The implementation of integrated electronic service delivery in Quebec: the conditions of collaboration and lessons

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Abstract
The article addresses the difficult conditions of interorganisational collaboration for the implementation of integrated electronic service delivery from three theoretical perspectives: institutional, political and managerial. These perspectives are used to conceptually define the main obstacles to interorganisational collaboration and the leverage available to public managers to facilitate the integration of electronic services. Based on a multiple case study in Quebec, the authors examine, more specifically, the institutional, political and managerial conditions that have delayed the integration of electronic services in this Canadian province. They show how the persistency of administrative practices, the desire for autonomy of public organisations and cumbersome governance structures have contributed to the diversification of the supply of online services in Quebec at the expense of an integrated service. Drawing on theoretical considerations and the study results, the authors propose that public managers do not stick only to horizontal governance mechanisms, but also make use of vertical governance mechanisms, to mitigate the effects of certain constraints on interorganisational collaboration and to accelerate the implementation of integrated electronic service delivery.

Points for practitioners
Several countries have made integrated public service delivery a priority of e-government. To effectively coordinate these projects with their multiple partners, public managers need to apply a hybrid governance to benefit from the stability of the hierarchy and the flexibility of the network. More specifically, the study shows

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vertical governance to be an effective tool to coordinate the activities of a network of organisations involved in the implementation of integrated service delivery.

**Keywords**
administrative organisation and structures, administrative science, administrative theory, e-government, information and communications technology, networks, partnership, public administration

**Introduction**

For several years, many governments have tried to integrate their electronic service delivery in order to make it easier for citizens to access these services and to streamline the use of their resources (Borins et al., 2007; Boudreau, 2011). Integrated electronic service delivery, understood as a set of online services offered by several organisations (Kernaghan, 2005), is a response to the proliferation of government websites and the diversification of online services (United Nations, 2012). It is also part and parcel of recent efforts to counteract the fragmentation of programmes and the ‘*agencification*’ of organisations inspired by New Public Management (Bouckaert et al., 2010).

Government portals are designed to make life easier for their users by organising the content according to a more intuitive rather than administrative rationale. Integrated service delivery can also help to improve the quality and efficiency of services in specific sectors such as health, education and justice. Today, no one seems to question the utility of an integrated electronic record to effectively monitor the health situation of a patient, the progress of a student or the incriminating trial of an offender.

While the majority of industrialised countries have officially made integrated service delivery one of their priorities for electronic government, the actual state of affairs is very different. Citizens and businesses often have to put up with many repetitive formalities in the course of their online transactions. Several government portals do nothing more than describe the steps to be followed with the agencies in charge of the services and redirect the user to the websites of these organisations. This shallow integration reflects the difficulty that public organisations face when it comes to interconnecting their technological infrastructure and harmonising their administrative processes (United Nations, 2012). One of the challenges of integrating electronic service delivery is to make the various systems interoperable by standardising technologies, data and processes. Another challenge, but more complex this time, is to convince various organisations that are anxious about keeping their autonomy to work together to interconnect their operations and systems. This article focuses on this challenge of securing collaboration by showing the organisational constraints and challenges facing managers in the course of integrated electronic service delivery projects.
The article is structured as follows. We start off by addressing the conditions of interorganisational collaboration in strategic resource management from three theoretical perspectives: institutional, political and managerial. In a second part, we go on to present our methodological approach, which revolves around a multiple case study conducted in the Canadian province of Quebec. Third, after drawing a portrait of integrated electronic service delivery in Quebec, we examine the institutional, political and managerial conditions that have delayed the integration of electronic service delivery. In the fourth section, on the basis of theoretical considerations and the results of the study, we propose the introduction of vertical governance mechanisms that help mitigate the effects of certain constraints on interorganisational collaboration and accelerate the implementation of integrated electronic service delivery.

**Theoretical considerations in relation to interorganisational collaboration**

On the basis of a review of the scientific literature, this section discusses the main obstacles to interorganisational collaboration and its levers from three perspectives: institutional, political and managerial.

