Supporting Good Information Management in the Government of Canada
Why focus on Information Management?

IM is a key enabler:

Information is part of every program, service and transaction carried out by government – a GC approach to IM strategies and standards is a key enabler of client centric services, transparency & accountability and service transformation

Challenge: to plan and design IM strategies and investments from an enterprise perspective:

- Common language to describe target groups, needs, outcomes, programs, services, processes
- Ability to align and measure outcomes of IM in relation to public program outcomes
- Strategic designs for services and business processes that can support GC management of information
- Ability to define enterprise roles & accountabilities

Challenge: to consistently structure, manage, share and reuse information and IM services across GC, communities of interest and jurisdictions
**The IM Challenges of GC**

Despite advances on many fronts such as MGI policy, governance structures, community development, expert support and guidance, and a portal approach to IM resources,

We are still challenged to...

- Ensure IM services are an integral part of GoC **program and service delivery**
- Ensure IM as a key enabler for **transformation** of service delivery and horizontal program management
- Leverage GC investment in IM from an enterprise perspective: **re-use designs, optimize limited resources**
- Build towards interjurisdictional **interoperability**
- Build **capacity within the IM community**
The IM Deficit

- **Level of sophistication of information need**
  - Program Deficit
  - Enterprise Management Deficit
  - Enterprise Operations Deficit

- **Current level of information management capability**

- **Capabilities**
  - Programs
  - GC Executive
  - Service Integration

**CAPABILITY GAP**
Canada’s Main Strategies to Improve IM

- **Policy Renewal & Implementation strategy**
  - full compliance with the Policy on the Management of Government Information (MGI) and support of sound IM practices
  - IM performance indicators, IM requirements for new programs and projects
  - MAF stewardship element
- **IM program design**
  - strategic vision and blueprint for effective IM in GoC
  - define priorities for investment, alignment
  - GoC information reference models: initial focus identity management, corporate administrative services
- **Information standards and Interoperability**
  - Metadata strategy enables information exchange
  - Initial focus citizen access, geomatics, metadata quality
- **IM Community Development**
The GC Policy Framework for Managing Information

Framework for the Management of Information
- Standards & Guidelines for IM Practice
  http://www.tbs-sct.gc.ca/fmi-cgi/index_e.asp

Policy for the Management of Government Information
- Implementation strategy
- Compliance indicators
- Identifies the E record as the record of choice
- Points to over 30 different policies & statutes that influence how information is managed

http://www.informationmanagement.gc.ca/
To ensure that information assets under the control of the Government of Canada are effectively and efficiently managed throughout their life-cycles, so as to support:

- accountability for government
- informed policy and decision-making
- the delivery of high quality programs, services, and information through a variety of channels and in both official languages
- the protection of personal information
- the preservation of the historical record
Supporting Compliance
Development of MGI Readiness Indicators

• Interprets MGI requirement statements into tangible activities or support mechanisms
• Provides a checklist against requirements of MGI Policy
• Indicates conditions or provisions that demonstrate an organization’s readiness to comply with policy – to support good IM
• Identify directives, procedures, tools, processes and organizational and technological requirements to support compliance
• Identifies Interdisciplinary responsibility – supporting coordination
• Distinguishes between central agency and individual institutional responsibilities
• Measures progress in MGI Policy Implementation
• Feeds into audit tool for monitoring and evaluation
Priority Indicators

Relate to:

- maintaining and protecting government records
- mechanisms to improve accessibility to information and strengthening support for the management of information
Why an IM Program?

Our inability to “act as one” prevents us from achieving enterprise IM outcomes

The primary outcomes of a government wide IM program include:

- Increased transparency of decision making and accountability
- Value for money: enterprise management of information assets supports reuse, appropriate access and information integrity
- Integrated service delivery: information interoperability across government and jurisdictions based on common standards and processes
- Improved provision of information to public programs that serve citizen needs for GoC services
IM Program in context of the overall business of the GC

Public Programs
(Socio-) Economic Development
Science and Knowledge Development
  Natural Resources
  Environment Protection
Legal, Collective, Democratic & Human Rights Protection
  Social Development
  Cultural Development
  Public Education
  Public Health
  Public Safety
  National Security & Defense
  Justice

Provider Programs
Public Policy, Planning and Management
Corporate Policy, Planning and Management
Human Resources Management Services
  Financial Management Services
  Information Management Services
  Information Technology Services
Facilities, Fleet and Equipment Management Services
Communications Management Services
Supply Chain Management Services
  Administrative Services
  Professional Services
Description of “The Business of IM”

The IM Program

An IM Program more effective within the context of the GC enterprise

Improved architected information and its supporting processes result in GC undertaking change with agility

Evidence that the IM Program is operating effectively within the context of the GC enterprise

Improved architected information and its supporting processes ensure the GC record has integrity

Improved architected information and its supporting processes result in GC operating as an enterprise

Improved architected information and its supporting processes ensure clients rights are upheld in the conduct of GC business

