John Langford | Partnering for e-government: Yvonne Harrison | Challenges for public administrators

Abstract: Governments around the world are spending huge sums of money implementing electronic government. Public-private partnerships with information and communication technology firms have emerged as the vehicle of choice for implementing e-government strategies. Concerns are raised about the capacity of governments to manage these complex, multi-year, often multi-partner relationships that involve considerable sharing of authority, responsibility, financial resources, information and risks. The management challenges manifest themselves in the core partnering tasks: establishing a management framework for partnering; finding the right partners and making the right partnering arrangement; the management of relationships with partners in a network setting; and the measurement of the performance of e-government partnerships. The article reviews progress being made by governments in building capacity to deal with these core partnering tasks. It concludes that many new initiatives at the central agency and departmental/ministry level seem designed to centralize control of e-government projects and wrap them in a complex web of bureaucratic structures and processes that are, for the most part, antithetical or, at best, indifferent to the creation of strong partnerships and the business value that e-government public-private partnerships promise.

Sommaire : Les gouvernements du monde entier consacrent d'énormes sommes d'argent à la mise en place du gouvernement électronique. Les partenariats secteur public-secteur privé avec des entreprises de technologie et de communication de l'information sont devenus le véhicule de choix pour la mise en œuvre de stratégies du gouvernement électronique. On se demande si les gouvernements ont la capacité de gérer les relations complexes, pluriannuelles, et souvent avec plusieurs partenaires qui impliquent un important partage de pouvoir, de responsabilité, de ressources financières, d'informations et de risques. Les défis de gestion se manifestent dans les tâches fondamentales du partenariat : l'établissement d'un cadre de gestion pour le partenariat; la recherche de bons partenaires et l'adop-

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tion d'ententes de partenariat appropriées; la gestion des relations avec les partenaires dans un cadre de réseau; et la mesure du rendement des partenariats du gouvernement électronique. L'article passe en revue les progrès réalisés par les gouvernements afin de développer les capacités requises pour s'acquitter des exigences fondamentales des partenariats. Il conclut que de nombreuses nouvelles initiatives prises au niveau des organismes centraux et des ministères semblent conçues pour centraliser le contrôle des projets relatifs au gouvernement électronique et les englober dans une toile complexe de structures et processus bureaucratiques. Dans la plupart des cas, ces derniers sont antithétiques ou, au mieux, indifférents à la création de solides partenariats et à la valeur commerciale que promettent les partenariats secteur privé-secteur public en matière de gouvernement électronique.

Governments around the world are spending huge sums of money to implement electronic government. The exact amounts are hard to gauge precisely, even in the short term, because few governments isolate e-government spending from general information technology (IT) costs. Nevertheless, some rough estimates are possible. A recent report by Kable Limited on fifteen European nations put their total e-government budget for 2000–01 at 13.4 billion euros (approximately Can\$19 billion).¹ The Gartner Group estimates that U.S. e-government expenditure will jump from \$1.5 billion (Can\$2.37 billion) in 2000 to \$6.2 billion (Can\$9.8 billion) in 2005.² The Canadian federal government spends about Can\$4 billion per year on information technology, of which about Can\$280 million is specifically earmarked for implementing e-government during 2001–02. This latter amount does not include the large amounts being spent on the "Connecting Canadians" strategy and other anticipated initiatives to expand high-speed broadband Internet access.³

Public-private partnerships have emerged as the vehicle of choice for implementing the e-government strategies of governments throughout the world.⁴ These vehicles in their most complex manifestation involve multi-year collaborations with multiple and changing private-sector partners to build, operate and maintain complex and evolving electronic infrastructures. To be successful, such arrangements must provide for the accomplishment of the objectives of both government agencies and their "new economy" partners in circumstances in which authority, responsibility, financial resources, information and risks are being shared.⁵

All countries that took part in a recent Organisation for Economic Cooperation and Development (OECD) forum on information technology outsourcing reported significant failures at the project level in the form of budget overruns, missed deadlines, and results far below the standards agreed to when the projects were started.⁶ While existing measurements of success and failure of information and communications technology (ICT) projects are contestable, there is widespread agreement that there is room for significant improvement in the implementation of e-government.⁷ This article argues that if governments are successfully to pursue extensive e-government strategies in the future, more concerted efforts must be made to identify and meet the distinctive challenges that e-government partnerships present. The range of challenges includes factors such as the structure of the information and communication technology marketplace, the wisdom and the clarity of the e-government outcomes sought by political and bureaucratic leaders, the size of projects, and governance issues such as privacy protection and accountability. Our particular focus here is the more limited range of problems that public servants face as they contemplate the steps required to enhance the capacity of their organizations to manage public–private e-government partner-ships.

