

ICA COUNTRY REPORT

Canada

Building Capacity to Accelerate Service Transformation and e-Government

“This year Canada again shows signs of taking the first steps toward the next plateau and realizing that further service delivery improvements will require service transformation.”

From the Accenture report “*e-Government Leadership – Engaging the Customer*” April 2003.

INTRODUCTION – FROM GOVERNMENT ON-LINE TO SERVICE TRANSFORMATION

Putting the citizen at the centre of a “whole-of-government” approach to using information and communication technology continues to drive the Government of Canada’s vision for e-government. Our work is proceeding along five lines: service delivery, common secure infrastructure and architecture, policy, organizational readiness and human resources, and communication. We have made significant progress in all these areas since our last report to the International Council for Information Technology in Government Administration, and we are on track to meeting our 2005 Government On-Line (GOL) and Service Improvement targets. However, over the past year, we have also been challenged as never before on three fronts: the question of value for money, the transformation of our business processes, and governance.

Pressures to improve services and modernize our operations are escalating. Citizens’ expectations for immediate, seamless access to integrated public services continue to rise as more Canadians experience the convenience – in everything from buying cars to insurance – of the private sector’s use of customer relationship management tools (CRM) to improve customer service. At the same time, as taxpayers, citizens are looking to governments at all levels to improve productivity and achieve better results across all public services -- from safety and security to health care.

Canadians want service improvements *and* greater value, transparency and accountability from their governments. While more than two-thirds of Canadians surveyed late in 2002 reported that they were satisfied with the services they receive from government, more than half expressed dissatisfaction with how government manages its operations, including cost-effectiveness, openness, and accountability for public spending.¹

The Government of Canada’s Service Vision

Using information and communication technology to enhance Canadians’ access to improved citizen-centred, integrated services, anytime, anywhere and in the official language of their choice

- Our Government On Line Delivery Target: Most commonly used services on-line by 2005
- Our Service Improvement Target: A 10% increase in citizen satisfaction by 2005

¹ Listening to Canadians: Communications survey, Communication Canada, Fall 2002, pg. 18.

Two drivers are behind the Government of Canada's efforts to transform its services and its service delivery network: the need to improve the service experience for citizens *and* the need to increase productivity and transparency. We must deliver better results and be *seen* to be doing so for clients at the service level, and for taxpayers at the operational level.

Expediting service transformation and progress toward on-line government will demand an increasing degree of internal coherence, principally through more integrated service and administrative processes and systems across government. Meanwhile, our capacity to invest large sums will likely be constrained for some time to come and our efforts to modernize services and the internal administrative processes that support them will have to be largely financed within existing budgets. Fiscal pressures coupled with the general capacity issues we face, such as potential shortages in experienced personnel as a significant portion of our workforce enters retirement age, add extra impetus to the need to deliver operational efficiency gains from our service transformation agenda. It is clear that we will not have the capacity to maintain the current state of our infrastructure, with its duplicative service and administrative processes and systems, nor the personnel that the status quo requires, and be able to continue to deliver excellence in policy development, programs, and service delivery for Canadians.

Over the past year, we have made significant progress in all five of our workplan areas for on-line service delivery and continued to innovate at the front line to move towards service transformation. Cutting across these efforts are two guiding principles that have been front and centre in our efforts to build e-government from the beginning:

- client-centricity, or moving to citizen-centred programs and services to improve the service experience; and,
- a whole-of-government approach, or transforming how we do what we do across government to deliver operational efficiencies and better results for Canadians.

Our efforts to transform services and improve operational efficiency must meet both principles.

WHAT'S NEW ON THE SERVICE FRONT

Canada's current level of e-government maturity

In its 2003 analysis of 22 countries' e-government initiatives, Accenture, a leading management consulting and technology services company, singled out Canada as the only country whose initiative is on the cusp of true service transformation. Accenture defines this level of maturity as having a vision of improved customer service delivery measured by increased take-up, where e-government is tied to a wider transformation agenda that includes multi-channel integration at all levels across the enterprise, from business strategy to technology.

Integrated transactions being processed successfully.

Evidence of having reached this level is service delivery that supports integrated transactions with clients. While we have a long way to go to achieve this government-wide across all channels, we have made progress making it possible for clients to conduct multiple transactions in a single on-line visit. These integrated services are available to businesses as well as citizens. Using Business Registration On-Line (www.businessregistration-inscriptionentreprise.gc.ca), businesses can, in one transaction, register for a Business Number, the federal GST/HST (Canada's sales tax), payroll deductions (for income tax and pension purposes), import/export and corporate tax. In addition, businesses in three provinces can simultaneously apply for various provincial licenses, permits and accounts. Previously, businesses would have had to register for all these programs separately. Similarly, through the Jobs, Workers, Training and Career portal on the Canada Site, individuals can access, in a single session, information and many

transactional services relating to finding a job, accessing training, financing learning, and career development.

The most popular integrated information and transaction services.

Between now and 2005, over 130 of the most commonly used services will be fully on-line, and most of these will be integrated, either by collapsing a number of transactions into one, or offering access to a complete suite of services in response to a specific life event or need, all in one session.

While the number of integrated service transactions is still low, the Government of Canada is providing many more examples of integrated *access* to transactional services. The Canada Benefits web site (www.canadabenefits.ca) provides information about financial assistance programs available to Canadians via federal and provincial/territorial governments. Through the Benefits Finder, a new feature of the site, users can obtain a list of all the benefits they may be entitled to from these two levels of government simply by inputting basic information about themselves, their families and where they live. Since its launch, the Canada Benefits web site has received over 800,000 visitors, making it one of the most popular integrated on-line service offerings. There are also more integrated access services for specific client groups. Through the "Seniors" portal, older Canadians can access a full range of information and services from all levels of government in Canada. This portal also provides the information and services Canadians need to help them deal with the death of a parent or a change in care giving situation.

Among on-line integrated access services for information, the Canada Health Portal, which was launched in May 2002, is one of the most popular. This service provides a single access point to authoritative and reliable health information organized by groups within the population that have distinct health issues and concerns, such as women, seniors and Aboriginal peoples.

Multi-channel service delivery

On the multi-channel front, the Canada Business Service Centres, representing 37 federal business departments, provincial and territorial governments, as well as associations and research organizations, provide business people everywhere in Canada with accurate, timely and relevant business information and referrals. Services are available by telephone, fax, mail, e-mail, web and in-person (www.cbsc.org).

Integrated, multi-channel services are now available in person for some clients at border crossing points. At the Vancouver International Airport, pre-approved low risk travellers can use CANPASS-Air to move quickly through customs inspections using iris recognition technology as proof of identity. These clients can also pay duties or taxes electronically on declared imported goods at the CANPASS kiosks using a credit card.

Canadians who have lost their jobs can already apply for general Employment Insurance benefits on-line. (Close to 650,000 clients have applied on-line since the service was first offered in April 2002.) In the coming year, this service will also be offered at Internet access points located in government offices across the country, where Canadians can access related in-person services, such as job counselling and training advice.

