viewed as a hallmark of federalism), there are offsetting costs in the failure of governments to pursue wider and deeper forms of collaboration that are essential to their own service and security objectives.

**Transparency and Trust**

In terms of transparency, trust and new and strengthened forms of democratic engagement, municipalities have been no less determined than other governments to make use of online channels of communications to provide timely and accurate information to their citizens (Lee 2004). Although the depth of this commitment varies in part due to population size (as the larger cities have many more issues within larger and more complex operations), the quality and quantity of information available via local governments online is often comparable to other government levels (Melitski and al. 2005).

Whether or not such openness is being pursued to alter and strengthen local democratic capacities is more uncertain. The formation of budgets by municipal
governments would seemingly support the view that political negotiation and public consultation much more common at the local level (in part due to the non-partisan Council structure of local governments requiring the Mayor to craft a coalition of Council supporters). There is some evidence of such participation extending online as well. For example, in coming to terms with a 2.93% property tax increase in their 2004 budget, the City of Vancouver deployed public consultation (including public meetings, a local opinion poll, and online questionnaires – in English and Chinese) as a means to explore the relative preferences of residents between service cuts or modest tax increases beyond the level of inflation.xxiv

Municipalities are also more detailed and accessible in accounting for their spending plans and financial results than is typically the case provincially and federally. For instance, in addition to outlining how the $7.1 Billion municipal operating budget for 2004 was crafted, the City of Toronto provides an online budget simulation for residents to experiment with shifts in financial allocations across municipal priorities: its purpose is also to provide a public education vehicle on Council’s priorities for 2005 and 2006xxv. Notwithstanding such notable cases, there is no systemic evidence to suggest that online government is substantially expanding the participative means and culture of municipal processes. One explanation lies in findings uncovered by Norris in the US:

Part of the reason that participants did not indicate that e-democracy was a reason that their governments adopted e-government can be found in their operational definitions of e-democracy. Their definitions of e-democracy were primarily, if not solely related to information and service provision with an
added dash of access to and communication with government officials. Thus, operationally, they did not separate e-democracy from e-government (p. 8, Norris 2005).

A similar mindset prevails in Canada, with wider e-democratic reform often viewed as a longer term phase to follow the more immediate challenges of service functionality customer service (Borins 2004). Many, elected officials emphasize that there is no apparent appetite on the part of the public for wider e-democratic reforms. As a result, politicians are much more concerned with deploying new technologies to achieve results rather than creating more direct and deliberative forms of citizen involvement (Gattinger 1998; Norris 2005).xxvi

An additional barrier is the lack of obvious organizational placement for e-democracy. With CIO-type structures focused primarily on internal operations – and updating and reforming these operations to better ‘serve’ the municipal client base, most municipalities assign public consultation responsibilities to communications departments, despite the dramatically different purpose and focus. The fact remains that much like all government levels in Canada, municipalities are only beginning to focus on deploying new technologies to widen citizen participation and incorporate it into traditional forums and decision-making mechanisms (Lenihan 2002b; Kernaghan and Gunji 2004).

Another factor limiting democratic change locally is the greater visibility and attention accorded to provincial and federal levels in matters of transparency and trust. Unfortunately, much of this attention is negative. The absence of sufficient openness has emerged as a major issue in the Parliamentary model at federal and provincial
levels – so much so it became a critical determinant in the January 2006 federal election that would see a new minority Government elected. Although local governments have not been without examples of corruption and mismanagement, there is clear evidence that Canadians are increasingly demonstrating higher levels of trust for their local governments and declining levels for their federal and provincial governments.\textsuperscript{xxvii}

Such trends are partly fuelling provincial interest in exploring democratic change of both institutional and electronic variants. Several provinces, for instance, are exploring electoral reform and the Government of Ontario has recently begun to deploy online public consultations as one element of its broader reform movement entitled, Democratic Renewal. The agenda has spawned the creation of a formal Secretariat within the provincial government and direct Ministerial status to overview it. Such experimentation stems from the widening view both inside and outside of government circles that public trust is based less and less on deference to traditional authoritative structures and more on reputation and experiences derived from more direct forms of participation and engagement (Geiselhart 2004; O’Hara 2004).

