

I EXECUTIVE SUMMARY

1. MARKET ANALYSIS

a. Methodology

There are two main sources of information about the size of the Canadian Federal Government Information Technology marketplace.

- Departmental Informatics Spending is derived from the government central and public accounts. Specific IM/IT related sub-codes from the Chart of Accounts were chosen and this information was totalled by type of spending as well as by department. The same sub-codes have been used in each of past ten years to ensure comparability. The spending is shown in Exhibit 1: Market Size and Exhibit 2: Market Forecast.
- A second source of information technology spending is included in Section II: Departmental Reports. This information is obtained from each department and is based upon estimated spending/budget levels for the current year, 2009-10. This is sometimes provided only for the central informatics branch and does not always include regional or program-related informatics spending.

b. Current Market Size

The 2008-09 spending was provided later than normal this year. The spending is released to Parliament usually in the third week of September. However, this year the results were issued in early November.

EXHIBIT 1

MARKET SIZE								
Category	2005-2006		2006-2007		2007-2008		2008-2009	
	\$ Million	%	\$ Million	%	\$ Million	%	\$ Million	%
Computing Hardware /Software	\$844.8	29.3%	\$738.2	26.0%	\$835.2	27.7%	\$785.0	26.5%
Computing Services	199.0	6.9%	26.2	1.0%	44.9	1.5%	40.7	1.4%
Communications Equipment	419.7	14.5%	401.3	14.0%	373.4	12.4%	387.1	13.1%
Communications Services	488.6	16.9%	562.1	20.0%	617.5	20.5%	641.2	21.7%
Professional Services	538.6	18.8%	717.7	25.0%	658.0	21.8%	641.7	21.7%
Maintenance	<u>394.5</u>	13.7%	<u>409.2</u>	14.0%	485.0	16.1%	462.3	15.6%
Total	\$2,885.2		\$2,859.4		\$3,014.3		\$2,958.1	

EXHIBIT 2

MARKET FORECAST			
	Actual 2008-2009 (\$ million)	Forecast 2009-2010 (\$ million)	Forecast 2010-2011 (\$ million)
Forecast	\$2,958.1	\$3,100.0	\$3,100.0

c. Market Forecast

The gathering momentum towards adopting an enterprise approach to informatics, and the associated development of shared services, will likely cause expenditures to rise in the short term. However, the overall effect on IT spending is expected to be neutral and the forecast for overall spending in each of the next two years remains just slightly above \$3.0 billion, as savings from slowed project spending is offset by transitional expenditures. Initiatives to support the development and implementation of Web 2.0 projects is likely to be slow.

d. Departmental Informatics Spending

Exhibit 3 shows the 2007-2008 and 2008-2009 departmental informatics spending based upon the same sub-codes selected from the Chart of Accounts. Total spending must be adjusted for internal or cross-departmental services, such as Canada Revenue Agency providing services to the Canada Border Services or many different departments purchasing services from ITSB within PWGSC.

- Most department totals reflect the IT spending within the core department and do not include related crown corporations.
- A comparison of the individual department spending in this exhibit with those provided in the departmental write-ups in Section II of this report will show some discrepancies. These discrepancies are mostly the result of program or regional level expenditures not being included in the data supplied for Section II. However, in recent years, almost all of the departments have consolidated IM/IT expenditures in a more comprehensive manner.
- There has been a substantial amount of work undertaken in the past few years by Treasury Board to identify the so-called hidden spending, i.e. the spending that is hidden within the regions or within programs.

2. OPPORTUNITY ANALYSIS

This section addresses the following business questions:

- What are the key initiatives?
- What is the personal computer installed base?
- Who are the top informatics vendors?