Our argument, simply put, is that the management of collaborative public-private partnerships generally represents a significant challenge,⁸ and the management of partnerships with ICT firms is even more complex. The article is speculative in character, drawing for evidence on the limited literature on this topic and the huge volume of government and industry reports and guidelines. It is intended to focus attention and provoke debate and further research rather than define a "one-size-fits-all" strategy for e-government partnering. The argument is constructed around a discussion of the following questions:

- 1. Are e-government partnerships a significant phenomenon?
- 2. Are such partnerships more than just big contracts?
- 3. What should a government-wide management framework for e-government partnerships look like?
- 4. How do you find the right partner(s) and make the right partnering agreement?
- 5. What structures, processes and skills are required at the business-unit level to manage the implementation of collaborative partnerships with ICT firms?
- 6. What performance measures are useful in the evaluation of the success of e-government partnerships?

Within the framework of these questions we think that many of the toughest managerial challenges of e-government partnerships can be engaged.

Are e-government partnerships a significant phenomenon?

Contemporary governments are placing significant emphasis on electronic government as a more efficient and effective means of making information, databases, interactive opportunities and services available to citizens and organizations.⁹ Many have set ambitious goals for making the Internet the one-stop "backbone" of service delivery¹⁰ and a key feature of the Third Way of doing government business ¹¹ Not to be outdone, Prime Minister Jean Chrétien has committed Canada to be the government "most connected to its citizens by 2004, with Canadians able to access all government information and services online at a time and place of their choosing."¹² In e-government, technology is used as an enabling strategy both to improve performance and/or transform government and its relationship with its constituents. From the performance perspective, "recent and dramatic advances in electronic commerce have set in motion models of interaction and efficiency that create expectations for governments to emulate, to make government information, resources and services more accessible and more useful to the public."¹³ On the reform side, the expectation is that this new business paradigm will enable governments to restructure both horizontally and vertically. "[I]nformed clients and an ever-competitive e-marketplace will drive organizations to collapse 'stovepipes' within their operations. The same forces will also drive organizations to look beyond their enterprise borders for opportunities to create linked supply-chains that offer greater value to shared clients."14

E-government initiatives appear to be establishing a pattern of multi-stage development similar to the pattern observed in the private sector. Casey sees it as a two-stage progression, distinguishing between electronic commerce and electronic business:

Electronic commerce is the buying and selling of goods and services using a variety of technologies singly or in combination. These tools include the Web, email, electronic funds transfer (EFT), electronic catalogs, and credit and smart cards. In contrast, electronic business is the leveraging of these same technology tools to redefine core business processes and thereby improve the performance of the enterprise and to reduce operating costs.¹⁵

The Little Hoover Commission, an independent oversight agency of the California state government, introduces an extra stage. The first stage is the development of a web presence through a simple web site; the second is the emergence of new digital businesses and digital business models; the third sees large companies re-engineer their business and models to "amplify their assets as well established corporations."¹⁶ Similarly, the Australian National Audit Office has identified four stages of Internet service delivery.¹⁷ Stage one includes the presence of a web site; stage two includes Internet access to a database; and stage three includes the ability to enter secure information and perform transactions. Finally, stage four includes the sharing of user data with other government agencies, leading to integra-

tion of government service delivery. Most governments are working on the first three stages, but few have significantly re-engineered their structures or their services to achieve the horizontal and vertical institutional reforms contemplated by a full-blown e-government model.

Not only are governments at all levels embracing e-government but they are using partnerships to produce it. Public-private partnerships are the policy instrument that "encapsulate, the new, essentially pragmatic Third Way view of the state."18 Government reports indicate that the most widely touted rationales for partnering with new-economy firms are the need to innovate, share risk, reduce costs, and increase the quality of government programs and services.¹⁹ It is widely accepted that go-it-alone ICT/e-government strategies are costly and have not achieved the desired levels of performance or transformation desired by governments. Governments are seen to lack IT competence, to have difficulty "keeping up" on their own with the changing new economy, and to lack incentives to innovate.²⁰ The Little Hoover Commission, which examined California's IT projects, recommended that "(t)he state should develop a variety of P3's to tap the expertise of the best technology experts, cutting edge businesses, leading universities and other public institutions. These partnerships should be used to conceive, develop, operate and evaluate e-government applications."²¹ Despite the fact that there is "(n)o conclusive theoretical or empirical support for the assumption that outsourcing will always lead to more focused organization, higher flexibility, lower costs and staffing levels, economies of scale and to the solution of all problems with IS (Information System) departments,"22 contemporary governments appear to be universally committed to collaborating with the private sector in the creation of e-government.

In Canada, at the federal level at least, an additional rationale for partnering to produce electronic government appears to be linked to the vision of Canadian industry as a leader in electronic commerce. The Government of Canada appears to be subscribing to the view that if you are going to sell the technology, you must be able to use and have benefited from the technology. This vision appears to be shared by other governments, including that of the United Kingdom. A further confounding rationale that is present in some jurisdictions is government's desire to enhance the ICT industry within its jurisdiction by using partnership opportunities to increase participation and competition. An example would be the Australian government's "Whole-of-Government Information Technology and Infrastructure Consolidation and Outsourcing Initiative."²³

As Figure 1 illustrates, there are numerous examples in Canada of e-government partnerships between the public and private sectors that span a wide range of public-sector activities. Figure 1. Examples of E-Government Public-Private Partnerships

Public Key Infrastructure (PKI)

The Government of Canada (Treasury Board) and Entrust Technologies have partnered to develop Public Key Infrastructure (PKI) privacy and secure infrastructure utilizing encryption technologies. The partnership is in the form of a development contract, with the private partner obtaining commercial rights to the product and public partner obtaining licensing rights to use the product. A host of Pathfinder Projects are underway to test this technology.