**Institutional perspective: a bureaucratised and fragmented order**

Despite a political and economic environment conducive to service integration, the majority of public organisations continue to operate as largely autonomous bureaucracies that prefer to work in silos rather than as a network (Fountains, 2001, 2009). This persistency is explained by the presence of government rules and routines that induce the vertical management of programmes and services, whether in terms of funding, accountability, performance, evaluation, privacy or security information (Dawes, 1996; Fountains, 2001; O’Flynn et al., 2011). Many of these rules and routines embedded in the bureaucratic functioning of government organisations also tend to be perpetuated in the ways in which organisational actors take ownership of information technologies and their use, preventing them from exploiting their potential to the full (Fountains, 2001).

New Public Management and, more recently, the ‘whole-of-government’ approach have not therefore overcome the bureaucracy. While this bureaucracy still proves effective in ensuring the ongoing management of high-volume services (Boudreau, 2006), it proves less effective in managing complex problems requiring the input of entities with no or little relationship of subordination between them (Milward and Provan, 2000; United Nations, 2014). Given that solving complex problems requires the pooling of resources (e.g. information, technology, expertise and budgets), a strictly vertical governance is not enough. By vertical governance, we mean a management method that is hierarchically organised and structured according to formal rules laid down by the centre (Rhodes, 1997). Public managers must also use a horizontal governance based on dialogue and
negotiation in order to coordinate and make the necessary organisational adjustments (Provan and Lemaire, 2012). By horizontal governance, we mean a method of administration based on trust and collaboration among a network of organisations with no or little authority between them, with the aim of offering joint solutions to often complex problems (Agranoff and McGuire, 2001; Milward and Provan, 2000).

**Political perspective: the desire or organisations for autonomy**

Improving integrated electronic service delivery calls for the interoperability of government back offices, that is to say, the capacity of the organisations that administer these services to share information in order to offer their customers a seamless procedure (Pardo et al., 2012). Interoperability presupposes a standardisation of systems, processes and data. Over and beyond the technical challenges of interoperability, service integration also has a political dimension (Bekkers, 2007; Dawes, 1996). Faced with attempts to interconnect their systems, organisations try to maintain control not only over their strategic resources, but also over their information domain, that is to say, the way in which information is selected, labelled and interpreted in order to manage operations and make decisions (Bellamy and Taylor, 1996). The information domains are uncontested private preserves within organisations via which the power of influential organisational stakeholders takes concrete form (see also Dawes, 1996) despite the efforts that may be deployed by the central agencies to unify the whole.

While wishing to maintain their autonomy and preserve their information domain, organisations become part of networks of organisations that give them access to the resources they need to function (Pfeffer and Salancik, 1978). The organisations will prove willing to collaborate if the relationships of autonomy and dependency work in their favour, or, at least, do not put them at a disadvantage (Beynon-Davies, 1994). The nature of the negotiations and interorganisational agreements tend to reflect the power of the organisations and their members, that is to say, the capacity to mobilise the resources that others need to operate and to achieve their goals. The most powerful organisations are those that manage to control the strategic resources on which other organisations depend (Pfeffer and Salancik, 1978).

**Managerial perspective: a collaboration to be built and maintained**

Collaboration is essential if services are to be integrated. This covers the collective learning that is acquired as the organisations and their representatives get to know each other and agree on a common framework of interpretations and actions (Agranoff and McGuire, 2001; Fountains, 2001; Nowell, 2010). Generally absent or low in the initial phases of an interorganisational project, trust is established gradually after repeated interactions between people who act in good faith and tend to put aside opportunistic calculations (Podolny and Page, 1998).
Conclusive previous experiences, combined with sustained interactions, encourage organisations and their representatives to work together and take others into account, especially during electronic services integration projects (Bekkers, 2007). The development of capital collaboration also requires the presence of managers capable of exercising a ‘soft leadership’ that encourages organisations and their representatives to negotiate in good faith and agree on common definitions and solutions (Ansell and Gash, 2008).