EXHIBIT 3

DEPARTMENTAL INFORMATICS SPENDING		
(\$ MILLION)		
	2007-08	2008-09
National Defence	973.8	984.8
Public Works and Gov't Services Canada	621.3	590.1
Canada Revenue Agency	284.4	305.1
Royal Canadian Mounted Police	221.8	253.2
Canada Border Services Agency	184.7	207.4
Human Resources/Skills Development	158.1	155.7
Foreign Affairs and International Trade	107.0	109.3
Health Canada	71.6	80.7
Fisheries and Oceans	63.1	72.2
Agriculture and Agri-Food	58.5	70.1
Correctional Service Canada	61.0	63.5
Environment Canada	50.6	58.0
Industry Canada	54.5	55.4
Citizenship and Immigration Canada	53.7	54.0
Statistics Canada	39.0	45.5
Transport Canada	47.6	45.2
Indian and Northern Affairs Canada	37.0	42.3
Natural Resources	35.1	35.1
Justice Canada	23.2	24.1
Parks Canada	18.7	19.6
Canadian Food Inspection Agency	22.4	18.8
Canadian Heritage	15.0	18.0
Veterans Affairs	21.0	17.5
Public Safety & Emergency Preparedness	16.3	14.8
Public Health Agency of Canada	17.7	14.6
Library and Archives Canada	15.6	14.1
Public Service Commission	7.2	8.6
Treasury Board Secretariat	10.4	6.6
Sub Total	3,279.9	3,384.3
Other Departments, Agencies, etc.	269.2	276.5
Total External and Internal Spending	3,549.1	3,660.8
Less Internal Spending	<u>- 534.8</u>	<u>- 702.7</u>
Overall External Spending	\$ 3,014.3	\$ 2,958.1

Exhibit 4 lists the department-level key initiatives. The chart focuses on projects whose potential is forthcoming, not on those where the opportunity has passed.

EXHIBIT 4

KEY INITIATIVES

Canada Revenue Agency

- CAS SAP sustainability
- Business Continuity
- Charities Returns
- Ontario Sales Tax
- Tax Free Savings Accounts
- Integrated Revenue Collections.

Canadian Heritage

- Enhanced Grants and Contributions System.

Citizenship and Immigration

- Temporary Resident Biometrics project.

Correctional Service

- Major data centre upgrade
- Offender Management system renewal
- Document Management System
- Health Information Management Module for health records
- Inmate Accounting System Modernization Project.

KEY INITIATIVES (Continued)

Environment Canada

- Econet and security enhancements
- Application rationalization.

Fisheries and Oceans

- Information technology Infrastructure Replacement project
- Collaborative software
- Print rationalization.

Foreign Affairs

- Review of IP telephony
- Workflow and groupware
- Upgrade of Export and Import controls system.

Health Canada

- Shared services migration
- PeopleSoft migration.

HRSDC/Service Canada

- Mainframe re-platforming
- Distributed Computing Renewal
- Common Delivery Platform
- Call centre software
- Paper handling software
- Information management
- Business rules engine software
- Performance system for Education.

KEY INITIATIVES (Continued)

Industry

- Intellectual Property Office Enterprise business renewal
- Business Intelligence
- Printer optimization

Indian Affairs

- Client relationship software
- Client Portfolio management
- Dashboard and reporting system
- Legacy applications replacement.

Other Health Agencies

- Canadian Institutes of Health Research (see section III)
- Public Health Agency of Canada
- Canadian Health Infoway (see section III).

Parks Canada

- Real Property Management Information System.

Public Service Commission

- Public Service Staffing Modernization Project.

Public Works and Government Services Canada

- E-Supply Chain
- Shared Services.

KEY INITIATIVES (Continued)

Royal Canadian Mounted Police

- Canada Integrated Justice Information Initiative
- Performance and Fault monitoring system.

Statistics Canada

- Network redesign project
- Enhanced data warehouse framework
- Computer Centre Upgrade.

Transport Canada

- Oracle ERP financial changes
- Storage Area Network review
- Security upgrades.

Exhibit 5 provides information about the PC base in the federal government. The information is based upon the department level interviews and is a summary of the information contained in Section II - Department Reports.

EXHIBIT 5

DEPARTMENT LEVEL PC BASE	
	Installed
Agriculture and Agri-Food Canada	9,000
Canada Revenue Agency	85,100
Canadian Food Inspection Agency	8,800
Canadian Heritage	2,400
Citizenship and Immigration Canada	7,500
Correctional Service Canada	16,000
Environment Canada	7,000
Fisheries and Oceans	10,000
Foreign Affairs / International Trade Canada	12,000
Health Canada	12,000
Human Resources & Skills Development / Service Canada	37,000
Indian and Northern Affairs Canada	5,900
Industry Canada	6,365
Library and Archives Canada	1,300
National Defence	114,500
Natural Resources Canada	5,500
Parks Canada	4,500
Public Health Agency of Canada	2,500
Public Service Commission	1,450
Public Works and Government Services Canada	14,000
Royal Canadian Mounted Police	30,000
Statistics Canada	12,600
Transport Canada	5,200
Treasury Board	3,600
Total Reported	409,015

Exhibit 6 outlines the total value of contracts that PWGSC's Acquisition Branch has signed with specific vendors in 2008-09. Contracting outside Acquisition Branch is not included.