EPOST

The Canada Post Corporation and Cebra (e-commerce subsidiary of Bank of Montreal) have partnered to develop the Electronic Post Office. The partnership provides privacy and security infrastructure to create a "virtual seal" around each postal transaction. More recently, Canada Post Corporation has partnered with EDs to handle Web-hosting responsibilities including the monitoring and management of EPOST's complex infrastructure.

Integrated Justice Project (IJP)

The Province of Ontario and a private-sector consortium led by EDS Canada Inc. The IJP is a multi-ministry, multi-partner project with a vision of modernizing major justice "business" processes by business re-engineering using technological solutions. Goals of the project include better information sharing within the justice sector, reduced delays and improved efficiency. Through this new information system, information is to be entered into the justice system once, at the start of the process, and people involved should be able to receive information when they need it.

Atlantic Canada On-line

The governments of New Brunswick, Newfoundland and Labrador, Nova Scotia and Prince Edward Island have a multi-year contract arrangement with Unisys Canada Inc. to provide business and consumer information and services within a single point of access. This service allows for both information retrieval and submission.

BC OnLine

The Government of British Columbia has a ten-year partnership with MacDonald, Dettwiler and Associates (MDA) to allow the latter to run BC Online, the government's electronic information access service. MDA will pay the province to use and market BC OnLine technology and distribute government information. The company will collect service charges from customers and will also receive performance-based development fees from the government to keep BC OnLine state-of-the-art.

Are such partnerships more than just big contracts?

Outsourcing arrangements can take many forms. They can range all the way from simple external operational relationships in areas like electronic banking and data processing, to more robust arrangements to create sophisticated interactive services. The former may be no more than a traditional arm's-length performance contract between a principal and an agent in which the service or good is produced to standards set down in the contract. The latter arrangements involve multi-year, collaborative partnerships in the concurrent fulfilment of both public policy objectives and the goals of the private-sector partners. This can mean significant sharing of authority, information, planning, decision-making, financial risk, responsibility and accountability over a protracted period. Such arrangements are a far cry from lesser forms of "partnership" and raise challenges well beyond the establishment of good contract management practices.²⁴ The closest equivalent arrangement in the private sector would be the strategic alliance that has become a common vehicle of choice for technology transfer in the new economy.

Beyond the general challenges of partnering, there are some special features of e-government alliances that make them even more difficult for governments to work with. First, private-sector partners are being asked to create and, often, run and maintain systems central to the most important service functions that governments perform. Governments are choosing in some cases to outsource not only technology production but also management and delivery of technology functions to a network of partners in order to concentrate on achievement of core objectives. This can result in powerful levels of interdependency among government agencies and private-sector partners, placing even more pressure on the agency's capacity to manage that relationship effectively.

Second, many e-government technology partnerships are likely to be multi-party arrangements. More often than not, the development and implementation of key elements of e-government will require a multidisciplinary set of private-sector application and integration partners. The "virtual enterprise" is what most U.S. state governments are referring to when describing the network or web of partners needed to achieve e-government objectives.²⁵ In addition, most partners already co-exist within a consortium or do business within partnership networks of their own. L. Segil reports on how networks of new-economy alliances have become a significant feature of the e-business model. Alliances have evolved beyond the traditional bilateral relationships to include what Segil refers to as "The Spider Network" of alliance activity.²⁶ By joining with networked enterprises, governments effectively are taking part in "cross functional, multiorganizational operations which can span large parts of an industry and / or inter-industry operations."²⁷ This is a far cry from the simple bilateral performance contract.

Third, the memberships of these networks may not be stable through the life of a partnership with government. "Mergers and take-over attempts among IS (information service) suppliers have become common practice. ... Mergers have led to the outsourcing market being concentrated in the hands of a relatively small number of IS suppliers ..."²⁸

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Fourth, the goals of ICT partnerships may have to be more flexible and "renewable" than those of a traditional service contract. This need for goal flexibility can be the result of rapid changes in the technologies themselves. "Since information technology is constantly evolving, the solution envisaged at the beginning of a project may no longer apply by the time the system is procured."²⁹ Another rationale for "goal flexibility" is the potential for policy, program or organizational change during the course of what can be a lengthy project. Finally, the informal manner in which many ICT partnerships begin can be a factor.³⁰ A "handshake" or series of loose, cascading contractual arrangements can lead to a major collaborative partnership in which the goals change as the scope and nature of the relationship evolves. For governments, more accustomed to the fixed outcome contract or the more legally secure and static joint-venture arrangement, adjusting to the notion of shifting goals can be a significant challenge.