Managers must also ensure that no major partner withdraws from the network to go it alone (Agranoff and McGuire, 2001). Instability is one of the main threats to collaboration and the capacity for collective action (Provan and Lemaire, 2012; Thomson et al., 2009). The departure of a reputable organisation or a respected leader weakens the network’s collaboration capital. Collaboration depends not only on managers well versed in horizontal governance, but also on formal administrative procedures and structures that facilitate the exchange of information and quick decision-making (Isett and Provan, 2005). A formalisation of the operating rules and decision-making processes is necessary to ensure the stable and effective governance of a state that is increasingly networked (Emerson et al., 2011; Fountains, 2009). The centralisation of governance mechanisms may also be beneficial, especially when the services to be integrated fall under organisations that are initially reluctant to collaborate. It may then be effective to rely on a central governance authority with a mandate to coordinate a network of organisations offering services to common customers (Milward and Provan, 2000; Provan and Kenis, 2008; Provan and Lemaire, 2012; Provan and Milward, 1995). For these authors, centralised governance improves the coordination and efficiency of the network by adding stability and predictability, especially when there is a high number of participating organisations. By centralising governance activities, several coordination activities no longer have to be managed in a decentralised manner within the network, thus eliminating numerous negotiations between organisations. On the other hand, centralised governance and its hierarchical mechanisms alone cannot ensure network efficiency. Instead, horizontal mechanisms must be relied upon, particularly ‘confidence as a complement to the hierarchical authority’, as stressed by Moynihan (2009: 912), in order to ensure the smooth flow of communication and minimise coordination efforts, particularly in crisis situations.

It can therefore be put forward that vertical governance (hierarchy) and horizontal governance (network) are not mutually exclusive or contradictory. Following on from the work of Provan, Milward, Kenis and Moynihan, we argue that these two modes of governance can intermingle and complement each other when it comes to coordinating interorganisational relationships and mitigating the effect of institutional, political and managerial constraints on the capacity of organisations to collaborate on joint projects, such as the deployment of integrated electronic service delivery. Before shoring up the previous theoretical considerations empirically, let us expose our methodology.
Methodology

Quebec appears to be an appropriate choice to examine the institutional, political and managerial conditions of the deployment of integrated electronic service delivery. First of all, online transactions are numerous. Quebec (like many Canadian provinces that share the Westminster system) is recognised for the scope of services offered to its population (Bourgault et al., 1997). In addition, various public service integration projects have been rolled out there since the early 2000s. Finally, the proximity to the field allowed the researchers to have access to rich and detailed information.

This methodological approach is based on an instrumental-style multiple case study (Stake, 1995). Specifically, the authors examined five major integrated electronic service delivery projects that have taken place within the Quebec government since the early 2000s, namely, the change of address service, the one-stop shop for carriers, business start-up, the integrated justice information system and the Quebec Health Record. To do so, around 40 semi-structured interviews were carried out between 2002 and 2012 with managers, professionals and consultants who worked on putting together or coordinating these projects, including 30 representatives of sector organisations and around 10 representatives of central agencies (Treasury Board Secretariat and Executive Council Office) or horizontal agencies (Services Québec and Shared Services Centre). These interviews helped to trace the history of the main integrated services in Quebec and identify the difficulties encountered in their implementation. The interview guide has three levels of questions: first, factual questions on the roll-out phases of the projects under study and on the roles and responsibilities of the respondents and organisations in these projects; second, questions on the organisational and institutional factors that were able to facilitate or undermine the legitimate operation of these projects and the collaboration between the organisations; and, third, questions about the strategies and actions used to facilitate the implementation of integrated electronic service delivery.

Many documentary sources supplemented the interviews. The annual reports of the agencies responsible for the studied projects made it possible to follow the progress of their electronic services over time. External evaluation reports of agencies whose mission is the integration of government services and infrastructure were used to identify the power wielded by service agencies in the deployment of an integrated service. Finally, the annual reports of the Auditor General of Quebec highlighted the governance difficulties encountered in the majority of projects under consideration. Note that the Quebec Health Record, alone, was the subject of three audit reports between 2006 and 2011.

All the collected material was subjected to a thematic analysis (Paillé and Mucchielli, 2008: 141–159), inspired by grounded theory (Glaser and Strauss, 1967), in order to pinpoint the cross-sectional themes common to the five case studies. Inductive rather than deductive, our analytical approach started from the first materials collated. It aimed to identify and empirically validate the relevant conceptual categories according to the principle of theoretical saturation (Glaser
and Strauss, 1967: 61–67). The MaxQda qualitative analysis software was used to organise the information around the five cases under study, and then to proceed with the cross-sectional analysis of these cases on the basis of the conceptual categories relating to the institutional, political and managerial dimensions of the interorganisational collaboration. This method made it possible to study the obstacles to the integration of electronic services in Quebec while showing the levers on which to act. The analysis was complemented by a validation of the empirical content of the study by government actors, particularly managers and experts working to develop electronic public service delivery in Quebec.