Our E-Service Delivery Platform

Beginning in early 2000, Internet users have been able to access information on all our services through the Canada Site (www.canada.gc.ca) via one of three client-centred gateways depending on whether they're a business, individual citizen or international/foreign client. Since then we have made it progressively easier to access information and increased the number of services available on-line.

In 2001, nine Government of Canada services were completely on-line – in other words, they had achieved their maximum level of e-maturity. In 2002, this increased to 31. By 2005, over 130 services will be on-line. For more information on the Government of Canada's current and planned on-line services, see *Government On-Line 2003 Annual Report*, available at www.gol-ged.gc.ca.

Improving our national portal

Significant enhancements have been made in the past year to the Canada Site, and to each of its client-centred gateways. We have made it easier to access subject and audience-based portals from the main web site and have introduced a number of new features including:

- a link to elected representatives (called "Your MP") under the "Government Contacts" section.
- an e-mail notification feature through which users can receive updates when new links and/or services are offered of interest to them.
- a wireless portal, enabling "mobile" Internet users of web-enabled cell phones or personal digital assistants to obtain government services best suited to these devices. For example, a person driving from Canada to the US can now access border wait times through the wireless portal and select a crossing point where they are least likely to experience a processing delay.

Finally, the Canada Site has continued to place an emphasis on design that facilitates easy navigation by people using assistive devices such as screen readers.

Meanwhile, thirty-three (33) Common Look and Feel (CLF) standards (www.cio-dpi.gc.ca/clf-upe/index_e.asp) for all federal web sites became mandatory at the end of 2002. These substantially improve the navigability and intuitiveness of Government of Canada sites as visitors move through the gateways and portals to reach specific programs and services.

Take-up and Popularity of e-government services

Take-up of on-line services is increasing steadily. Over 70% of Canadian Internet users had visited a Government of Canada web site at least once in 2002, up from 61% in 2000². More than half of them did so to conduct a specific transaction, including filling out an application on-line, sending an e-mail to a government official, ordering publications and remitting payments. The most popular government e-services are in the areas of employment, health and taxation.

The Jobs, Workers, Training and Career portal on the Canada Site provides Canadians access to a full-range of job-related information and services including the Job Bank, Canada's largest web-based network of job postings. The Job Bank provides information on an average of 46,000 job openings at any one time, with up to 2,000 new jobs posted daily. In 2002, the service was used more than 66 million times³. From the main page, employers can post their advertisements in the Job Bank and access

A snapshot of Internet use in Canada

More than two thirds of the population now uses the Internet on a regular basis.¹

- Half of all households have at least one member regularly using the Internet from home.²
- Of Internet users, 70% have visited a Government of Canada web site.³
- 34% of Canadians report their most recent contact with their federal government was through the Internet.⁴

Sources:

¹ Ekos Research Associates, *Rethinking the Information Highway*, 2003

² Statistics Canada, *Household Internet Use Survey*, 2002

³ Erin Research Inc, *Citizens First*, 2003

⁴ Ekos Research Associates, *Rethinking the Information Highway*, 2003

² Erin Research Inc., *Citizens First 3* (2003)

³ The Government of Canada is also increasingly reliant on the Internet to hire its employees. Almost all recent graduates and students now apply for jobs and work experience opportunities with the federal government on-line. A new Post Secondary Recruitment program is being introduced to streamline the hiring

resources to assist with their human resources management needs. People looking for work can get practical help building their résumé and register to receive Job Alerts – e-mail notifications when jobs matching their search criteria become available. The site also links to the Electronic Labour Exchange, which matches job seekers and employers based on skills, education and experience.

One of the hottest topics in Canada is the weather and Canadians check it on-line. With over 250 million visits per year, the weather web site (www.weatheroffice.ec.gc.ca/canada_e.html) is Canada's most popular on-line service. This site also provides animated radar imagery, weather warnings and detailed information on various weather phenomena.

MOVING TOWARDS CITIZEN-CENTRED PROGRAMS AND SERVICES – IMPROVING THE GOVERNMENT SERVICE EXPERIENCE: Obtaining feedback from the public

Canadians' priorities and expectations

Regularly consulting Canadians is a critical part of the Government of Canada's approach to building e-government. Between April 1st, 2002, and March 31st, 2003, more than 10,000 Canadians participated in surveys and focus groups conducted by the Government of Canada on e-government and service transformation. The findings help guide every aspect of our work in service delivery, infrastructure, policy, human resources, and communications. Because the results are widely shared with departments and agencies, this research also plays an important role in encouraging horizontality and building a more client-centred service culture across the federal government. Some of the main conclusions we have drawn from research conducted over the past year are that:

- Privacy and security issues continue to have a major impact on Canadians' willingness to conduct on-line transactions. Identity theft in particular is a growing issue. The Internet is perceived to be the least private or secure channel: 70% of Canadians continue to be concerned about exchanging confidential or personal information with the Government of Canada on-line⁴.
- On the matter of privacy in particular, Canadians want access to the government's information about them in order to verify and if necessary, correct it.
- Canadians are generally unsure of how the federal government manages their personal information, have very low levels of awareness of their legislated privacy rights, and often incorrectly assume that departments can easily access information about them without their consent. (Meanwhile, fully 71% of web visitors have not read a government privacy statement, which are posted on *all* departmental sites.)⁵
- **National Identity Card:** In general, 65% of Canadians support mandatory identification (ID) cards (at present, Canada has no such card), and an even higher percentage (70%) would support them if they were to contain biometric information. However, they have doubts about the ability of the federal government to put a national ID card system in place.⁶
- 84% of Internet users are moderately or very comfortable registering their views and opinions on a federal government web site, but less than half (42%) approve of e-voting. Frequent Internet users have fewer concerns about the impact of the Internet on democracy: only 35% see the potential for harm, versus 58% of non-users.⁷

process, and provide for the electronic screening of job applications. In 2002, the government received more than 800,000 applications for jobs 86% of which were submitted through the main federal Internet recruitment site, www.jobs.gc.ca.

⁴ Ipsos-Reid Omnibus Telephone Survey, March 2003.

⁵ Ekos Research Associates: *Rethinking the Information Highway*, 2001

⁶ Ekos Research Associates: *Rethinking Government*, 2003

⁷ Ekos Research Associates: *Rethinking Citizen Engagement*, 2003

Research to assess Canadians' familiarity with services currently available on-line suggests that more effort is needed to market e-services. In a 2002 survey, only 25% of Canadians said they were aware of the URL for the main web site (canada.gc.ca) and of this group only 7% identified it correctly.⁸

We also conduct research in collaboration with other governments in Canada to develop a shared understanding of Canadians' service expectations and priorities and thereby encourage more client-centred vertical integration of services across levels of government. Through the Institute for Citizen-Centred Services (ICCS), the federal government, nine provincial and territorial governments, and five municipal governments recently sponsored a third round of *Citizens First* research with a representative sample of 9,000 Canadians.