The conclusion we draw from observing the characteristics of collaborative partnerships in general and ICT/e-government partnerships, in particular, is that this form of outsourcing presents public-sector agencies with a significant set of management challenges that are qualitatively different from those represented by traditional purchase of service or goods contracts. These challenges manifest themselves in the core partnering tasks: establishing a management framework for partnering; finding the right partners and making the right partnering arrangement; the management of relationships with partners in a network setting; and the measurement of the performance of e-government partnerships. How are governments enhancing their capacity to perform these tasks?

What should a government-wide management framework for e-government partnerships look like?

In recent years, a number of governments have responded to the failure of major ICT projects by attempting to reframe their overall approach to them. Generally, this has involved embracing the philosophy that such projects should be better managed at the project level and, more significantly, that they should be managed more "cosmically" in the context of the relevant objectives that the government and the lead agency are pursuing. In short, e-government projects are not the application of technology for its own sake but must be embedded in higher business purposes of the sponsoring agency and the wider government and managed to such ends.

When the Little Hoover Commission examined the management of IT projects in California, it found that "for the most part policy-makers still approve projects on a case-by-case basis, rather than thinking of technology projects as a portfolio of investments for achieving a shared vision for how the state should serve people."³¹ Technology management is decentralized, with multiple state agencies running "a gauntlet of oversight and control agencies to deploy technology."³²

In a survey of U.S. states by the Center for Digital Government, the Progress and Freedom Foundation, and Government Technology magazine, the State of Washington ranked the number-one digital state in the U.S.³³ "[E]nterprise-wide leadership" is the management structure "found in states leading the digital revolution."³⁴ One of the unique administrative/leadership characteristics that made Washington State number one is the "partnering" role of the chief information officer (CIO). "The CIO provides leadership for enterprise-level technology initiatives such as implementation of the State's digital plan, but must partner with departments in the deployment of technology that crosses boundaries."³⁵ Similarly, the Georgia Technology Authority (GTA) was established to coordinate IT projects within government. The GTA is structured with a governing board consisting of privatesector business and a leadership team. Much of the work of the GTA is to begin the process of defining state government as an enterprise, using a portfolio management approach to bring a coordinated and comprehensive IT vision to the entire government.³⁶

Many of these enterprise-wide leadership models appear to be emulating structures and processes found in the corporate headquarters of sophisticated strategic alliance firms in the private sector. These would include senior alliance-management teams, an alliance-oriented senior executive position, a committee of the corporate board, and a rich set of policies, procedures and best practices guidelines to be used by business units within the firm.³⁷ In Ottawa, for example, the initiative is called the Enhanced Management Framework (EMF) for Information Management/Information Technol-

ogy and it is managed by the chief information officer (CIO) in the Treasury Board Secretariat. At the broader level – labelled portfolio management – emphasis is placed on the alignment of a department's e-government strategy with its business plan. It emphasizes the need to set priorities and budgets for a line department's e-government investments as a whole, "allowing it to assess and successfully manage projects, existing operations, enhancements and innovative pathfinders." A business case puts the investment decision in a strategic context and provides an analysis of all costs, benefits and risks associated with the initiative and any optional investments. This framework forces line departments to review their options and available funds and choose the e-government investments that will deliver optimal value. "[Enhanced Management Framework] also promotes the application of project management disciplines to all approved initiatives, as well as the implementation of risk and performance management throughout the entire process."³⁸

> It will be equally important to discover whether, by dint of their exacting bureaucratic demands, these frameworks make it more difficult for departmental project managers to introduce flexibility into the procurement process and the implementation of partnerships

But these department-level procedures are being put in place in the context of strong direction from the centre. The Implementation Council drives the institutionalization of EMF across government. The council is a partnership of representatives from twenty-eight departments, the Office of the Auditor General, and central agency functional areas such as policy, risk, audit and procurement. Working with the council, the CIO Branch develops frameworks, sets out solutions and toolkits and generally acts as a cheerleader for the development of better e-government partnership management practices in line departments. More importantly, the CIO Branch and the new Information Management Board assess all new projects submitted to Treasury Board for approval by departments against the model of best practices set out in the EMF and its many supporting guidelines. Approved projects face demanding reporting and ongoing approval processes at various "gates" in the project life cycle as well as internal audits. The two-stage (preliminary and effective) project approval process and gate reviews are bureaucratically demanding and have the effect of putting the control of departmental projects in the hands of the Treasury Board.³⁹

Similar management frameworks, almost all featuring significant centralization, are becoming a common feature of the macro-management of e-government partnerships in developed countries.⁴⁰ In the United Kingdom, for example, it was recently recommended that

the Office of the *e-Envoy* should have dual key responsibility for the release of electronic service delivery funding. It will be responsible for approving e-Business plans, and for recommending that the Chief Secretary (to the Treasury) release funding to support them. Release should be conditional on satisfaction that plans put forward support the government's wider objectives for e-Government and that departments have robust plans for realizing efficiency gains. This includes the programme being fit for purpose, compatible with the single portal and with cross-cutting delivery.⁴¹

In addition to the creation of the e-Envoy in the Cabinet Office, the ICT procurement process is being re-organized under the new Office of Government Commerce. The parallels between these initiatives and innovations in Ottawa are marked.