EXHIBIT 6

TOP INFORMATICS VENDORS 2008-2009	
	Total Contracts (\$ Millions)
Bell Canada.	374.0
Thales Canada	183.7
IBM Canada	172.6
Microsoft Licensing, MSLI GP	99.8
Telus.	87.5
Lockheed Martin Canada	60.8
Cisco Systems.	60.6
Rogers Business Solutions	46.0
CGI Information Systems.	38.0
Oracle Corporation Canada Inc.	37.0
EDS Canada Inc.	34.5
General Dynamics Canada	27.7
Brainhunter Inc	26.3
Stratos Wireless Inc.	25.0
Hewlett-Packard (Canada) Co	24.7
Veritaaq Technology House Inc,	23.3
Bragg Communications Inc.	18.5
MTS Allstream Inc.	18.4
Team CGI-IT/Net	16.4
Fujitsu Consulting (Canada)Inc	16.0
Nisha Technologies Inc.	14.9
Ajilon Canada Inc.	14.1

3. MAJOR MARKET TRENDS

Based upon interviews with many people, some major market trends have emerged. These are outlined in Exhibit 7.

- The Chief Information Officer branch within Treasury Board is committed to continuous improvement in the management and direction of Information Technology within the government. The introduction of the Federal Accountability Act has had a profound influence on the processes and methodologies employed to manage this continuous improvement approach. As a consequence, there is an ongoing process which will consolidate and document exactly what departments must do to comply with the various policies and directives.
- The government has continued to move forward in establishing shared services across the government. At the same time, the government is looking at the timeframe, costs and the potential benefits of this initiative. This is an outcome from nine operational reviews that have been completed, of which three were closely tied to information technology:
 - Review of the use of information technology and its management;
 - Review of Corporate Administrative Services, including human resources, finances and materiel;
 - Service delivery transformation.
- As a result of pressures to reduce expenses and to prepare for the move to a shared services environment, several departments have reorganized their information technology organizations. This has resulted in a rationalization and centralization of resources under the CIO. Regions and sectors in these departments have lost the autonomy that they previously enjoyed.
- The Common Administrative Services initiative has stalled and is still undergoing further review.
- Treasury Board is taking a stronger lead on many issues such as the Government of Canada Strategic Reference Model, the Management of Information Technology Security and the Business Transformation Enablement Program. These staffing levels are continuing to increase.
- Treasury Board has issued guidelines on how to develop effective strategic information and information management plans. These plans are now being developed in a more standardized fashion.
- Treasury Board is also encouraging easier access to data and information across the government.

- In April 1999 Treasury Board approved the Strategic IM/IT Infrastructure initiative. The major recommendations have now been implemented. A federated architecture has been developed so that the mix of departmental infrastructure and government-wide shared infrastructure can interconnect seamlessly to support business processes. There is a significant initiative to adopt a Services Oriented Architecture across the government to enable service components to be automated and shared.
- A Secure Channel has been implemented to support electronic commerce requirements. The Government of Canada Secure Channel was specified by the Chief Information Officer Branch and developed and delivered by PWGSC. The prime vendor was Team BCE, a consortium led by Bell Nexxia. The Secure Channel is now supporting programs from many departments. However, there still remains a substantial challenge to build the transaction volumes on a broader basis.
- There are some shifts taking place in the move to shared systems as shown by the potential shared computing facility for Public Works, Canada Revenue Agency and the Bank of Canada.
- Information sharing through improved information management is recognized as the ultimate objective.
 - Information sharing within and between departments is key.
 - Data standards, data modelling and data warehousing are all elements of making information more integrated and accessible.
- Privacy and security issues are being addressed in a more global fashion particularly with the adoption of the Management of Information Technology Security Standards (MITSS) program.
- There is increasing pressure to undertake serious server consolidation regardless of platform, both within departments and within the Information Technology Services Branch of Public Works.
 - Operational economy and stability is a concern.
 - Evergreen approaches are being developed for both servers and clients.
 - Thin client adoption appears to have slowed, except in a few departments.
- The CIO branch of Treasury Board is determined to put in place more effective controls of large projects so that they are approved from a financial and technical perspective before they get started.
 - The objective is to incorporate more solid front-end work and to improve management techniques throughout the project. A more pro-active approach is anticipated.