Measuring results of e-Gov investments.

According to survey results published in January 2003, the federal government's score for "service reputation" – a global summary measure – rose to 56% from 47% in 1998. In looking at satisfaction with service experience for 18 key federal services, the mean level of satisfaction recorded was 64%, an increase from 60% in 1998. We are therefore well on our way to meeting the overall 10% increase in client satisfaction by 2005. Interestingly, programs where a pronounced shift to Internet-based delivery has occurred since 1998 were among the ones that saw the steepest increases. Satisfaction with Employment Insurance rose from 45% to 53%; the Canada Customs and Revenue Agency, from 55% to 59%; and information on health issues, from 55% to 59%.

The survey showed that Canadians' perceptions of service quality vary significantly across delivery channels: satisfaction with on-line government services scored a 68% while satisfaction with telephone services was only 56%. More than 80% of respondents who had used an online version of a government service said they would do so again. Among respondents who said they would prefer a different delivery channel to receive government services, over 50% said they would like to switch to the Internet or e-mail, compared with only 21% who would prefer in-person service, 19% the phone, and 7% the mail. Clearly, electronic service delivery has the greatest potential to raise overall satisfaction with the service experience.

The drivers for channel use are profoundly affected by the nature and complexity of the service and the extent to which it involves the exchange of personal information. At present, users perceive the Internet to be a starting point, best suited for research and preparation purposes. Where services or transactions are complex or involve personal information, users still tend to rely on traditional channels. Even the most experienced Internet users prefer to undertake a transaction involving the exchange of important personal

Benchmarking Client Satisfaction: Canada's Common Measurements Tool

Sponsored by the Public Sector CIO Council and the Public Sector Service Delivery Council, representing federal, provincial and municipal governments in Canada, the Institute for Citizen-Centred Services (ICCS) promotes common methodology and reporting to ensure high levels of citizen satisfaction with public-sector service delivery. In 2003, the ICCS released a new version of the Common Measurements Tool (CMT) to measure clients' service experience. The CMT provides public service managers in all jurisdictions with a common approach and tool to understand client expectations, assess satisfaction and identify priorities for improvement.

The new version of the tool is tailored to a multi-channel service environment, and includes questions that reflect the specific drivers of satisfaction that are particular to each service delivery channel (i.e., Internet, kiosk, telephone, in-person and mail).

The CMT and other support materials are available at www.iccs-isac.org.

⁸ Ipsos-Reid: Omnibus Telephone Survey, March 2003.

information in person (46%) or via the telephone (29%). Only 14% say they would use the Internet.⁹ Canadians are also using multiple channels to complete a single service transaction more often. The latest *Citizens First* research indicated that 50% of respondents used more than one channel in their most recent contact with government, nearly double the 26% who reported doing so in 2000. This trend will need to be monitored closely because research shows the more contacts required for completing a transaction, the lower the satisfaction rate with the service. Clearly, channel integration that supports seamless service delivery needs to be a priority to improve satisfaction with the service experience.

A second important avenue for feedback on our e-government efforts comes through the Government On-Line Advisory Panel. The Panel, comprised of twenty-one Canadians spanning the public, private and voluntary sectors submitted its second report in December 2002 (for a copy, go to www.gol-ged.gc.ca). Panel members emphasized that moving from offering more services on-line to the “next step” – developing a highly effective and efficient service delivery network across government – is the only way to deliver the kinds of service improvements citizens are looking for over the longer-term. They pointed to emerging performance issues for some programs that are struggling to cope with sharp increases in client volume; problems such as an increasing number of unanswered client telephone calls. With the aging of the Canadian population, they warned that capacity-related problems like these will only accelerate and costs rise, unless the government takes steps now to modernize its business systems and processes with a common and highly effective electronic infrastructure that supports all channels.

The Panel made the following seven recommendations to the government to guide its efforts in transforming its service delivery network:

1. Take immediate action to re-think current operations and develop, resource, manage and communicate an integrated service delivery network that meets the real needs of users.
2. Reinforce the Government On-Line/Service Improvement Initiative (GOL/SII) as a major “whole-of-government” priority to transform government into a multi-channel, multi-service delivery network.
3. Strengthen the leadership and governance structures supporting GOL/SII.
4. Determine and allocate the resources, human and financial, necessary to sustain horizontal service delivery on a permanent basis.
5. Develop and fund a communications program that includes promoting on-line services to drive take-up.
6. Expand consultation and outreach, to help refine the scope of GOL/SII.
7. Establish clear criteria for success.

Transforming services for citizens

Since the GOL Panel Report, the Government of Canada has begun developing high level “visions” for service transformation to determine what a client-centred seamless “service continuum” should look like and what government-wide enablers or capabilities need to be in place to support it.

The government-wide “service visions” which are being developed for our three main client groups – individual Canadians, businesses and international clients – will define common service outcomes at four levels of maturity: on-line presence/basic capability; service availability; service maturity, and full service transformation. They will also define the internal capabilities required at each of these stages to move along the service continuum.

As these visions are developed, roadmaps are being produced to guide the way forward and “catalytic initiatives” are being identified to provide additional momentum for transformation. How best to address implementation and sustainability issues is also being determined, such as what incentives would

⁹ GOL Internet Research Panel – Online Survey #2, March 2003.

encourage clients to move on-line for transactions best suited to the Internet; what tools are needed to enable coherent, disciplined and standards-based business transformation across departments and agencies; what additional changes are required to governance and decision-making processes to support implementation, and what are the best approaches to financing government-wide transformation. By 2005, these visions and the roadmaps that support them will be consolidated into a government-wide service strategy to guide the next phase of e-government.

Government of Canada Service Visions

Common Service Outcomes at the Transformation stage:

- Increased accessibility = harmonized content
- Informed citizens = informed decision-making
- Facilitated participation = “smart” regulations and benefits
- Integrated service delivery = “seamless” delivery
- Simplified programs = “smart” programs
- Valued relationships = e-Government/e-Democracy

Common Enabling Capabilities at the Transformation stage:

- Information Management = shared knowledge base
- Back Office Systems = shared services
- Customer Relationship Management = best practices in client management
- Infrastructure (e.g., the Secure Channel) = shared service
- Delivery networks = shared points of presence with integrated channels across levels of government
- Business Processes = excellence in transformation process management
- Workforce and Culture = a more agile and responsive workplace
 - Policy and Legislation = enabled e-Democracy

Early federal initiatives for client-centred integration

Determining what services to join up for integrated transactions, where, when and for which clients, is a hugely complex task that requires consideration of a broad range of factors. The potential for returns in the form of increased client satisfaction must be considered along with the potential for operational efficiency gains and the relative ease with which the supporting business transformation can be undertaken. Maintaining service continuity, security and privacy must also be taken into account, along with the skills needed in the government’s workforce to fully optimize and sustain integrated service delivery.