Context and description of the five cases under consideration

First case

In its budget speech in 1996, the Quebec government announced the creation of the first one-stop shop to facilitate the life of carriers (e.g. taxi, bus and trucking) by grouping the services leading to the granting of a transport permit. Four months later, the one-stop shop for carriers was created. It allows carriers to settle on site much of the paperwork that previously took up to five weeks. The Quebec Transport Commission, the agency in charge of the one-stop shop, mediates between the carriers and agencies involved in issuing permits. Available since 31 May 2004, an electronic version of this one-stop shop allows carriers to update their records and make payments online.6

Second case

In the wake of measures to reduce the administrative burden imposed on businesses, the Ministry of Industry and Trade began the work of developing an integrated service for small- and medium-sized enterprises on 1 January 2001. It then created a portal that aims, initially, to guide the aspiring entrepreneur in his business start-up process. Integrated within the Quebec portal7 since 2005, the enterprise portal, now called the Éspace entreprises,8 is now under the responsibility of Services Québec. The Éspace entreprises, which pools information from over 60 agencies, offers various guided pathways that, like the business-start up, guide the entrepreneur regarding administrative paperwork.

Third case

In the early 2000s, Quebec’s government decided to offer the public the first integrated online service, the Quebec change of address service. Announced in 2001 and launched two years later, this service allows citizens to carry out in a few minutes a change of address with six government agencies.9 Since 2005, the Quebec change of address service is under the responsibility of Services Québec. In the Quebec portal, this agency also developed, on the one hand, an Éspace
citoyens,\textsuperscript{10} which gives citizens access to online services, information on government programmes and personalised itineraries along the same lines as the guided pathways available to businesses, and, on the other hand, the \textit{Mon dossier citoyen} (or My Services Québec Account),\textsuperscript{11} which allows citizens to access the information that the government holds in relation to them.

\textbf{Fourth case}

The integration of services and infrastructure also affects large public networks in Quebec, including that of justice. Inspired by computerisation projects in progress in the US, in 1999, the authorities of the Ministry of Justice and the Ministry of Public Security obtained the approval of the Quebec government authorities to roll out a project to modernise their systems. The project, called the integrated Quebec justice information system, was born with the aim of improving communication between different stakeholders in the administration of justice (e.g. police, lawyers, judges, the correctional services) through computerisation of records within an integrated platform. Faced with high development costs, in 2004, the project authorities decided to recover the integrated justice system developed in British Columbia and to adapt it to the particular characteristics of Quebec.\textsuperscript{12}

\textbf{Fifth case}

The health system in Quebec is also the scene of a major integration project. Benefiting from government of Canada funding of approximately $300 million, in 2006, the Quebec government mandated the Ministry of Health and Social Services to create a remotely accessible electronic health record, dubbed Dossier Santé Québec/Quebec Health Record to allow a better flow of clinical information among health-care providers. The Quebec Health Record sets out to complement the clinical records of health facilities, medical clinics and pharmacies. So far, some components of the Quebec Health Record (e.g. medication, laboratory tests and medical imaging) have been set up in various regions of Quebec.\textsuperscript{13}

The previous portrait of the delivery of electronic services in Quebec suggests that service integration is well under way. However, at closer investigation, we realise that many projects are struggling to evolve into advanced stages of integration. For example, the few integrated services offered in the Quebec portal cut a sad figure compared to the electronic services offered by large public agencies used to managing large transaction volumes. The Quebec change of address service is the only integrated transactional service accessible to citizens on the Quebec portal. For the other integrated services, citizens and entrepreneurs are rapidly redirected to the sites of service agencies and their red tape, the government portal only playing the role of relay here. As for the integrated justice information system and the Quebec Health Record, time and again, the Auditor General of Quebec has noted governance problems that have led to delays, cost overruns, major
repositioning and, in the case of the first, its scrapping in 2012. Despite an economic and political environment conducive to the pooling of resources, Quebec has come across its share of difficulties in the integration of electronic services. Let us take a closer look.

Results: the obstacles to collaboration and the integration of electronic services in Quebec

Various obstacles to interorganisational collaboration have led to the diversification of the supply of online services in Quebec at the expense of an integrated service. The cross-sectional analysis of five cases helped hinge the results of the study around three main findings that cover, respectively, the institutional, political and managerial perspectives of interorganisational collaboration.