Most of these developments at the centre are recent and there is little empirical data available on their impact on the success rates of large ICT projects. An important test will be whether these macro-management frameworks engage the most senior political and bureaucratic leadership as supporters of e-government partnerships. It will be equally important to discover whether, by dint of their exacting bureaucratic demands, these frameworks make it more difficult for departmental project managers to introduce flexibility into the procurement process and the implementation of partnerships.

How do you find the right partner(s) and make the right partnering agreement?

Traditional government procurement systems with their dependence on mechanistic, lowest-bid, tendering processes, standardized contracts and penalties for non-performance seem inadequate to the realities of partnering with contemporary ICT firms to develop large complex systems for providing services and restructuring government. From a cultural perspective the emphasis of governmental tendering systems is on risk reduction and certainty, two values that seem out of place in a context that sees risk as opportunity and sees advantages for all parties in the flexibility of the "incomplete contract." From an institutional perspective, the slavish reliance on devices such as requests for "interest," "qualifications" and "proposals" can be at odds with the informal networking, information sharing and negotiating that establish the existence of complementarity and characterize the incremental development of value-adding partnerships in the ICT world. They are also at odds with the speed with which strategic alliances are established in the private sector.⁴²

There is clearly a need to find a balance between the demands of these two polar-opposite procurement models that will allow governments and ICT firms to enter into productive, value-adding partnerships. In particular, we need to find ways to build in more focus on establishing the process of the partnership rather than tightly defining a final product; reduce the time required to make a contract; partner with consortia; enhance the flexibility to add and subtract partners during the course of a contract; and rethink approaches to risk management. Some agencies (e.g., the U.S. Department of Defense) appear to have made significant advances towards adopting commercial contracting processes and performance specifications in recent years.⁴³

Institutionally, one of the most critical reforms to be considered is the restructuring of the contracting process, moving away from the sealed bid model to allow for more negotiation of all aspects of the relationship. It is also worth considering the adoption of a "cascading contract" approach to partnering that would allow more uncertainty and flexibility to be built into each of a *framework*⁴⁴ of smaller (and, therefore, less expensive) projects in a context wherein the partners could dissolve the partnership at the end of each contract.⁴⁵ Turning "whale" projects into a series of "dolphin" projects is the trademark solution of David Feeny of Oxford University.⁴⁶ This strategy appears to have been incorporated into official thinking in the U.K., where there is much talk of *modular* or *incremental* development of large IT projects.⁴⁷ and to a lesser extent in Ottawa where it is known as the *phased approach*.⁴⁸

There are a number of alternative procurement models emerging. Some, such as the U.K.'s new Gateway Process, appear to be largely oriented towards risk reduction through tight central control and evaluation. The Gateway Process considers the project at critical points – gates – in its development. There are five gates during the life cycle of a project, three before contract award and the other two looking at service implementation and confirmation of the operational benefits.⁴⁹ Other models show more sensitivity to adaptation of the traditional tendering process to the partnership setting. For example, the Benefits-Driven Procurement (BDP) Model was developed within the federal government to address shortcomings of the government's Common Purpose Procurement Policy in dealing with major ICT projects. The BDP Model

evaluates vendor bids and measures project success in terms of client-defined benefits or desired outcomes, rather than by conformity to mandatory specifications or lowest cost. It includes a business case with a significant risk management regime and invites vendors to share in the financial risks and rewards of the project ... The objective now was to foster cooperation between client and vendor so that both were aligned and working towards the same project objectives.⁵⁰

Nova Scotia's Cooperative Business Solutions procurement method

may be used by any client (department) to enter into an alliance with a supplier to

solve a particular business problem jointly. In so doing, the client can utilize the skills of both its own staff and the supplier in resolving the problem. ... Since both the client and the supplier must devote resources to the project, a continuous dialogue between client and supplier is assured. ... Other advantages to the cooperative approach are the opportunities to share the risks as well as the benefits from the project. These must be negotiated and form part of the contract between the Crown and the supplier. ... As no solution is specified in the CFP, the successful vendor can suggest creative and innovative alternatives to the client. By not restricting the project team to developing a predetermined solution, total flexibility is maintained as long as possible. CBS achieves the ability to address and facilitate unique solutions to problems which would previously have been difficult to deal with. ... CBS projects are typically developed in phases. Since resources from both the client and the supplier are involved in developing a solution, the ongoing and changing needs of the client are kept foremost in mind. The project participants are not encumbered by a potentially outdated vision of the problem and its solution. Instead, the project team, both client and supplier members, identify and refine those requirements as necessary during the project. ... Since each phase of the project is covered by a different contract, methods of payment are negotiated for each.⁵¹

Both these models share common features that appear to have been emulated in other procurement reforms across Canada. These new models create many of the conditions for kick-starting a successful collaborative partnership and go a considerable distance towards meeting the shortcomings of traditional procurement processes. Unfortunately, the ICT/e-government experience with such common purpose processes remains largely unexamined in the public administration literature.⁵² It is hard to say at this point whether the reality of making partnership agreements bears much relationship to the rhetoric.