As will be shown later in this report, there has been some progress towards developing integrated services across federal departments. However, the Government of Canada is an enterprise of enterprises. Some departments and agencies, particularly those managing a rapidly expanding client base and increasing business volumes, are already planning significant business transformation initiatives to integrate services around common clients within their department.

Human Resources Development Canada – *Modernizing Services for Canadians*

Human Resources Development Canada (HRDC) delivers nearly 90 programs and services and dispenses approximately \$70 billion annually, with 95% of that going to Canadians in benefits under Employment Insurance (EI), the Canada Pension Plan (CPP) and Old Age Security (OAS), as well as many other smaller programs for groups such as seniors, youth, post-secondary students, Aboriginal peoples, persons with disabilities and homeless Canadians. Through its Modernizing Services for Canadians initiative

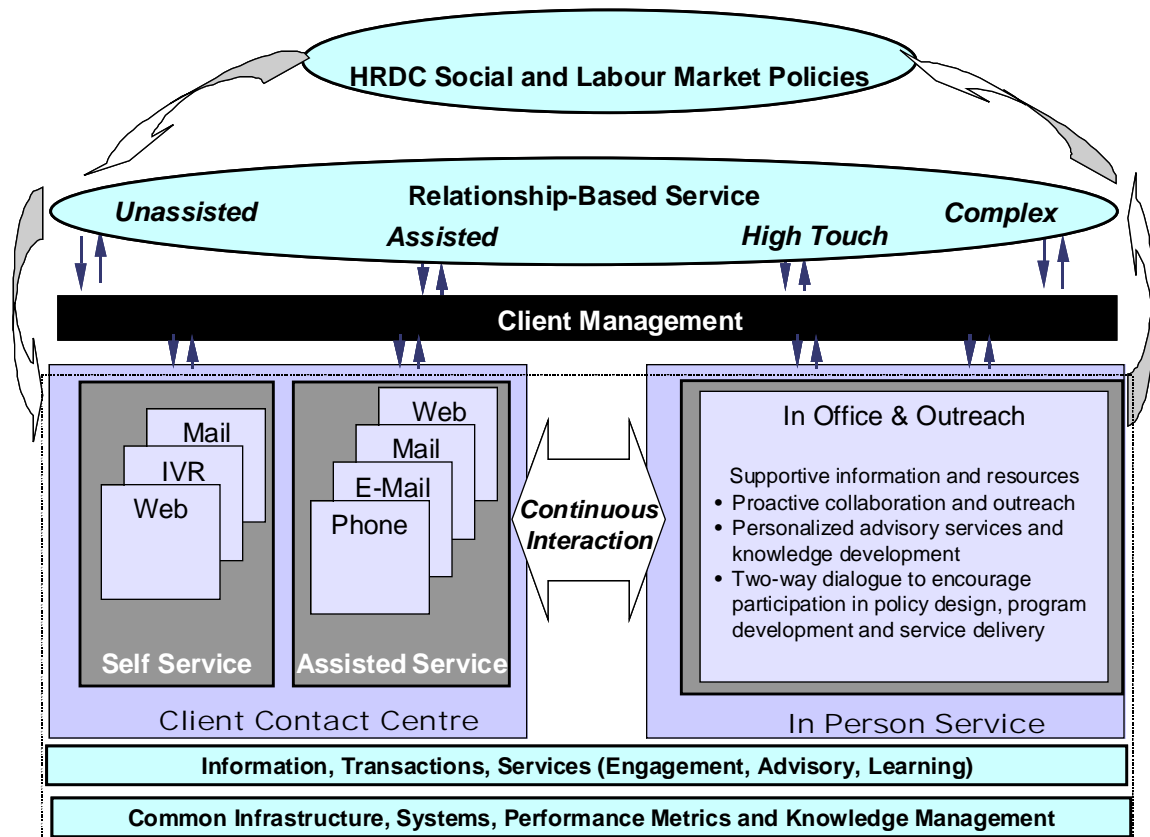
(MSC), the department will move from being structured and organized on the basis of programs and transactions, to an organization that is integrated, client-focused and relationship-based.

Over the past year, conceptual and planning work has focussed on identifying relevant best practices in areas such as relationship management, client contact centres and integrated service offerings. A MSC business plan is being developed to prioritize business transformation projects for the next four years to build a single, integrated service delivery network.

One of the first projects under MSC is the Call Centre Harmonization project. Currently, the department operates 1,200 different toll-free 1-800 telephone numbers and 26 call centres. The call centres are currently managed independently, with most either supporting EI or CPP/OAS. Standards for service, operations, resource management, training and staffing vary from site to site. While the centres handle in the order of 50 million telephone calls a year, it is estimated that some 30 million more are going unanswered. The harmonization project will involve the consolidation and rationalization of the call centre function across HRDC, harmonizing service standards and resource management practices, and transferring budgets and people to an enterprise-wide, nationally managed call centre “network.” Initially, the network will support the delivery of the largest of the department’s programs, but eventually it will support the delivery of *all* the department’s programs.

Bringing service delivery channels together

The success of the Call Centre Harmonization project is the critical first step towards achieving a multi-channel service vision at HRDC. As this project gets underway, the department is simultaneously designing a vision and plan for a single enterprise-wide benefits delivery system that will support relationship-based, seamless, integrated multi-channel service delivery for all its programs. The diagram below illustrates what this conceptual work is based on – an integrated service system *continuum*. Client Contact Centres are at one end to provide self-service (via IVR, web and mail) and assisted service (via web, e-mail and telephone). At the other end of the continuum is an outreach capacity, which would facilitate partnerships and encourage stakeholder participation in policy design, program development and service delivery, strengthening HRDC’s ability to respond to change and adjust or build new programs to meet Canadians’ future needs.



Meanwhile, several projects that enable service improvement using the e-channel, many of which began several years ago through the Government On-Line initiative, will be accelerated. These initiatives focus on reducing duplication, eliminating the need for manual processing, and reducing the cost of back-office functions. Within the next twelve months, more EI-related services will be available on-line and Canadians will be able to apply for CPP on-line. In addition, the Record of Employment on-line service, launched in May 2003 will be made available to more employers, who identify the current paper-based process as their number one government paperwork headache. Some 8 million Record of Employment forms are filed annually by Canadian businesses every time there's a termination of employment, with about half of them used for EI claim purposes.

One of the major challenges facing the department over the next four years will be designing and implementing enterprise-wide integrated service solutions, without interrupting or reducing ongoing service delivery. The department is developing a change management strategy that will help mitigate this risk by ensuring the transformation is coherent, integrated and coordinated and occurs at a manageable and sustainable pace.

Canada Customs and Revenue Agency – *Future Directions*

The Canada Customs and Revenue Agency (CCRA) collects about \$300 billion annually, processes over 23 million individual and 1.6 million corporate tax returns every year, and makes benefit and credit payments, including on behalf of provinces and territories, to over 10 million eligible Canadian households. In September 2002, CCRA released *Future Directions*,¹⁰ following 18 months of consultations. Discussions were held with over 3,000 clients from four principal client groups (individuals, small and medium sized enterprises, large businesses, and charities) and approximately 2,000 of the agency's employees. Seven strategic directions emerged from the *Future Directions* process, all of which support the premise that CCRA can more effectively facilitate voluntary compliance by instituting a stronger client-centred orientation and culture within its organization.