First observation: an institutional context conducive to fragmentation

In Quebec, the majority of laws and regulations have a ministerial or sectoral scope. Laws with a governmental scope may also give priority to ministerial accountability, such as the Law on Public Administration, which is based on accountability mechanisms at the level of the organisation. As for the Law on Access to Documents Held by Public Bodies and the Protection of Personal Information (hereinafter the Access Law), it governs the possibilities of exchange of information between government organisations. Indeed, the administrative compartmentalisation of personal information files, one of the founding principles of this law, prevailed in the design of the Quebec change of address service. In order to avoid the administrative centralisation of personal information, this service acts as a postal runner in that it ‘collects information and places it in a data environment reserved for each agency…Every agency has its pigeonhole’ (Respondent).

As for the legal experts, they are perceived as the guardians of the information domain of their respective organisations by overseeing the observance of the laws and regulations to which it is subject. Several integrated service projects have, indeed, led to heated discussions between legal experts to develop memoranda of understanding on the exchange of personal information between organisations.

However, the legal and regulatory framework is not the only or the main factor in the fragmentation of the operations of the state apparatus. The diversity of the administrative routines that service agencies have instituted to ensure the management of their programmes is a bigger obstacle to the integration of public services in Quebec. These routines are particularly demanding when it comes to agreeing on a common way to authenticate citizens in order to give them access to transactional services. In the absence of a single authentication system at the provincial level, Quebec’s change of address service found itself reproducing the authentication protocols peculiar to each of the participating agencies, a diversity that is reflected in the number of questions put to citizens. The wide range of authentication protocols also contributed to delaying the development of some
components of the Quebec Health Record, notably due to ‘a failure to match the local clinical information concerning the user with a provincial identifier, the cornerstone of the creation of a provincial health record’ (Government of Quebec, 2009: 8).

This lack of uniformity is also reflected in the wording of the administrative data. For example, the lack of a single repository of names and addresses held by the government delayed the implementation of the change of address service given the numerous negotiations to agree on such a repository. The lack of terminological standards also applies to the clinical data used by health institutions, including the results of laboratory tests, a vital component of the Quebec Health Record (Government of Quebec, 2009: 18). Finally, the diversity is reflected in the growing number of computer systems that public agencies have implemented in recent decades. This is the case for the Quebec Health Record, where, as pointed out by the Auditor General of Quebec (2009/10: 13), ‘facilities have a large number of information assets that were acquired or compiled without an overall perspective’. It is the same story for the integrated justice information system, where multiple compartmentalised systems were developed in the 1970s and 1980s that cannot be scrapped, at least for the time being.

In sum, the fact that public agencies have instituted their own administrative and terminological rules and often developed their information systems regardless of their interconnection has made the integration of electronic services in Quebec a complex matter. For the government, the solution lies in the standardisation of processes, contents and systems in order to facilitate the exchange and processing of information. However, attempts at the standardisation of infrastructure and the integration of services come up against the resistance of government agencies that wish to preserve their management autonomy and keep control over their resources.

Second observation: powerful service agencies anxious to retain their autonomy

In volume II of its 2010/11 Annual Report, the Auditor General of Quebec (2010/11: ch. 8, p. 5) states that ‘the current structure of information resource management in Quebec’s public administration is decentralised and primarily focused on the autonomy of the ministries and agencies’.14 He adds that this autonomy is particularly pronounced among service agencies ‘that have developed cutting edge technological infrastructures to support high-volume operations’ (Auditor General of Quebec, 2010/11: ch. 8, p. 5). In addition to being perceived by service agencies as a loss of autonomy, several respondents claimed that the development of an integrated government offering rarely brings immediate gains.

The reluctance to participate in the development of integrated services can be particularly strong when there are calls for a sharing of information that is considered to be strategic by the agencies. For example, representatives of the Régie de l’assurance maladie du Québec (the Quebec health insurance scheme), the agency
holding the most comprehensive database of names and addresses in Quebec, were initially hesitant to join the Quebec change of address service after the government refused to appoint them project manager. The government preferred to entrust this role to the Ministry of Relations with the Citizen and Immigration, which had never managed addresses and even less so large information technology (IT) projects. In addition to challenging the lack of expertise of the project manager, the Régie de l’assurance maladie du Québec and its representatives feared that the Quebec change of address service would affect the quality of data used to determine eligibility for the drug insurance scheme. Indeed, the Régie de l’assurance maladie, just like the Ministry of Employment and Social Solidarity, continue to check the veracity of certain change of address applications on the basis of manual processing and phone calls.