Still, this provincial activity may also be viewed as a more advanced microcosm of reform to the Parliamentary model that is shared with the federal government: there is no offsetting effort by the provinces to extend either e-democracy or more participatory forms of engagement to the municipal level that falls within their domain.\textsuperscript{xxviii} Some scholars have even questioned the motives and sincerity of the provinces in light of growing federalism activism in seeking new arrangements to support municipalities financially:
Although the federal move is to be applauded, it also draws attention to the increasingly curious absence of provincial governments from the national debate over cities and an urban agenda. Given that provinces are a much larger player than the federal government on the municipal stage, and will remain so, their very modest role to date is both puzzling and troubling. At issue, then, is the need for a strategic framework upon which can be built a new relationship between the municipal and provincial governments. And, we need to think about more than the need for more money (p. 1, Gibbons 2005). xxix

The need for a discussion beyond money is evident, and it is one that will intensify in light of the nexus of e-government’s building and maintenance costs and intergovernmental pressures on the one hand, and questions about the need for stronger local governance capacities on the other hand. A closer look at this latter dimension and how it related to the evolution of e-government is the task to which we now turn.

**Resources, Identities and Federated Capacities**

Despite the aforementioned local renaissance in many parts of the world that arose in the 1990s, its recognition and strength was partially stalled in Canada by what some observers have termed an obsession with federal-provincial relations (Andrew 2002). Accordingly, it was not until the late 1990s and early part of this century when cities, urbanization and territorial governance matters began to penetrate the political and policy agendas of Canadian governments (OECD 2002), a time that would
also see the emergence of e-government in a forceful manner at the federal level (Paquet and Roy 2004).

Canadian reforms have arguably lagged behind the European experience in terms of a focus on both local and multi-level capacity building. One Canadian observer notes that: “using a mix of principles, programs and networks, the EU in the 1990s developed multi-level governance to implement more place sensitive policies and programs” (Bradford 2004)\textsuperscript{xxx}. Importantly, many European countries seem intent on extending this sensitivity to the realm of e-governance (Jorgensen and Rosamond 2002; Lodge 2003; Gerster and Haag 2003).\textsuperscript{xxxi}

Although comparative examinations of local government are notoriously complex (due to a variety of cultural and structural variables across all levels of government in any one jurisdiction), a review conducted for the Government of Scotland pointed to the following issues as the main contours of what should be considered in a broadly structured debate on local governance:

- the constitutional status of local government;
- the distribution of functions between the levels of government;
- powers of intervention and direction;
- electoral arrangements (and the role of elected mayors or executives);
- financial powers or responsibilities of local government (including taxation); and
- themes and issues which characterize the different national approaches to local government.\textsuperscript{xxxi}

Canadian municipalities face handicaps in many of these areas (Barnett 1997; Paquet 2000; Wong 2002; Paquet and Roy 2004; Bradford 2004). The governance of a
country such as Denmark, for example, comparable in population size to larger Canadian provinces, features taxation powers structured inversely to the residual property tax feature of local governments in Canada: income tax in Denmark is predominantly localized. A similar set of financial structures characterizes Switzerland, where local communes enjoy not only significant taxation powers relative to other government levels but also the ability to restructure its electoral and decision-making systems, both individually and in concert with other local communes.

An alternative system in the Netherlands features more nationalized taxation mechanisms that nonetheless enable the transferring of a substantial level of resources to local governments via unqualified grants. Such transfers enable local governments to exercise budgetary authority in a locally decided upon manner. Even within the more similarly structured federations of Canada and the United States, municipalities south of the border enjoy a wider array of financial mechanisms and governing provisions that provide wider degrees of freedom within State-level legislative frameworks than their Canadian counterparts (Vander Ploeg 2002).

In Canada, although the federal government has introduced various new funding schemes designed to provide resources to the municipal level (as acknowledged by Gibbons above), these reforms are being introduced in a predominantly top-down manner, on the basis of federal infrastructure programs, competitive granting schemes, and federal-provincial agreements to share limited taxation sources with local governments. While such initiatives provide an important financial stimulus for infrastructure investment - according visibility to the federal government, they are an insufficient basis for
strengthening municipal autonomy and self-governance capacities (McMillan 2004). There may well be a more acute threat here for local governments pursuing e-government reforms where financial capacity has been demonstrated to be increasingly important with higher levels of technological sophistication and deepening commitments (Moon and Norris 2005).