Twenty projects are planned for the current fiscal year alone, all of which advance the organization's capacity to offer a wider range of more convenient electronic self-service options tailored to client needs. For example, a secure "My Account" web page was recently launched, and will eventually allow individuals to make adjustments to their files on-line. A similar on-line portal is being developed for tax professionals that will enable them to manage their clients' accounts on-line.

Inter-jurisdictional initiatives

A number of inter-jurisdictional "government without boundaries" initiatives are also underway, to improve service transactions for common clients and strengthen the operational capacity of governments to offer new e-services in the future. For example, the Canadian Consumer Information Gateway involves more than 400 federal departments and agencies, provincial and territorial ministries, and non-government organizations. This collaboration has created the most comprehensive and reliable source of consumer information anywhere in Canada. The web-based service also offers tools and services for consumers, for example, interactive financial calculators to help users make decisions on credit cards, financial service charges, and borrowing strategies, and the "Complaint Courier" which enables Canadians to lodge consumer complaints with the appropriate consumer protection agency.

Secure Electronic Authentication

Privacy and security are major priorities for all governments in Canada as they move more of their transactional services on-line. Smaller governments are particularly challenged to obtain the financial and human resources they need to tackle issues like these, and to convince their political leaders that the benefits of e-government are worth the investment. Meanwhile, there has been a steep increase in cases of

CCRA's Strategic Directions for Service Transformation

Expanded Electronic Services – to enable more clients to self-serve where appropriate making compliance easier and more convenient

1. **Account Manager Framework** – to offer the right mix of services via account managers to a client or client group across all agency functions
2. **Customized Approach to Compliance** – adopting a client-based approach to target information and services to meet the needs of client groups while improving verification and collection
3. **Strengthened Partnerships and Co-operation** – to accelerate efforts to create new opportunities to deliver services on behalf of other governments to reduce duplication and enable vertical integration
4. **Timeliness** – to enhance the timeliness of transactions across all services
5. **Transparency, Clarity and Simplification** – to simplify all the agency's requirements to increase transparency and public trust, and thereby, foster compliance
6. **Workforce Development** – to support the agency's employees in key areas such as training and learning to enable them to become more client-oriented, and to provide them with the tools and information systems that this requires.

¹⁰ This document is available in PDF at www.ccr-a-adrc.gc.ca

identity theft in North America, and a number of high profile security breaches of client databases in the financial sector. Such trends are increasing pressure on governments to adopt state of the art solutions – solutions that are likely to be beyond the reach of all but Canada’s largest provinces and municipal governments.

We need to have common security solutions across all the levels of government if we want to successfully pursue opportunities to vertically integrate services around common clients. In the absence of such solutions, we will not be able to ensure all Canadians, urban as well as rural and remote, can benefit from secure on-line access to services.

Authentication initiatives.

Last year, the Government of Canada began implementing a PKI-based authentication service with *epass* in a pilot application for citizens to register a change of address on-line with the Canada Customs and Revenue Agency. Each *epass* – a PKI certificate – is unique and is used to authenticate the client and digitally sign documents. An e-pass is issued through a program enrolment process, where identification and authentication occurs at the application layer, behind the service provider’s firewall. This makes the anonymous *epass* potentially re-usable by other programs and services with the *epass* holder’s consent. There are now approximately 75 Government of Canada departments and agencies, and 100,000 users (mostly government employees), relying on PKI certificates. A total of seven federal departments and agencies are CAs or Certification Authorities (i.e., they can issue certificates). These federal CAs are in turn cross-certified through the Canadian Federal Bridge CA.

Government of Canada e-services using *epass* for authentication

Address Change On-Line – introduced in 2002, this service enables individuals to change address and contact information in one transaction, and automatically update this information for a range of tax and benefit programs that they would otherwise have had to notify separately. To date, over 83,000 *epass*s have been issued to Canadians to use this service.

- **Record of Employment** – this service went “live” May 23, 2003 for a select number of employers, allowing them to send information at termination of employment electronically. Some 8 million of these forms are filed annually by Canadian businesses, which identify the paper-based transaction as their number one government paperwork headache. Compared to the paper transaction, which can take up to seven days to process, the on-line version takes only a few hours.

In November 2002, the Government of Canada and the Government of Ontario entered into a cross-certification agreement through the Ontario Provincial Police and the Royal Canadian Mounted Police (one of the seven federal CAs). Our first international cross-certification activity is currently underway with the US Federal Government, which has 4 CAs that are cross certified through their bridge. The goal is to have a legal agreement completed by the end of the 2003.

Work is also underway to develop the concept of a Common Certification Authority (CCA). The aim would be to lower costs and facilitate integrated e-service delivery (horizontally and vertically) and secure interoperability through broader deployment of the PKI certificate among institutions, both public and private, that interact and transact with the same individuals and businesses. The CCA’s core services to governments and the private sector would involve the issuance, validation, suspension and revocation, and recovery of PKI certificates.

THE CHALLENGE OF WHOLE OF GOVERNMENT TRANSFORMATION

An evolving governance approach

The themes of client-centricity and whole-of-government innovation have been central to the government of Canada's efforts to foster a service culture across the public service, and deliver operational efficiency gains. To date, the Government of Canada has not made radical changes to its governance structure. Instead we have pursued an approach that promotes interoperability and integration that we call "radical incrementalism." Until we know better how to operate as a fully e-enabled e-government and design the supporting structures to achieve fundamental transformation, our experience suggests significant change can be undertaken to meet citizen's steadily more demanding expectations for service delivery *within* existing organizational structures. At this time, major structural change would have little significance or meaning for most Canadians and its disruptive effects could slow the implementation of the changes Canadians *do* want. Instead, "virtual" departments have been created around "clusters" of services for seniors, youth, job seekers, travellers, prospective immigrants, and so on, stretching the concept of horizontality *within* the bounds of our existing departmental and agency structures. This approach is allowing us to "join up" or integrate services from the perspective of the client to facilitate more convenient, seamless *service* access without restructuring government. Furthermore, it is allowing us to significantly improve our operational *adaptability* so that we can continue to aggregate and disaggregate service offerings as Canadians' diverse service needs and expectations evolve over time.

Clusters create synergies across traditional boundaries and bring together knowledge and expertise to provide comprehensive information and service offerings to clients. The role of cluster groups is to function as internal facilitation teams, bringing together partners with similar interests serving common clients, and acting as the catalysts for the integration of information and services based on subject, audience or life event.

To achieve this goal, clusters require work-flows and processes that enable the rationalization and integration of information and services across departments and jurisdictions so as to provide seamless service delivery. As such, cluster partners share a common vision and mission and ongoing collaboration and information sharing with partners is one of their key roles.