- The Organizational Readiness Office moved to Treasury Board and has made significant strides in rationalizing the many IT job titles and job descriptions to a more manageable 50 titles. This should improve mobility between departments and help to improve training of IT personnel.

EXHIBIT 7

MAJOR MARKET TRENDS

- The push to embrace shared services is very evident.
- Many departments are centralizing IT services.
- Treasury Board is taking a stronger line on many issues including project review and management.
- Information sharing through improved information management is the ultimate objective.
- A Strategic IM/IT Infrastructure initiative has been implemented.
 - The adoption of Services Oriented Architecture is being encouraged.
 - A Government of Canada Secure Channel has been developed in concert with other enabling components.
- There is increasing pressure to undertake serious server consolidation regardless of platform
- Shifts are taking place in the moved to shared systems.
- The implications of cloud computing are being examined.
- The use of Web 2.0 technologies is now in the pilot stage and more new developments are expected.
- Multi-department and cross-jurisdictional opportunities will grow.
- The Organizational Readiness Office is now located within Treasury Board.
- The Public Sector CIO Council aims at facilitating enabling technologies on a cross-jurisdictional basis.
- Broader trends include increasing wireless use and ageing of IT professionals.

- Multi-department and cross-jurisdictional opportunities will grow as more partnering takes place.
 - Single-window style projects are being developed by groups of departments to serve clusters of clients.
- In the public sector marketplace there are a number of broader trends that will become increasingly important:
 - The politicians are becoming more aggressive in attempting to review information technology projects as demonstrated by the Expenditure Review Committee meetings during the Summer of 2008 and continuing in the Fall of 2009.
 - The provision of government services is becoming increasingly multi-channel and multi-government in nature. There is a continuing trend towards electronic channels and towards the use of multimedia (voice, video and data).
 - There is recognition that there will, in the future, be enhanced citizen interaction as government moves from a program-centric view to a customer (citizen) - centric view of services. This will provide a more flexible and personalized access to government services e.g. ‘Service Ontario’ and ‘Service Canada’.
 - The increasing mobile workforce will require more in-the-field support using mobile devices.
 - The reengineering of the business of government continues, especially in the areas of public security and safety, education and health. It will require new information to support these changes.
 - The government is analyzing what steps are necessary to embrace and develop Web 2.0 approaches. Clearly there are several experimental developments of blogs and wiki-based projects but wide deployment is still in the future. The launch of GCpedia, a wiki for GoC public servants was completed in 2008.
 - There are some tentative approaches to understand the implications and feasibility of cloud computing technologies in the government.
 - Rapid adoption of wireless technology will make the challenges of dealing with an always-on society very significant.
 - Citizens have an ever increasing expectation of quality of service and the government will be compared with other governments and the private sector.
 - The aging of IT professionals is especially severe within the public service and will require a range of innovative solutions.

There are two Public Sector councils which are supported by a full time secretariat and now work together through a Joint Coordinating Committee. There is a stronger attempt to interweave the work of the two councils in order to bring together individual cases so that inter-jurisdictional success can be defined and measured.

- The Public Sector CIO Council was formed in 1998 to address cross-jurisdictional I&IT matters. The Public Sector CIO Council (PSCIOC) is comprised of the Chief Information Officers of the federal, provincial and territorial governments. It also works informally with municipal and other broader government partners.
- The Public Sector Service Delivery Council (PSSDC) explores common issues, develops partnerships and coordinated solutions, and shares best practices in the field of public sector service delivery.

4. STRATEGIC RECOMMENDATIONS

The key priority within government has changed to a focus on what it takes to realize an enterprise approach to IM/IT within the government. Exhibit 8 highlights the strategic recommendations.

- It is critical that vendors pursue opportunities across all relevant departments and influencers of technology selection. Vendors must demonstrate their technology advantages, not just to the program and line of business managers within the departments, but also to:
 - CIO Branch of Treasury Board Secretariat.
 - Information Technology Services Branch of PWGSC.
 - IM/IT branch within line departments.
- In the wake of the Expenditure Management Review, it is advisable to identify those departments where ‘keeping the lights on’ business expense is greater than 50% of IT spending. The potential for new projects will emerge as departments redefine and reallocate resources to new projects.
- The creation of the Shared Services organization within PWGSC indicates the potential for a new approach to the delivery of Information Technology through the use of shared systems across the government.
- The Federated Architecture will define standards.
 - Make sure that your products are compliant.
 - Embrace Service Oriented Architecture.