Single solutions have difficulty prevailing when the field is already occupied. This was the lesson learned by those in charge of the Quebec Health Record after investing in a clinical system supported by a single interface. Following the scathing criticisms of the Auditor General of Quebec, these same project managers repositioned the Quebec Health Record to allow its interoperability with various systems already in place in health institutions and medical clinics.

The agency responsible for the Quebec portal, Services Québec, must also learn to live with tried and tested systems that have been deployed by agencies with a solid infrastructure and expertise. The resources of Services Québec seem modest alongside the resources of large service agencies. This imbalance is reflected in the range of transactional services available online. While the Quebec portal offers few transactional services, the websites of the large service agencies are well endowed with them.

While the integration of service delivery is the first mission of Services Québec, the integration of government back office comes under Quebec’s Shared Services Centre, which is in charge of the infrastructure and services common to several agencies. It is also a central player in the IT aspects of integrated projects in Quebec. However, its expertise seems challenged when it comes to pushing forward in an integrated manner the mission systems of the large service agencies (Chabot and Thornton, 2010). The heads of the IT departments within the agencies are not alone in resisting the enhanced role of the Shared Services Centre. Business area managers see it as a loss of influence on the development of their system: ‘With all that the Shared Services Centre has to offer as government services, how am I going to have enough weight to assert my priorities’, said one business area manager.

In short, the pace of deployment of integrated online services in Quebec shows a desire by agencies to preserve their management autonomy and ensure control over their resources. Due to the expertise they hold and the services they administer, several large agencies emerge as compulsory figures in the deployment of integrated services. This dispersion of expertise and services shows the limits of a single government solution that would make a clean sweep of existing methods and systems, at least in the short term.
Third observation: heavy and unstable horizontal governance structures

Faced with agencies well-endowed with services, resources and expertise, the heads of several integrated projects in Quebec have mostly adopted low interference development strategies to minimise the impact of integrated services on the back offices of the agencies. To get them on board, a majority of project leaders advocated a consensual form of governance where agencies must agree together on the services and infrastructure to be set up. In the majority of projects examined, no agency, not even the project manager, had the power to decide: ‘Everything is negotiated between partners and you have to have one meeting after the other’, said one respondent. Consensus is particularly difficult to obtain given that the representatives of agencies tend to exercise caution: ‘A steering committee of seven associate deputy ministers16 doesn’t make decisions unless it is unanimous’, noted another respondent. It also happens that the representatives do not have the power to decide on the spot, especially when the decision has an impact on their agency. They must then return to their respective agencies to obtain approval from their directors. Thus, the slowest agencies impose their pace on others.

The greater the number of agencies participating in an integrated service project, the more complex it is to agree on the responsibilities and contributions of each. This was the case of the business start-up service, where more than 90 agencies were approached when the project was first launched. Even by restricting the number of agencies, their involvement remains tentative and it takes time to build mutual trust and for everyone to establish how they stand to gain. It can take time to create a climate conducive to collaboration when agencies belong to different professional worlds, as in the case of the integrated justice information system. Even after trust has been built up, interorganisational collaboration remains precarious due to the slow pace of decision-making:

Since 2001, I’ve been asked several times to withdraw from the project so that we can go off on our own and roll out our own development project…if we had gone it alone, we would have already finished. (Respondent)

The precariousness of integrated service projects can also be put down to the instability of their governance structures. Long drawn out, the projects reviewed have seen one agency representative follow in the steps of others. In the Quebec Health Record, ‘six senior managers have taken over from one another, which cannot fail but generate instability as regards the leadership that is essential for a project on this scale’ (Auditor General of Quebec, 2010/11: 19). These departures and replacements undermine the relationship of familiarity that has grown over time in the decision-making bodies of these projects:

The biggest governance challenge was the mobility of the deputy ministers involved in the steering committee. They all moved on, and every time someone new came
around the table, things were perpetually called into question. We had to start re-explaining the choices, why we had done this or that. (Respondent)

In short, the slowness of integrated service projects creates instability, which, in turn, contributes to a slowdown in projects: ‘The longer it takes, the more turnaround there is among decision-makers, and the more turnover there is, the longer it takes’, we were told. This delay was a source of such dissatisfaction that some agencies preferred to develop in parallel their own electronic change of address services, as well as citizen records and business records, for their respective customers.