To the extent that changes in the governance structure have been made to enable the modernization of service delivery, they have been aimed at promoting culture change so that we can adapt existing structures and machinery to support whole-of-government, client centred innovation. The role of public sector employees and their relationship to information, citizens, "home departments" and each other *is* changing. "Communities of practice" that transcend administrative units are emerging at the working level, supported by an interdepartmental committee structure that facilitates collective management. Accountabilities are addressed through memoranda of agreement. Policy frameworks and business transformation guidelines are beginning to standardize how we go about managing information and modernizing our business processes and programs to achieve the interoperability we need to improve service delivery and operational efficiency. "Horizontal" governance and shared information and content management systems are playing increasingly pivotal leadership and enabling roles.

New policies and standards

As we reported in our last country report, on May 2, 2002 we introduced a Privacy Impact Assessment (PIA) Policy (www.tbs-sct.gc.ca/pubs_pol/ciopubs/pia-pefr/paip-pefr_e.asp), to ensure that privacy risks in new programs and services that collect, use or disclose personal information are addressed, mitigated or avoided *before* changes are made or new services launched. Since then, the tools we developed to enable departments and agencies to adhere to the policy have been used to develop PIAs for every program design or re-design, and all new e-services.

Standards for managing information

A new policy, the Management of Government Information (MGI) came into effect May 1, 2003. It requires departments to use electronic systems as the preferred means of creating, using, and managing information, and to assess the effectiveness of their management of information throughout its life cycle. An important feature of the policy is that it sets out the roles and responsibilities of all government employees with respect to managing information. A number of tools, guidelines and practices are already in place to support its implementation including the Framework for the Management of Information in the Government of Canada or FMI. This tool is steadily providing more authoritative, comprehensive and integrated guidance to departments and agencies on information management (IM) to support service delivery, enhance citizen access, improve results, fulfill the government's information, legal and policy obligations, and strengthen accountability.

Over the past year, guidance on IM governance and accountability, IM requirements in business cases, and IM and XML have been published. We have also progressed in metadata standards, completing an application profile for resource discovery on the Internet, which will enhance the architecture development to support search engines. We created metadata schemes in order to classify and retrieve web resources by audiences, by geographical regions and by document types. Metadata implementation guides for developers and managers in the public service, as well as for the gateways and clusters content management community, have been updated. [A metadata training module has been developed that helps federal organizations ensure that online resources are labelled accurately and consistently.](#) In the coming months, a metadata standard for records management and another to describe and manage e-learning materials will be finalized. Government of Canada Metadata Application Profiles with XML schemas will also be completed to support the interoperability of information.

All IM standards and resources are being developed collaboratively and distributed through the Government of Canada's web based IM Resource Centre (http://www.cio-dpi.gc.ca/im-gi/index_e.asp). The Resource Centre is evolving to become the single Government of Canada "portal" on information management.

Standards for Information and IT security

To facilitate department and agency compliance with the revised Government of Canada Security Policy, which came into force in February 2002, an updated Information and Technology Security Management Standard has been drafted. The standard emphasizes the need to document processes and decisions, to adopt a "lifecycle" approach to managing and maintaining information and technology security, and for departments that share information systems or that use common IT infrastructure, to jointly assess threats and risks and define additional security requirements associated with these interdependencies.

The standard contains several concepts that must be reflected in department's information and technology security strategies, including:

- Building trust, because compliance with security policies protects information held by departments, further strengthening the trust of Canadians in the ability of departments to protect their personal information;
- Taking a comprehensive approach that blends technical, operational, management, personnel, physical and procedural controls;
- Ensuring "operational resiliency" which means having the ability to detect and respond effectively to a rapidly changing environment, recognizing that mechanisms that work today may fail tomorrow in the face of new and unexpected threats and vulnerabilities; and,
- Strengthening a "collective perspective" because as departments' systems steadily become more interoperable in a more networked and interdependent environment, an adverse event in one department is a threat to others. In this context, the ability to respond rapidly to a security

incident is not sufficient. Departments must also be able to share information about the incident with all other entities that may need to take corrective action of their own.

Departments are expected to address a range of issues, including the integration of security as part of the system lifecycle; change control management; incident management; and policy review and revision at a frequency aligned with the criticality of the IT system in question or when changes occur that may adversely affect the department's IT security. They are also expected to fulfill a number of mandatory management requirements, including the categorization of critical assets and identification of threats to those assets. Other mandatory requirements in the standard are that departments and agencies:

- Establish an information security governance structure, with a framework for senior executive oversight to establish information and technology security priorities and conduct periodic reviews of information and technology security strategy.
- Appoint an Information Security Coordinator to support managers with their information security risk management responsibilities; liaise with the department's Security Officer to ensure coordination between information and technology security and other departmental security measures (e.g., personnel screening, controlling access to the physical plant, etc.); and, network with other information security coordinators to share best practices and lessons learned to contribute to sharing information about security risks and solutions across government.
- Develop and integrate IT continuity plans into overall business continuity planning and recovery activities and in keeping with a lifecycle philosophy, routinely test and revise these safeguards to ensure their continued effectiveness.
 - Prior to the deployment of any application or system, conduct a vulnerability assessment that addresses the availability, integrity, and confidentiality of information being processed as well as the application or system itself.

Additional supporting standards are also either being updated or developed, including for Threat Risk Assessment, Firewall Configuration, Certification and Accreditation, IT Security Self Assessment, Mobile and Malicious Code, Secure Systems Design, Information Protection, Use of Cryptography, IT Security Zones, Vulnerability Assessments, System Hardening, and Intrusion Detection Controls.

Developing a Common Technology Infrastructure

A common infrastructure is essential for achieving our vision for client-centred, integrated, multi-channel services, including transactional services, supported by a more operationally efficient program delivery network. The common technology infrastructure must be able to:

- Facilitate client-centric service delivery, with the ability to respond quickly to clients' changing service expectations, reduce delivery costs and improve the quality of services and information;
- Improve accessibility to government programs, regardless of location, access channel used, time of day, or client group (e.g., Canadians with disabilities);
- Ensure security to the level required, along with secure, automated authentication and authorization;
- Support government as an integrated enterprise, with a seamless view for all GoC information and services and components that all departments and agencies can use; and,
- Promote interoperability and "fast to market" implementation, with open applications, plug and play functionality, etc, to optimize the government's ability to adopt new technology solutions at least as quickly as most of the citizens and businesses it serves.

Over the past year, the Government of Canada has made significant progress in several key areas that contribute to building common infrastructure with these "enabling" characteristics.

Building “out” the Secure Channel

Nearly all Government of Canada departments and agencies have now migrated to the Secure Channel Network (SCNet) from the previous government Enterprise Network (GENet), and the government is on track to complete the migration by October 31, 2003. SCNet is a government-wide telecommunications network – an extranet – that facilitates secure access to common government information and services as well as the worldwide web. This essential piece of the technology infrastructure for client-centred, integrated, multi-channel service delivery features a Virtual Private Network with 48 points of presence; bandwidth-on-demand with a range of connection options and speeds from 56 Kbps to 1000 Mbps; and, a number of optional security services (e.g., managed firewalls, intrusion detection, virus scanning and content filtering).