Preserved and safeguarded information

Ensured availability of information to use in managing program and services

Ensured availability of information to use in delivering service outputs

Ensured availability of information to use in tracing decisions and process

Ensured availability of information to use in delivering service outputs

*PLUS the needs and outcomes of Any GC Program

Any GC Program needs
- Preservation and safeguarding of program information
- Program information is available to collaborators
- Information to use in managing program and services
- Information to use in tracing decisions and process
- Information to use in delivering service outputs

Any Integrated Service Delivery Program* needs
- Ability to integrate services across GC programs

GC Executive* needs
- GC programs that operate effectively in the enterprise context
  - Ability of GC to operate as an enterprise
  - Ability of GC to undertake change with agility
  - Assurance that the GC record has integrity
  - Assurance that client rights are upheld in the conduct of GC business

*PLUS the needs and outcomes of Any GC Program
The 3 Target Groups & Their Needs

1. Any GC Program
   ▪ Program information is available to collaborators.
   ▪ Program information is preserved and safeguarded.
   ▪ Information to use in managing program and services.
   ▪ Information to use in tracing decisions and process.
   ▪ Information to use in delivering service outputs.

2. GC Executive
   ▪ GC programs that operate effectively in the enterprise context.
   ▪ Ability of GC to operate as an enterprise.
   ▪ Ability of GC to undertake change with agility.
   ▪ Assurance that the GC record has integrity. Assurance that client rights are upheld in the conduct of GC business.

3. Any Integrated Delivery Program
   ▪ Ability to integrate services across GC programs.
The Goal ....

to treat information as a strategic asset and to manage it as a public trust

At the day-to-day operational level:

Programs have the information to manage & deliver on mandates. Information is preserved & safeguarded & made available as appropriate.

At the government-wide, executive level:

Rules, standards & guidelines are used for structuring & handling information which enables integrated operations/agile change. Reports have integrity. Clients’ rights are upheld in the collection, storage and use of information.

At the transformational level:

Horizontal initiatives benefit from information infrastructure designed to support sharing and integration across programs.
Objective: a cohesive fit of current and planned IM investments against desired program outcomes

- Understand investment priorities
- Identify where there is duplication
- Address key gaps in activities

Approach

- Identify candidate IM initiatives for alignment – IM inventory
- Examine existing and planned IM initiatives - alignment
  - to determine degree of alignment to outcome value chain
  - To identify opportunities to leverage efforts/investments
Areas for Improvement

These are the priorities:

1. Enterprise information architecture
2. Integrated policy and legal framework for information assets
3. Information standards for business interoperability
4. Business need-driven information availability
5. Embedded IM training
6. IM Community Management
7. Enterprise IM strategic design and planning
8. Measuring IM performance in the GC
Information standards & architecture

• “A conceptual framework that … defines the basic structure, content and relationships of the organization’s information holdings needed to support the basic business processes of an organization.”

• A consistent information architecture will help align information assets …
  • to our strategic outcomes for Canadians via the Management, Resources, and Results Structure (MRRS)
  • for greatest efficiency and effectiveness for business success
  • for information re-use and interoperability
Levels of Interoperability

- **Business Interoperability**
  - Common methods and shared services for collaboration, including workflow, decision making and business transactions

- **Information Interoperability**
  - Common terminology, definition and structure of information, along with shared services for its retrieval and management

- **Technical Interoperability**
  - Common methods and shared services for the communication, storage, processing and presentation of data
Information Standards & Interoperability
GC Evolution

- **Initial work:**
  - Adoption of the Dublin Core as the GC core metadata standard (TBITS 39.1);
  - 5 mandatory elements (CLF 6.3).

- **Evolution:**
  From a base set common to all domains…
  - to a common set for resource discovery…
  - to guidance on developing elements and a MAP.
GC Enterprise Information Architecture: Building Blocks

- Architectural principles
- Standards and information modelling methodologies
- Information Reference Model
- Common Information Elements Model
- Metadata Standards
- Value sets (Taxonomies, Functional Classification, etc.)
- Values
- Schema
Lessons Learned …

- Information management must be an integral part of program and service delivery planning – *it cannot be ‘assumed’*
- **Program needs are the driver - NOT technology**
- Integrated citizen centered program delivery is only possible if the supporting information is managed at the enterprise level
- To be successful we need to:
  - Provide the enterprise context for **alignment of major IM initiatives**
  - Bring the IM and business community together around a **shared understanding of IM**
  - Create an **enterprise strategy** for defining, structuring & managing information – information interoperability
- An IM Policy must provide the framework which links other policies and laws that influence IM, set out accountabilities ... and must be supported by an implementation plan
IM Environment Today

We face many challenges:

- Breadth of IM not recognized by senior management
- Good IM practices have yet to become widespread in program delivery and day to day operations
- Problems in information sharing impede interoperability and provision of horizontal and transformed services
- Most IM investments not managed with an enterprise perspective
- Inability to measure the contribution of IM to business of government
IM Environment Today

- Information required by employees to conduct their work is fragmented and difficult to locate
- The complete government record not available for many audit situations
- GC cannot guarantee that information assets entrusted to it are always well managed
- Accountability for IM is not clearly articulated
- Many large IM solutions developed with inadequate IM expertise
- IM solutions require multidisciplinary teams yet these communities are not working together