Discussion: the necessity of vertical governance

The Quebec experience in integrated electronic service delivery shows the limits of horizontal governance, which has so far resulted in often modest and hard-won outcomes. However, the addition of vertical governance mechanisms and a formal framework helps reduce the effort required to coordinate a network of agencies engaged in the implementation of an integrated service, as proposed by some of the studies discussed earlier (Fountains, 2009; Milward and Provan 2000; Provan and Kennis, 2008; Provan and Milward, 1995). While collaboration cannot be decreed, it can be better managed.

The adoption of interoperability standards is a first formal framework mechanism that the Quebec government can coordinate centrally. With these standards, it is possible to avoid imposing wall-to-wall governmental solutions likely to stifle the initiatives of government agencies and market innovations. Initiatives and innovations are encouraged, but within a clear framework. Quebec could be inspired by the government of the UK, which has managed to impose clear operational standards on its service agencies in the development of their offer. Although British government agencies remain masters of their infrastructure, the Government Digital Service, a body responsible for coordinating electronic delivery in the UK, ensures the inclusion of this delivery in the government ‘one-stop shop’ (GOV.UK) by requiring service agencies to send them information in specific formats. The Canadian government is also considering migrating all of the electronic delivery to a single counter: ‘The number of federal government sites should be cut from 1500 to one’ (Corinne Charette, Senior Director of Information at the Secretariat of the Government of Canada Treasury Board, quoted in an article in Le Soleil, 19 November 2013).

Although necessary for delivery integration, the standardisation of systems and the creation of electronic one-stop shops remain insufficient. It is also necessary to modernise administrative processes, otherwise the mandatory red tape will continue to weigh heavily on the shoulders of citizens and other customers (Gil-Garcia, 2012). Certain administrative formalities, dating from the days of paper files (e.g. manual signature), must be replaced by more modern and efficient rules (e.g. digital signature) that are part of a seamless process. In addition, strategic administrative
processes and tools, such as authentication and the use of forms, must be unified and harmonised to take full advantage of integrated services and to significantly simplify the lives of citizens (United Nations, 2012, 2014).

Furthermore, the integration of services makes sense only if it is part of a coherent government vision that translates into clear strategies (Gil-Garcia, 2012). The countries leading the way in the development of electronic services, such as Finland, France, the UK, South Korea and Singapore, have adopted digital strategies that promote the integration of services and infrastructure (United Nations, 2014). In Quebec, we are still waiting for a clear strategic vision for the deployment and integration of electronic services.17

Finally, the Quebec government would do well to introduce more verticality in the governance structures of its integrated services. There is a need to establish a central coordinating authority that brings vision, stability and efficiency to the governance of electronic service delivery projects. Via a coherent government strategy and the development of clear standards, this entity would have the means to stimulate and guide the collaboration of organisations in the deployment of integrated electronic service delivery. To avoid being contested by the organisations it seeks to administer, the central coordinating authority should base its legitimacy on its expertise (Milward and Provan, 2000; Provan and Milward, 1995) and on the position it occupies in the government hierarchy. The fact that they are attached to the highest political level (e.g. office of the prime minister or president) and are given a clear mandate and formal powers explains the success experienced by some countries, like the UK, France and the US, with the integration of their services (United Nations, 2014: 82). Quebec could learn from these models of centralised governance.

In Quebec, as in Canada, it is the Office of the Chief Information Officer (CIO) that acts as a governance authority in the development of electronic service delivery. Reporting to the Secretariat of the Treasury Board, so far, the CIO of Quebec has mainly done nothing more than perform administrative controls on the management of IT projects, controls that have tightened since the adoption in 2010 of the Law on the Governance and Management of Information Resources of Public Bodies. However, the CIO has been reticent to draw up a government strategy for electronic delivery, a responsibility that is nevertheless reiterated in this law on governance. For several respondents of the study, linking the CIO to the Secretariat of the Treasury Board has meant that the control mechanisms have tended to overshadow the elements related to vision and strategies.