E-governance thus becomes an important prism through which the new style of governance arrangements may be identified and crafted, as organizations in all sectors seek to foster coordination in a manner that reconciles central authority and flexible autonomy. Such is the notion of a federated architecture that is as much political and organizational as it is technological. Indeed, the scope of what must be sought is explicitly multi-dimensional: technically, it permits decision-making systems within a variety of organizational subunits to join together; and strategically and politically, it allows for both action and authority to be facilitated, shared and coordinated across a multitude of levels (Cairncross 2002; Batini and al. 2002; Koch 2005). Realizing such a vision, however, requires coordination – often from organizational and institutional changes that must be orchestrated by imposition or agreement. In the case of political federalism in a formal sense, agreement is almost always essential since no one level holds power over the others, though a complicating variable for Canadian municipalities is their subordination to provincial control.

There is a body of evidence in e-government and IT management demonstrating that in the absence of significant pressure to modify the existing structures of power and authority, the application of new technologies will result by and large in a strengthening of existing arrangements (Kraemer and King 2003). With respect to
the adaptation of Canada’s federalist structures to a more
digital era, this view of technological incrementalism seems
consistent with the manner by which federal action
continues to grow in terms of both its own governance
mechanisms (partially liberated through cyberspace from
traditional geographic confines) and its support for shared
inter-governmental initiatives and matters of local
infrastructure and development.

The two critical weaknesses with this scenario are:
i) an absence of a political architecture to oversee the
pursuit of interoperability that is increasingly interwoven
with the stated commitments and intentions of all
government levels to pursue more seamless forms of
governance in the realms of service and security; and ii)
regarding transparency and trust, limited capacities for
democratic engagement locally as the federal government
and the provinces are likely to extend their financial
resources and political clout into this realm. Here too, the
absence of an inter-governmental architecture politically
ensures that politicians at each level are most concerned
with their own visibility and relevance, rather than the
collective performance of the public sector.

Clearly consequential for municipal e-government
strategies, such weaknesses also raise the stakes
considerably for the evolution of e-government at federal
and provincial levels. As digital technologies permeate
wider segments of public sector operations – and as further
democratic innovation is pursued, the deployment of new
technology can only expand in scope and complexity. The
risk of federal and provincial technocracies is real since
administratively larger governments have typically adapted
more slowly than subnational ones (Goldsmith and Eggers
2004).
One way to manage such risk is undertake a political conversation that links democratic renewal, fiscal federalism and the widening need for new and more regularized forms of inter-governmental collaboration within the context of e-governance and e-government. In other words, the provincial and federal governments might launch a public reflection on democratic governance as enterprise architecture for the country as a whole.

Here, the “grail of enterprise architecture is to create a map of information technology (IT) assets and business processes and a set of governance principles that drive a constant discussion about business strategy and how it can be expressed through IT” (p.4, Koch 2005). Four main components include: i) the information architecture; ii) the infrastructure architecture; iii) application architecture; and iv) business architecture (ibid.). Although such parameters are now commonplace within individual governments (a sufficiently complicated tasks in wrestling with the balance between decentralized autonomy and government-wide interoperability), such a perspective is now increasingly called for across all government levels.

Providing such a technological perspective can thus better enable a strategic reconsideration of fiscal federalism arrangements where a commonly held principle has been that ‘finance follows functions’ (McMillan 2004). One must go further in an era of e-governance and e-government and ask how form is best facilitated by and adapted to new technological and social realities. In the public sector, more so than in industry, these social realities are tied to the complicated relationship between transparency and trust that determines accountability mechanisms of oversight and participation involving government bodies, elected officials and the citizenry. Thus, the enterprise architecture of a public sector in a
federal environment is complicated by the need to sort out roles and assign resources and authority in a manner that either respects or explicitly seeks agreement to overcome the sovereignty of each political level enjoined.