Structural reform of contracting will have little positive impact if governments do not have access to sophisticated professional skills at the front end of the partnering process. This raises organizational and expertise questions. From an organizational perspective, the key issues are the capacity of individual agencies to partner on their own and the nature of the centralized body required to back up the initiatives of individual agencies or groups of agencies. There are almost as many approaches to the organization of e-government expertise as there are governments. But, because of the potential implications of the implementation of e-government for service delivery and coordination across the entire system, it is becoming common to have central coordinating bodies involved in both government-wide and agencylevel strategic planning and the procurement process itself.

Regardless of how the outsourcing in this area is organized, government agencies have to have access to a wide range of experts capable of building strategic plans that integrate e-government initiatives into the wider strategic objectives of agencies, groups of agencies and the government as a whole; market surveillance and analysis, particularly with a view to identifying both appropriate technologies and private-sector partners that would have a good strategic and cultural fit with the agency; and negotiating significant partnering arrangements. In the private sector there is a clear consensus that in-house capacity is crucial to successful outsourcing.

(A)Ithough there is a relearning process from previous collaborative practices of the late nineteenth and early twentieth, it is being accompanied in many cases by continued growth of in-house research and technical capacity. We therefore seem to be emerging into a different, new era in terms of research and technical competences and collaborative patterns for firms as companies now seek a more balanced and mature approach to their research and technical requirements. Firms accept that they need in-house capacity to appraise, select and then use "brought in" research and technical elements.⁵³

Many governments, especially at the local level, use consultants to manage the start-up tasks. While consultants may be helpful for a second opinion, depending solely on them for strategic and market advice is not a good strategy.⁵⁴ Many e-government initiatives potentially have significant implications for the restructuring of government services and it is essential, therefore, that governments have the internal capacity to advise on where these projects are taking them. Until very recently, it has proved particularly difficult for governments to attract and retain ICT experts, especially in an environment in which salary expectations are high, the supply is limited, and the experts are being courted daily by the firms with which they are negotiating. A number of U.S. state governments have adopted an enterprise business model to managing ICT projects and are taking aggressive actions "to recruit and retain technology personnel, and streamline the procurement of IT goods and services."⁵⁵

What structures, processes and skills are required at the business-unit level to manage the implementation of collaborative partnerships with ICT firms?

The literature on private-sector strategic alliances argues that the key values underlying a successful partnership experience (where success depends on exploiting the complementarity of the partners) are trust, flexibility, collaboration, information sharing, network and negotiation. The structures and processes that have demonstrated their effectiveness naturally tend to be those that foster these values. At the business-unit level they include specialized alliance managers and other alliance specialists. At the inter-organizational level, alliance managers and staffs from the partnering firms work together to create boundary-spanning structures and processes (such as joint teams and task forces, collocation of activities, executive conferences and interchanges) that encourage open communication, information sharing, informal dispute resolution, and consensus-based decision-making. Obviously, "alliance managers" both at the deal-making stage and throughout the implementation of the partnership are, first, risk managers capable of understanding the strengths and weaknesses of the partners as the alliance unfolds and, second, network builders capable of sustaining a portfolio of horizontal linkages among partners.⁵⁶

These general partnering lessons are reinforced in the limited literature on new-economy partnerships. It is argued that such partnerships demand a focus on ICT within evolving projects, rather than a fixed-term contract. Traditional management structures may be limiting and managers may not have the requisite skills needed to manage e-government partnerships effectively. In moving to e-government, the public sector has the burden of operating two distinct business models – one largely hierarchical and the other largely horizontal. Segil refers to the complexity of this management task as the equivalent of having to "grow two heads."⁵⁷

The literature suggests that ICT partnering has resulted in a high failure rate in both the public and private sectors not because of any intrinsic weakness of the strategy but because of a lack of organizational and human capacity to manage technology partnerships effectively in a rapidly evolving context. The OECD reports that many jurisdictions have experienced problems that have led to "substantial direct and indirect costs" "discouragement of staff" and "a loss of public confidence in public sector management."⁵⁸

R. Mornan sets out the problems associated with procurement of ICT projects and how they often "fall short of expectations." Some of the problems identified start with contract start-up failures (e.g., the acceptance of the lowest bid), but many more problems emerge from the application of adversarial contract management practices during the implementation stage. "The winner strives to manage within the narrow limits of the specifications, creating constant conflict over what is within or outside the specifications."⁵⁹ Acknowledging this phenomenon, J. Howells argues for the establishment of a technology outsourcing skill set at the partnership implementation stage that includes portfolio/relationship management, proactive communication, and networking.⁶⁰

A number of reports reflect the concern about the capacity of government agencies to manage the implementation of ICT partnerships. For example, the Little Hoover Commission identifies how the State of California will not be able to successfully implement and "embrace e-government because it still cannot reliably manage technology projects." The commission comments that little progress has been made to prepare the state institutionally: "particularly at the departmental level, the state has not universally implemented the management practices necessary to take projects from concept to completion."⁶¹