In keeping with the countries leading the way in the governance of electronic services and the digital economy, the Quebec Liberal Party currently in power proposed during its General Council, held in September 2014, the creation ‘of a coordination body that may take the form of a digital governance secretariat that is open and intelligent and reporting directly to the Prime Minister of Quebec by reusing existing resources’ (Parti Libéral du Québec, 2014 : 11). We believe this is a step in the right direction, especially if the CIO is at the centre of this new entity (Bernier and Fortier, 2014).
Conclusion

As shown by the results of the study, the diversity of administrative practices and the desire of public organisations to control certain strategic resources (e.g. information, expertise, budgets, systems) are hindering the integration of services in Quebec. A strictly horizontal governance, based on a search for consensus and compromise between the organisations, proves to be of limited effectiveness to coordinate the integration of public services, especially because of the length and volatility of decision-making. While building on the initiatives and expertise of public organisations, it is necessary to strengthen central governance and formalise certain supervisory mechanisms when implementing integrated services, as, indeed, suggested by the United Nations (2014).

To our knowledge, this is one of the first studies that, through the systematic examination of concrete cases, has shown the importance of using vertical governance mechanisms (e.g. strategic vision, central coordination and the standardisation of operations) as a vector of integration of electronic public service delivery. Drawing on the work of Milward, Provan and Kenis, the results of the study show that a vertical governance, exercised by a credible central authority, is an effective instrument to coordinate the activities of a network of organisations involved in the implementation of integrated electronic service delivery. By centralising policy decisions and standardising certain network operations, vertical governance reduces the use of often never-ending interorganisational negotiations to agree on a common infrastructure and integrated services. Thus, compared to a strictly horizontal governance, it reduces network coordination costs (Milward and Provan, 2000; Provan and Lemaire, 2012). In addition, thanks to its stability, vertical governance gives the central authority time to take ownership of the coordination mechanisms and to develop bonds of trust and collaboration with the organisations of the network administered by it (Milward and Provan, 2000: 372–373; see also Moynihan, 2009). Hierarchy and network go hand in hand, the strengths of one complementing the weaknesses of the other (Provan and Kenis, 2008).

While rehabilitating vertical governance and its hierarchical mechanisms, public managers also have an interest in exploiting the advantages of the network and its horizontal mechanisms. The network makes it possible, for example, to benefit from the expertise and initiatives of organisations in the development of complex electronic delivery. Not everything can be decided centrally in the field of service delivery. In a state anxious to integrate its services, public managers must develop hybrid governance structures and know how to handle them to benefit from the stability and decision-making effectiveness of the hierarchy and the flexibility and innovative capacity of the network.

Finally, our study has methodological limitations that restrict its range. While Quebec is a fertile ground for the review of institutional, political and managerial conditions related to the integration of electronic services, the organisations studied belong to a single level of government, the provincial level. Studying electronic service integration projects that are more complex and extensive, such as cases of
multi-level integration (e.g. federal, provincial, municipal, community), would help to enrich the practical and theoretical knowledge of hybrid governance. Our study is nevertheless a good starting point for future research on the governance of integrated services within increasingly interconnected states.

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**Notes**

1. Integrated service projects of the same nature have been rolled out elsewhere in Canada, the US and several other countries.
2. Including an information officer and two experts.
3. Including a minister in charge of online government. The Executive Council is the equivalent of the Privy Council of Canada.
5. An agency offering integrated services to public bodies. See: http://www.cspq.gouv.qc.ca/
6. See: http://www.ctq.gouv.qc.ca/fr/guichet_unique_des_transporteurs/
7. Under the responsibility of Services Québec, the Quebec portal is a single gateway to general government information and transactional services for citizens and businesses.
8. See: http://www2.gouv.qc.ca/entreprises/portail/quebec
12. See: http://www.dossierdesante.gouv.qc.ca
13. This observation may seem paradoxical in a Westminster system where the central agencies have long since played a major role, both in Quebec and Canada (Bernier and Fortier, 2014). The implementation of electronic services, despite being funded and authorised by the Ministry of Finance and Treasury Board, seems to have escaped these federative and centralising trends.
15. In the Canadian system, and therefore in Quebec, the deputy minister is the most senior official of a department. An associate deputy minister is his deputy. These senior officials are chosen on merit and not on a political basis.
16. According to a recent report of the Auditor General of Canada (2013: 15) on access to online services, ‘there is no government-wide strategy to guide the provision of services [at the federal level]’. This is reflected in a ‘limited integrated service delivery across departments’ (Auditor General of Canada, 2013: 9).
References


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