**Conclusion**

The structures and rules of federalism in Canada were forged in the 19th century at a time when Canada was a patchwork of largely rural communities dispersed across a country that would for some time remain partially unconnected by rail, much less a modern telecommunications infrastructure. Cities were almost non-existent and town and communities were sub-units of provinces hostile toward any notion of a strong national government that would infringe on their jurisdictional autonomy. Despite this strong provincialism, much of the twentieth century would see the continued emergence of a much stronger federal government and ongoing federal-provincial tensions over mainly political and financial matters. Most recently, cities have emerged as an acknowledged third government order, albeit without formal recognition and with a high level of dependency on both federal and provincial processes.

By way of concluding, it is important to acknowledge the preliminary nature of the assessment undertaken here. Indeed, there has been only limited effort devoted to the study of e-government and federalism generally. This article therefore provides a basis for broadened debate as to the digital transformation of the public sector as a whole – inclusive of its many levels that are becoming more intertwined due to pressures and opportunities for connectivity, coordination and collaboration. Further research is warranted on not only the sorts of mechanisms for inter-governmental activity
(including technological, organizational and political dimensions), but also the manner by which fiscal arrangements across different levels of government shapes public sector deployments of digital technologies and how these deployments, in turn, affect democratic activity and self-governance capacities at the local level.

With respect to the two views of federalism put forth early on in this paper – namely the competitive rationale modeled on jurisdictional separateness and a more collaborative approach based on integration and interdependence, both would appear to have relevance in Canada at present. Whereas the former perspective is clearly more in line with the origins and much of the ongoing traditions and structures of Canadian government, the latter is now beginning to be recognized as an important component of the e-government transformation that cannot unfold in a strictly unattached manner at each government level. The main problem at present remains the absence of more holistic thinking on the need for a new enterprise, federated architecture for collaboration that entails an overhaul of the existing political arrangements of the federation.

One important lesson is that the weak status and limited capacities of Canada’s municipalities, a concern predating e-government’s emergence, risks amplification in an increasingly digital age. However, the consequences of the weakness also depends in part on how provincial and federal governments respond to the erosion of public trust by adapting their own structures, as well as the effectiveness of emerging top-down mechanisms being deployed to strengthen the infrastructure of cities and communities. More research will be required in order to gauge such consequences, as well as the efforts of all government levels to gradually construct a more
collaborative and interoperable governance architecture by adapting current arrangements that any such systemic orientation.
REFERENCES


I or purposes of this article, ‘local’ and ‘municipal’ will be used interchangeably as a prefix to the usage of government. The term ‘governance’ is used much more generically in reference to systems or mechanisms of coordination either within an organization or sector or between among them. Local governance, then, refers to the collective capacity of a jurisdiction (whose boundaries are identifiable and aligned in some manner with one or more local government units) to steer itself, coordinate resources and undertake decisions in an environment that, as will be explored, is shaped by both endogenous and exogenous pressures and processes.

Among other jurisdictions, the Government of Mexico adopted this definition. Although its precise origins are unknown it may have been formulated in a report prepared for public sector clients by Gartner Consulting and Research.

In addition to these interviews, the author participated in the annual Lac Carling Congress, the country’s premier e-government gathering of senior managers from all government levels in Canada as well as the private sector. Along with the content presented at the forum itself, additional discussions took place to gather insight and opinion. Details of Lac Carling are available at: www.laccarling.ca.

Clearly, homeland security is also a factor that has risen in importance in recent years: in 1999, for example, 126,809,769 pages of government information were declassified by the US federal government. By 2004, this number has dropped to 28,413,690. Source – Secrecy Report Card – An Update, April 2005, www.openthegovernment.org).

Scandinavian countries, for instance, feature unitary government systems that nonetheless grant local authorities more direct autonomy and self-governance than is the case for municipalities in federal jurisdictions such as Australia, the United States and Canada.

For those interested in a critical examination of e-government in Canada federally please see (Roy 2005).

One indicative example is the City of Vancouver (www.vancouver.ca), with three prominent service streams for residents, businesses and visitors. The City of Toronto’s main portal (www.toronto.ca) is organized similarly through four main themes – living, doing business, visiting, and accessing City Hall.

All of the municipalities surveyed allowed for the online completion of one or more of these functions online – although in some cases an additional offline step may be required (for example, residents wishing to register for recreational classes may first be required to visit or call
the recreation centre in order to receive an identification (pin) number that can subsequently be used to complete selection and confirmation online.