Some sophisticated governments are taking initiatives to enhance their capacity to manage the implementation of major IT projects at the department/agency level. In the United Kingdom, the emerging model recommends that a "senior responsible owner" (SRO) take overall responsibility for each department-level project. The SRO is supported by a complex web of players including a "project board," a "program manager" and a "project-level SRO," a "business change manager" and a "senior user" working together within a formal project management methodology – the Gateway Process – and a formal risk management framework.⁶²

Except for the occasional mention of the "supplier," the private-sector partners remain largely invisible in the management edifices constructed or proposed

Again, there are strong parallels with the approach to the implementation of ICT projects emerging in federal departments. A senior departmental official responsible for the business function enhanced by the technology is expected to be the "project sponsor" supported by a "senior management committee." The implementation is driven by the "project charter" between the end users and the technical groups involved in the project and takes place within the framework of a "project execution process" set down by the Chief Information Officer Branch. This process sets out the roles for the "project leader" and the "IT project manager" and team and places strong emphasis on change, business continuity and risk management.⁶³

These initiatives clearly represent significant efforts to improve the success rate of major IT projects. Similar approaches are being adopted by several other OECD nations. What is fascinating about these complex formulae for implementation is their fixation with implementation as a project management problem. Despite the widespread acceptance of the reality that all of the development and building of e-government will be outsourced they make only passing reference to partnership management. Except for the occasional mention of the "supplier," the private-sector partners remain largely invisible in the management edifices constructed or proposed. This is particularly noteworthy in view of the relational elements being introduced into some reforms of the procurement process. It is also in startling contrast to the strong emphasis placed on partnership management at the business-unit level in private-sector strategic alliances. One hint of light at the end of the tunnel is found in a recent report by the Central Computer and Telecommunications Agency (now folded into the U.K.'s new Office of Government Commerce), "which focuses more on the management of the relationship with the service provider."64

What performance measures are useful in the evaluation of the success of e-government partnerships?

To effectively monitor progress of a partnership arrangement, the publicsector agency involved has to ensure that a reporting regime is in place that is appropriate to the nature and complexity of the partnership being managed. It is this latter condition that presents a significant challenge as public-sector agencies become involved in more robust partnerships for the development and delivery of e-government. The issue is the degree to which governments are prepared to move from strict contract compliancereporting by the agency alone to a more complex, shared performance-reporting model. This is not an area in which public administration literature or government thinking has progressed very far.

In considering this problem, it is helpful to lay out the components of a performance measurement system as it might apply to a simple standardized contract with a supplier and then puzzle through the kinds of changes that might be required as an agency slides along the privatization continuum to engage in more complex partnerships. Briefly, best contract-management practices with respect to performance measurement would include government imposed service-delivery standards defining the work in measurable terms; quality, quantity and timeliness requirements; and a description of how the suppliers' performance will be assessed against these standards and the fees paid related to performance.⁶⁵ What changes should be contemplated in the context of a larger, more complex partnership arrangement in which both parties share substantial risks, have a common interest in keeping their goals both aligned and flexible in the context of changing technology, and want to create incentives to improve performance and seek innovative solutions over the length of the partnership?⁶⁶

There is no easy answer to this question. Measuring the performance of ICT public-private partnerships has been identified in the literature as a difficult challenge.⁶⁷ In a 1995 report titled "Systems Under Development – Managing the Risks," the Auditor General of Canada noted weaknesses in information systems performance monitoring, including a lack of an effective performance monitoring system and inadequate performance measurement data.⁶⁸ Eric-Hans Klijn and Geert Teisman note the lack of attention paid to the complex networking aspects of public-private partnering.⁶⁹ In an analysis of local government public-private partnerships in Sweden, Sven-Olof Collin and Lennart Hansson describe how the "performance of a PPP is as ambiguous as its character. ... It is difficult to make rules of thumb about what the efficiency of a PPP should be since there are diverse objectives behind the creation of each PPP, and, hence, without knowing these specific objectives it is hard to evaluate how a particular PPP has been successful in

meeting its aims."⁷⁰ Adam Jaffe notes that public-private partnership projects in technology "have never been designed with economic evaluation in mind. Without some comprehensive evaluations, public debates on these programs tend to focus on easily measurable private returns and easily understandable anecdotal stories of project success and failure."⁷¹

In his study, "Performance Measurement of Electronic Service Delivery," Edward Robertson found that "the practice of performance measurement applied to government services is experimental. Administrative and validity problems result from technological solutions that are implemented and measured in a blanket fashion."⁷² Moreover, measuring performance is difficult to establish in electronic service delivery because "establishing measures is considered a 'process' and one that requires planned coordination."⁷³ Damian Tambini elaborates further: "[m]easuring progress to ESD is not an exact science. Measurement criteria are not clear. ... [H]ow is it possible to guard against departments cooking the books, focusing only on their more successful aspects of ESD, or stretching the definition of electronic delivery?"⁷⁴