SCNet links departmental intranets together, allowing government employees to access a wider range of applications, and provides secure remote access for public servants, so employees at home or on the road can have encrypted access to their department’s local area network.

The Receiver General “Buy Button” went live May 20, 2003, and allows departments to accept payments on-line (using three credit card types: VISA, MasterCard, and American Express), and to securely store related payment information. It allows departments to provide their customers with Internet payment options, and is flexible enough to be able to accommodate new payment methods as they are made available by the Receiver General.

On July 1, 2003, the Secure Channel Client Service Centre went into operation to provide first level support to Canadians who use the *epass*, the Secure Channel authentication service.

We have developed a Common Services Roadmap to ensure that the technological resources and services the Secure Channel supports are linked and coordinated with the evolving business requirements of departments and agencies. This technology management and planning tool estimates the build and capital costs over time for enhancements to the Secure Channel, and provides for the development of product and service delivery plans. It also serves as a communications vehicle to disseminate information about current and forthcoming Secure Channel services and capabilities to departments and agencies.

As we proceed to expand the Secure Channel’s authentication services to support more than half of the services we will have on-line by 2005, we are also working to use PKI certificates to support our next national census in 2006. A Proof of Concept is to be finalized by the fall of this year, and a pilot is planned for May 2004, involving 300,000 households and 20,000 farms.

Improved Stewardship of IT assets

Starting in May of this year, we began conducting an expenditure and management review of our external and internal service delivery infrastructure across government. The goal is to optimize the ability of current investments in IT, telephony, in-person service and administrative network assets, which in 2001-2002 exceeded \$13 billion (CDN), to contribute to infrastructure development that supports user-centricity from a whole-of-government perspective. We want to invest resources in ways that will promote fewer systems and reduce duplication. In addition to providing service delivery benefits, reducing duplication and fragmentation will help reduce overall costs. We know that currently, across the Government of Canada, less than 10% of IT asset related expenditures are managed in common, compared to a range of 40 to 70% in other large organizations.

As part of this exercise, we are asking some fundamental questions about enabling services that support program delivery, including their relevance, value for money, management practices, interrelationships with other organizations and potential for alternative service delivery arrangements. This will help us identify areas that are ripe for transformation, through alternative service delivery, organizational or functional consolidation, or administrative process streamlining. Some of the transformation opportunities

we anticipate include the consolidation of call centres (we currently operate over 160 across government, with a median size of 12 seats), and streamlining and integrating more of our corporate HR, materiel and financial services. In the latter case, a Benefit Analysis Report completed in 2001 concluded that moving from a department-centric administrative model to shared services for HR, Materiel and Finance, could save the Government of Canada some \$2.5 billion over a ten-year period. With improved stewardship of IT assets, we believe we can achieve efficiencies that, within current resource levels, will enable proportionally greater investment in business transformation to support client-centred, integrated service delivery.

Enabling coherent business transformation government-wide: The Business Transformation Enablement Program

While we have made good progress and gained valuable insights and lessons learned from the introduction of on-line services, it is clear that full-scale transformation that fully harnesses the e-channel is the only way to sustain ongoing service improvement and achieve efficiency gains. To realize the vision for citizen-centred, integrated, multi-channel service delivery, and do so as affordably as possible, the Government of Canada must enable coherent business transformation design across all its programs, services, departments and agencies.

To achieve a vision where individuals, organizations and businesses can use whatever government programs and services they need in as seamless and convenient a way as possible, there must be steadily more interoperable and integrated business processes across the whole of government supported by robust, secure and affordable infrastructure. To design the enterprise architecture that supports technical, information and business interoperability, departments and agencies must be able to plan, design and implement business transformation in a formal, disciplined and standards-based way. For this reason, in 2002 the government created the Business Transformation Enablement Program (BTEP). Through BTEP, a common, formal, standardized business transformation methodology is being developed, using design best practices and models suited to public sector organizations. BTEP's methodology will ensure that transformation initiatives across government are easier to coordinate, manage and sustain, and can be more rapidly designed and implemented.

Once it is adopted by departments and agencies, the BTEP methodology will mean that we conduct planning, design and implementation work to re-design or create new business processes in basically the same way across the entire enterprise. Business models for similar types of programs and services will be catalogued and available for "re-use" across the system, promoting design consistency and efficiency. By defining and modeling our programs and services in a standardized way, independent of administrative structures, we will be better able to undertake cross program alignment and identify redundancies and duplication as well as opportunities for collaboration and integrated service delivery. This will expedite service transformation and progress towards e-government, including the further development of our federated architecture, while reinforcing a common, whole-of-government approach.

The Business Transformation Enablement Program Vision

To facilitate sustainable whole-of-government client or citizen-centred transformation, and to provide the design and alignment tools that will enable rapid change.

The BTEP methodology will improve the reliability and consistency of business transformation initiatives, as well as the overall capacity of the government to execute change. It will help executives and program managers better understand the business processes they are responsible for and more easily identify the programs with which they must interoperate to advance client-centred service delivery. This methodology will also help managers to communicate and direct systems architects and designers more effectively. This will ensure that design work responds to the government's business goals because these will have been clearly defined and described to architects in a language and format that they understand.

The main elements of the methodology are:

- A transformation framework;
- The Government of Canada Strategic Reference Model;
- “e-Enablers”, which are logical groupings of information systems services, and,
- A defined set of "deliverables" that transformation teams would produce to undertake business transformation, including visions, strategies, designs, business cases and implementation plans.

Over the coming year, the BTEP methodology will be tested and refined on two key business transformation projects. Once the methodology is formally approved, facilitators will be trained and deployed to assist departments and agencies in using it.

Coordinated marketing for take-up and early returns

To date, individual departments and interdepartmental working groups have undertaken portal and program-focused promotional campaigns. These efforts have contributed to building and maintaining awareness of integrated service access points (e.g., the Canada Site) and introducing new on-line services. However, these activities remain largely uncoordinated from a strategic perspective. Across government, we have yet to put in place mechanisms that will help to shift clients from traditional channels to e-services. Systematically familiarizing Canadians with new ways of interacting with government is key to building momentum, bridging the chasm between early adopters and the majority of potential government e-service users, and creating a receptive climate for future innovations in multi-channel service delivery.

A government-wide collaborative marketing effort is required to drive more users to the e-channel so that efficiency gains can be realized and reinvested. Work is underway to develop a whole-of-government approach for the promotion and marketing of on-line services, in line with a client-centred view of government services.