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IX This logic may, at times, be contradictory however – as geographically large but remote communities with small population bases may stand to benefit from making use of digital channels of transacting. Yet, realizing this benefit requires a reliable broadband infrastructure for the community at large, coupled with municipal capacities to deliver services in such a fashion, and the evidence in North America suggests that in both respects a significant urban – rural gap remains prevalent (Hudson 2001; Gerster and Haag 2003).

X http://www.nlc.org/Newsroom/Nation_s_Cities_Weekly/Weekly_NCW/2005/03/07/2529.cfm

XI A very good summary of the portal project is available for downloading via the search function of the main City of Calgary portal (www.calgary.ca).

XII Text of the Address (delivered on February 8th, 2005) retrieved online via the Mayor’s Office via the City’s portal - www.Calgary.ca.

XIII There are at least 15 active 311 systems in the US serving nearly one quarter of the American population. The 311 application in Canada outlines three types of activities that can be covered by such a system: i) Service response – road conditions, traffic lights, water main breaks, garbage services, sewer systems, building permits, animal control, water management, noise complaints, transit inquiries, abandoned vehicles, and non-emergency police and fire services; ii) Transactions – Property taxes, business licensing, ticket payments, recreation facilities; and iii) General information – Mayor’s Office and City Council referrals, general service complaints and complements.

XIV As testament to the planning that underpinned the launching of this new system, City officials forecasted an initial uptake of 43,500 calls in the first two weeks of operation and the actual result was approximately 1% below this level. City officials report no major surprises following the launch, an outcome accredited to the significant preparation that preceded it.
XV Closing remarks made by a federal government official at the May 2005 Lac Carling Congress.

XVI One such example – www.seniorsinfo.ca, reflects an effort to coordinate (and potentially further integrate) the programs and service offerings for senior citizens available via the City of Brockville, the Province of Ontario and the Government of Ontario.

XVII A federal-provincial CIO Council exists encompassing senior managers from both government levels with CIO-type responsibilities. This body has been instrumental in creating awareness and interest for an inter-governmental service delivery architecture (creating for examples, the Institute for Citizen-Centric Service Delivery: http://www.iccs-isac.org/eng/isd.htm). Although managers cannot undertake any action without at least implicit political support, the mandate of this Council remains informal and limited, since inter-governmental agreements between federal and provincial governments are orchestrated via central agencies at each level, reflecting their jurisdictional autonomy. For these same reasons, the municipal presence on this Council is a quandary, informally encouraged at forums and events (and included in various studies undertaken by the Institute) but nonetheless limited by the absence of local government autonomy and tensions as to whether the federal government can and should interact with municipal bodies that fall under the provincial domain.

XVIII Provincial jurisdiction over both health care and education is resulting in ongoing escalations in budget demands at a time when the federal government regularly reports budget surpluses exceeding its projections. With the federal government increasingly active in both of these fields, however, both levels of government are engaged in a widening debate about a ‘fiscal imbalance’: i.e. whether taxation powers federally and provincially are suitably and fairly aligned with funding responsibilities. The municipal tax base is highly limited to property tax and as such, municipal budgets are often both dependent on and interwoven with provincial spending and rules (although as will be discussed further below, the federal government has recently begun to seek ways to direct its own forms of assistance to local authorities).

XIX For a summary of the full report please see:


XX Ottawa, January 24, 2005 © Federal, provincial and territorial Ministers responsible for emergency management met today and

A comparison of Canadian and US efforts to support local responders in domestic security efforts is equally revealing. South of the border, more than $2 Billion in new federal funds has been dispersed to local authorities in order to bolster security capacities, an amount that clearly dwarfs Canadian levels on a per capita basis. Despite this considerable funding base, the US experience also underscores the ongoing difficulties plaguing municipal efforts to both navigate state and federal processes and ensure that the local capacities are adequate to make good of such funding once arrived. Two useful sources provide a detailed examination of these issues: the first a federal task force on local support for homeland security (http://www.homelandsecurity.mo.gov/6-17_TASK-FORCE-REPORT-FINAL.pdf) and the second a report prepared by the US Mayor’s Association (http://www.usmayors.org/72ndAnnualMeeting/homelandreport_062504.pdf).