> [T]here is little overt indication in these reforms of the emergence of a performance measurement framework that recognizes the critical partnership element of contemporary ICT outsourcing

Gezinus Hidding and Jeffrey Williams report that the private sector faces a similar challenge with performance measurement in the new economy. "[D]ifferent products evolve through their life cycles at different speeds but how do you know at what speed a given business will evolve? How long will the competitive advantage (once obtained) last? How do you know what the competitive success factors will be? What are the key measures to track over time?"⁷⁵ Segil reports how the measurement of e-business alliance performance will differ from traditional alliance performance measurement. More specifically, she describes how the need to develop more flexible alliances in a reduced time-frame will affect the way performance is measured. She uses the term "metric" to describe performance measurements and contrasts traditional and new-economy approaches. She provides three categories of FastAlliance metrics, including financial, relationship and non-financial categories.⁷⁶

Admitting that IT project performance measurement has been spotty in the past, OECD governments have begun to address the performance management challenges of enhanced partnerships. As noted above, the Government of Canada has created complex central and departmental agency structures and processes designed to enhance the management of IT projects. The Enhanced Management Framework, Business Case, The Project Charter, the Review Schedule tied to Gates and the traditional internal audit are all part of an attempt to ensure that departments and central agencies are in a position to monitor progress against objectives. The British government is recommending that the "senior responsible owner" (SRO) depend on a rolling series of peer reviews by fellow project practitioners and that gate reviews be used for all IT projects. Both of these processes will be under the ultimate control of the central Office of Government Commerce.⁷⁷

There is an encouraging sign in the British reforms that, while the focus of performance measurement is on "quality, performance and risk," the reviews will also evaluate whether "services, supplier/customer relationships and contracts are continually managed to an agreed standard in order for the benefits of the project to be realized."⁷⁸ But this is grasping at straws. Overall, the steps being taken by OECD countries look like little more than the extension of more rigorous performance contract methods in the context of increased central agency control. Pursuing the general thesis of this article, there is little overt indication in these reforms of the emergence of a performance measurement framework that recognizes the critical partnership element of contemporary ICT outsourcing.

While there is no full-blown partnership performance measurement model available, the very nature of partnering suggests that a new approach might incorporate all or some of the following elements:

- a shared approach to results-oriented performance measurement in which both parties agree on the measures and the reporting vehicles and presentation and share the measuring and the production of the required data. Transparency and information-sharing among partners is essential. "Performance measurement as traditionally practiced ... tends to look at the process as more mechanical and one-way: managers measure what they do, and then pass the information along to their overseers. For the process to work well, the participants have to understand the stakes and the incentives of those on the other side and supply information that will be heard",⁷⁹
- the use of some form of commercial contract that recognizes the performance obligations of both the government and the private-sector partners and establishes measures for tracking the performance of both as well as the evolution of their respective risk profiles;
- a performance incentive system that links rewards (bonuses, agreements to share extraordinary costs related to better performance or allow for justifiable price increases against better performance) to additions in value to the agencies' business and foregoes profits if agreed-upon levels of value-added are not met; and
- a focus on learning and adjustment rather than winning or losing. This
 might involve innovations such as the creation of targets for continuous

improvement and an acceptance of the notion that objectives should be revisited and reset with the agreement of both parties.⁸⁰

Getting the partnership aspect of performance measurement right is only half the battle. Before entering into negotiations with partners about measurement, public-sector agencies need to determine what measures would actually help them understand whether they have met the objectives set for implementation of e-government capacity. There is room for considerable experiment and evaluation here in the face of our lack of experience with e-government metrics.

> We need to look more carefully at successful e-business partnerships to see what elements of the management of these strategic alliances can be adapted to public-private partnerships

Conclusion

We will not belabour the thesis that we have been expounding in this article. If ICT public-private partnerships are going to be a central feature of the creation and maintenance of e-government then we argue that the characteristics of collaborative partnerships will have to be more aggressively catered to in the structures and processes being created to manage this phenomenon. The failure of large numbers of outsourced IT projects has led to a whirlwind of risk-reducing management reform activity, almost all of which will have the effect of centralizing control of such projects and wrapping them in a complex web of bureaucratic structures and processes that are, for the most part, antithetical or, at best, indifferent to the creation of strong partnerships. At this point, these reforms are largely promise, and interested private-sector observers have seen little evidence of their impact at the project level.⁸¹ But if these reforms do take hold it is doubtful that they will be the key to unlocking the business value that e-government public-private partnerships promise. They certainly don't represent a very progressive response to the challenge of effective management of "disintegrated" procurement and delivery systems. We need to look more carefully at successful e-business partnerships to see what elements of the management of these strategic alliances can be adapted to public-private partnerships. If the public sector is not capable of raising its game above the more rigid application of project management of performance contracts then we may have to consider limiting ICT outsourcing to smaller, closed-ended projects suitable to such approaches. Since this does not appear to be an option, we need to encourage further research, debate and action about how to build partnership management into the development of e-government.

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