Issues under consideration include:

- How to select e-services that are sufficiently mature for aggressive promotion and that will have the greatest potential to increase satisfaction among the greatest number of clients and contribute to a return on investment from service modernization (i.e., increased efficiency in program delivery);
- How to target client segments of greatest importance to future service modernization plans;
- Whether and how to use intermediaries (e.g., professional and business associations; financial institutions and other private sector service providers, voluntary sector organizations, etc.) in e-services marketing efforts;
- How to ensure that other e-services benefit from lessons learned in marketing; and,
- What are the best ways to sustain a coordinated effort to change attitudes towards using government e-services.

Two e-services marketing pilot projects are currently under development. These will test innovative marketing approaches for e-service promotion, providing the knowledge base and practical experience for the development of a government-wide marketing strategy that will complement the service visions for Canadians, business and international clients.

LOOKING AHEAD

Managing cultural change

Our approach to implementing and sustaining transformative change focuses primarily on our people, and as noted earlier, leverages on existing organizational and administrative structures. The goal is to develop a more agile workforce with significant adaptive capacity.

The Government of Canada's Definition of Organizational Readiness

Results-oriented public servants with the skills, mindsets and knowledge-sharing support needed to design, develop and deliver modern citizen-centred services using available human and technology resources in an efficient, integrated manner.

A key element of this approach is to encourage the development of informal, domain-based “communities of practice” that nurture informal workplace learning and knowledge sharing networks.¹² Our initial focus is on the IT, IM and Service Delivery communities, where we are cultivating functional leadership for the development of increased capacity to implement the service transformation agenda and address workplace modernization challenges more generally. Innovative leadership development programs have been introduced for IT and IM professionals that create opportunities for public servants to develop and implement innovative solutions that transcend traditional administrative silos.

We are leveraging the formal resources of government *and* the expertise, passion and interest of visionary individuals within these communities, to develop community-led, competency-based HR frameworks that provide for a whole-of-government management of critical human resources, and that also enjoy a high level of employee buy-in and support. The communities are providing mechanisms for departments to share basic HR tools such as work descriptions, competency profiles and self-assessment tools. Recruitment tools developed for the Service Delivery Community address a need identified by managers across government who hire front-line service agents. The IT Community co-ordinated the interests of over a dozen departments to provide a shared e-Learning Gateway geared to training and development needs of IT workers. The Service Delivery Community is co-ordinating departmental efforts to assemble a body of knowledge of proven service delivery practices. In these and all their other initiatives, the communities co-ordinate and complement the activities of departments, which retain the organizational accountability and responsibility for maintaining an effective public service.

In February 2003, the Government of Canada introduced the *Public Service Modernization Act* (Bill C-25), the legislative piece of a broad HR Modernization agenda to develop and implement a new, more flexible and adaptable HR management regime. The agenda involves significant changes to HR management practices in all areas including recruitment, training, leadership development, accountability mechanisms, compensation, labour management relations, workplace environment, workforce diversity, and enabling systems. Among other things, it will put a much stronger emphasis on competencies, and shift more staffing flexibility closer to the level of service delivery. It is expected to drive up demand for an expansion of community-led, competency-based change management model, and the sharing of approaches and solutions in everything from pre-qualified staffing pools to leadership development, across many more functional communities.

The Government’s ability to continue to meet public demands – including for more client-centred, integrated and efficient service delivery – depends fundamentally on the quality of its people and on how well they are lead and managed. Better HR management is the foundation upon which other management change including service transformation can flourish. The public service of the future must be more engaged with the citizenry it serves and better capable of listening to, and learning from, its partners. Public service employees must become more flexible in the ways they work, more oriented towards innovation and less risk-averse, while at the same more willing to stand up and be accountable for their decisions and actions. Equally important, they need to be supported by effective leaders, a supportive working environment and be given the appropriate tools to get the job done.

Meeting the challenge of inter-jurisdictional governance

Arguably the greatest challenge facing proponents of e-government in Canada is achieving client-centred “vertical” integration between orders of government. While progress is being made, particularly for business clients (<http://businessgateway.ca>), delivering the level of integration that research such as *Citizens First* suggests Canadians want is fraught with governance barriers directly related to political considerations and the structure of Canada’s parliamentary system. In May 2003, the CIO of the

¹² Web-based learning and networking tools to support the development of communities of practice across the Government of Canada can be accessed at www.compra.ca

Government of Canada commissioned a report on this issue. In his report, *Integrated Service Delivery: Beyond the Barriers*, Professor Kenneth Kernaghan of Brock University, identifies and examines the specific governance challenges facing vertically integrated service delivery. He also describes the perils of the “Bubble Gum and Good Will” model, which typifies the way most of the progress to date has been achieved. The analysis includes detailed case studies of ten inter-jurisdictional initiatives and puts forward eight recommendations for overcoming barriers and improving the accountability and transparency of these vertical service integration arrangements.

Conclusion

Since 1999, the Government of Canada has been taking an enterprise-wide approach to the design and delivery of on-line services so Canadians can access all government information and services online at the time and place of their choosing. Since then, our definition of what constitutes on-line access has matured considerably, as has our understanding of the extraordinary opportunities e-government presents and the profound business transformation required across government to fully optimize them.

Three words exemplify what we have learned: adaptability, simplification and discipline.

The speed with which information and communications technologies are changing means we have to be flexible about what we expect to achieve in e-government, even in as little as a year from now. To be overly prescriptive would limit our ability to take advantage of new technologies and new applications as they become available. Instead, we have built “adaptability” into our approach, with a vision and principles that have enabled us to make frequent course corrections. For instance, initially we envisioned simply putting all our services on-line, in much the same way as they are delivered through other channels. However, we quickly learned that there are inherent advantages and unique risks involved with the provision of services on-line. Maximizing these advantages and mitigating the risks demanded that we limit our initial efforts to most commonly used services, particularly those where there were integration opportunities. This has made it possible to simultaneously improve the service experience for a majority of our clients and begin improving the efficiency of our service delivery network rather than simply adding another delivery channel to the status quo.

As we looked to what this incremental approach to on-line service provision would demand of our infrastructure, we learned that our systems architecture across government had to respond first to business drivers and not technology capabilities. We recognized that simplification is the key – fewer, more coherent, and more integrated information systems, supporting more of our common business processes and functions. This offers the best prospects to steadily reduce systems complexity, identify and eliminate duplication, achieve better economies of scale in the technology solutions we adopt, and develop in our employees the specialized skills we need to sustain e-government.

Finally, we have learned that building the business-driven infrastructure we need for service transformation and e-government demands discipline. The starting point is the development of a business strategy supported by a standardized business transformation methodology. In organizations that are heavily dependent on managing information such as governments, this disciplined approach makes it possible for executives and business managers to direct, design and implement change to meet their business goals.

Business transformation needs to encompass all the conceptual and planning work that provides the context, impetus and direction for change and for communicating, implementing and sustaining the solutions – the new ways of doing business – that support service transformation. Adherence to a common methodological approach for business transformation across departments and agencies will support whole-of-government governance and collaboration, enable the development of a common language for transformation, advance interoperability, and render design solutions that are re-usable,

eventually making the business and service transformation process itself less time-consuming, more rigorous and more efficient.