Despite such an acknowledgment, a key question remaining is how the federal government will respond in the broadening the public safety focus beyond air travel (that is exclusively a federal jurisdiction and as in many countries, a primary focus of post-9-11 efforts, a focus now questioned in light of London’s events) to urban matters in particular – through new forms of inter-governmentalism aimed at partnerships to strengthen municipal capacities or more direct forms of federal intervention by federal departments and agencies in urban and community settings.


By way of comparison, provincial and federal governments – operating within Parliamentary structures, feature highly concentrated budget processes controlled by the Minister of Finance and other central agencies. Consultations are typically limited, and secrecy is viewed as a hallmark of the budget until its tabling in Parliament (increasingly a televised event rendering it more a public unveiling). For details of Toronto’s online simulation please see: http://www.toronto.ca/budget2005/budgetworkbook.htm#
There is also an important urban – rural distinction. In the latter, less populated type of communities, many politicians feel they are readily accessible and engaged with the public already. In urban areas introducing 311 systems, many public officials reported unease on the part of many politicians who view such self-service as an erosion of their role and source of value for constituents (unlike the Mayor who typically enjoys widespread visibility and, as in the case of Calgary, is portrayed as the impetus for such change).

As part of a comparative survey project polling Americans, Mexicans and Canadians on federalism and different levels and styles of government (in June 2004), only 36% of Canadians trusted the federal government to do a good job in carrying out its responsibilities (a decline of 12% since 2002). By contrast, 69% reported trusting their local governments, the gap between federal and local levels growing by 32 points since 2002 (CRIC: www.cric.ca).

The experiences of the United Kingdom are of some value here given the shared Westminster origins of Parliamentary-modelled governance. Despite a growing interest in e-democracy by both the executive and legislative branches of the British national government, the emergence of e-democracy is taking place in a more bottom-up manner (MacIntosh 2003). For instance, online voting, the most incremental of e-democratic reforms, has been piloted at local levels. The new Scottish Parliament has viewed digital innovation and citizen outreach as defining traits of its existence and its efforts to distinguish itself from British custom. Even the UK’s national framework for e-democracy is a locally-centric set of funding mechanism and supports established to encourage and nurture experimentation and innovation across the local level (see – www.edemocracy.gov.uk).

Although such a generalist observation requires with it careful analysis to determine specific impacts and results, other research from within the EU points to a strengthening of localized capacities via multi-level processes in an encouraging manner (Stoker 1996; Keating 2003; Scott 2004).

Italy’s most recent e-government strategy carries an explicit commitment to fostering local, regional and national capacities in a complementary manner, backing up this commitment with significant funding arrived at through a cross-jurisdictional dialogue. The second phase of the e-government programme is expected to consolidate the shift towards federalism in Italy by bringing local administrations closer to citizens and enterprises, by stimulating local self-government capabilities and by providing a common strategic vision to all the actors.
involved in the process. Programme investments will focus on building up capabilities at regional and local level, and will be structured around five core policy priorities that will receive central government funding: development of local infrastructure (EUR 61 million); territorial spreading of online services for citizens and business (EUR 86 million); inclusion of small towns and provinces in the e-government project (EUR 25 million); development of e-democracy (EUR 10 million); and promotion of new services for citizens and enterprises (EUR 9 million). The complete strategy is available (in Italian only) at: http://www.cnipa.gov.it/site_files/e-gov%20Fase%202%2004-11-031.pdf (English Summary, http://europa.eu.int/idabc/en/document/1841/339).

This comparative study, published online by the Scottish government is available at: http://www.scotland.gov.uk/cru/documents/con-status-10.htm

Whereas approximately 40% of local government revenues come from transfers from the central government (including conditional and unconditional transfers), just over 50% of revenue comes from direct income taxes levied locally (the remainder comprising non-tax revenue). Accordingly, the largest shares of taxation accrue first to local governments and then secondarily to national authorities (McMillan 2004).

The most recent and prominent example of the ‘new deal’ for cities and communities is a federal government decision to transfer the proceeds (once collected) of its tax on gasoline to local governments via a federal-provincial agreement (necessary given provincial jurisdiction over municipalities) that stipulates the sorts of objectives sought for the usage of the funds (mainly training to transportation infrastructure and environmental management).

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