- Program areas have both the business problems and the financial resources to address them.
 - Since clients' problems are business problems, vendors must stress their understanding of the business problem and propose business solutions, not IM/IT solutions.
 - In some cases, partnering with an organization with credibility in the business area may be critical.
- There is a growing interest and commitment to respond to green initiatives. Ensure that you are aware of the department's special concerns in this area and prepare solutions sets that recognize the greening of government.
- Be aware of the current Code of Conduct for Procurement issued by Public Works in September, 2007 and ensure that staff do not fall foul of these rules as failure to comply may not only impact the current procurement but future procurements as well.
- Cross-departmental/multi-jurisdictional initiatives require co-ordination.
 - Vendors must demonstrate a well-orchestrated approach to all participants.
- Alternative Service Delivery options continue to be pursued.
 - Opportunities range from large-scale outsourcing to small-scale support projects.
- Concerns over client/server operational and technical stability create a benefit for those who can tell a credible story of long-term strategy and commitment.
 - Service stability and security solutions are critical.
 - Evergreen approaches are sometimes funded.
- Improved information management continues to be a major focus.
 - Products and expertise which assist will be in demand.
 - Data modelling, data mining, data warehouse and data display are just some of the key areas.

- Characteristics of a successful supplier:
 - If it's on Merx you are already too late. Suppliers need to do their homework and preparation for a large tender should take place at least six months before the tender.
 - It is critical for vendors to evaluate those opportunities where they have a good chance of winning. Recognize that the opportunities are far reaching and that the cost of bidding is high.
 - Show flexibility in your bidding strategy. In those cases where you have sector knowledge or demonstrated ability to execute, consider taking the lead. Be prepared to use consortium arrangements to compliment your skills base.
 - It is too easy to get settled into to a long-term contract, meet the required service levels but forget to add the sugar on the top. The trouble is that when it comes time to renew, the client may get wooed by the fresh ideas displayed by the potential new suppliers.
 - Continue to prove that you are adding value. The ministry wants proof that they are getting value for money. More often these days it is the company that shows willingness and ability to transform the ministry or agency and make a real difference that ends up getting the contract.
 - Reputation is increasingly important. Government ministries and agencies want to see a solid record of accomplishment of delivering in the public sector.
 - One of the biggest fears of government is that some suppliers have jumped into the public sector market to take advantage of the perceived stability and potential growth rates. The worry is that, at the first sign of a pick up in the commercial sector, they will lose interest. It is critical to show commitment to the public sector.
- While each department will continue to spend significant dollars, the big opportunities will come from the cross-department and shared initiatives. Smaller opportunities will come from the program areas that have the business need and the budget.
 - To be effective, vendors must sell business solutions to the program people who need new systems to meet budget and service demands.
 - Speciality vendors should consider partnering with the 'big solution' players.
 - Vendors must emphasize to the prime contractor which unique 'winning' capabilities they bring to the team. Commodity capabilities can likely be provided directly by the prime contractor.

- The level of discussion about Alternate Service Delivery options or anything with greater private sector involvement continues to be of interest. All vendors should review strategically where they could participate.

EXHIBIT 8

STRATEGIC RECOMMENDATIONS

- Demonstrate solutions to all buyers and influencers.
- Products must be compliant with the Federated Architecture.
- Identify 'Rust Out' solutions that your product can address.
- Cross-departmental and cross-jurisdictional initiatives will develop.
- Be sensitive to the need to meet green initiatives.
- Be aware of the Code of Conduct for Procurement.
- Program areas which have business problems also have the funds.
 - Stress business solutions/partner with solution providers.
- Cross-departmental/multi-jurisdictional initiatives require co-ordination.
- The move to a Shared Services organization would provide significant opportunities
- Alternative Service Delivery options, large and small, are being pursued.
- Stress client/server operational and technical stability.
 - Evergreen approaches are under consideration.
- Products and expertise in improved information management are hot.
 - Data modelling, data mining, data warehouse are key.