Presented to
Open Group Enterprise Architecture
Practitioners Conference

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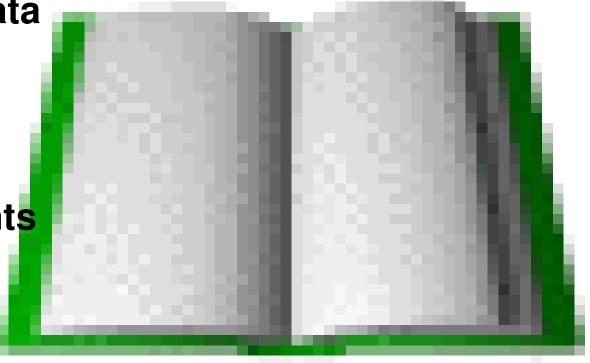
2009-07-22

# Agenda

- Background
- Journey

Information & Data Universe

- Driving forces
- Constraints
- Enabling elements
- Governance
- Recap



## **Background: The Mandate**

#### **Government of Canada**

Peace, Order and Good Government - (Good Government Agenda – provide the best possible government to Citizens that yields the best return on their tax dollar.

# Human Resources and Skills Development Canada (HRSDC) / Service Canada / Labour Canada

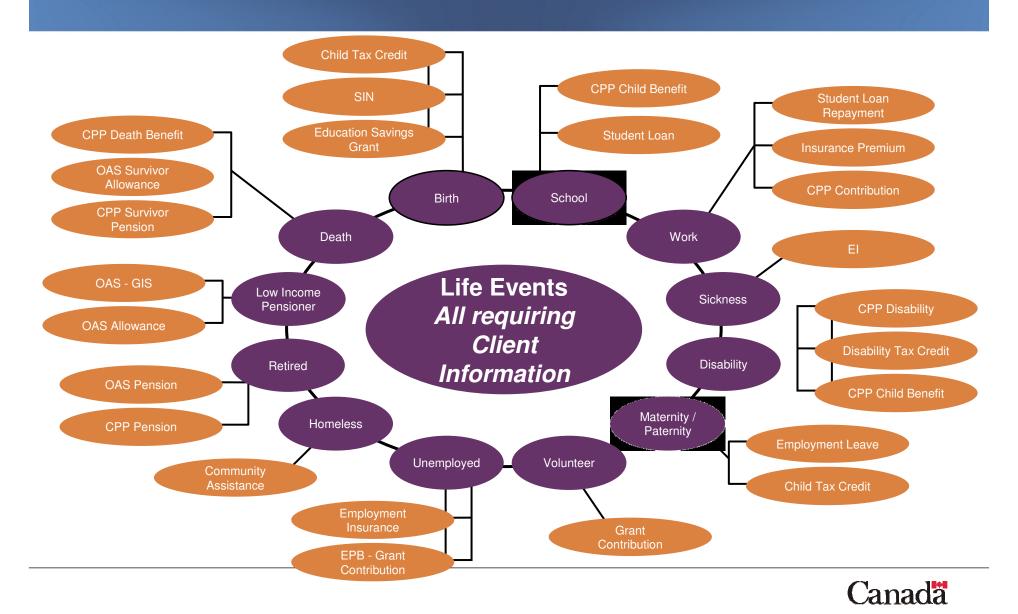
Build a stronger and more competitive Canada, to support Canadians in making choices that help them live productive and rewarding lives, and to improve Canadians' quality of life.

#### Innovation, Information and Technology Branch (IITB)

IITB is to enable HRSDC / Service Canada / Labour Canada to become a worldclass client service organization, by being a world-class IT organization that is driven by client-focused, value, quality and innovation.

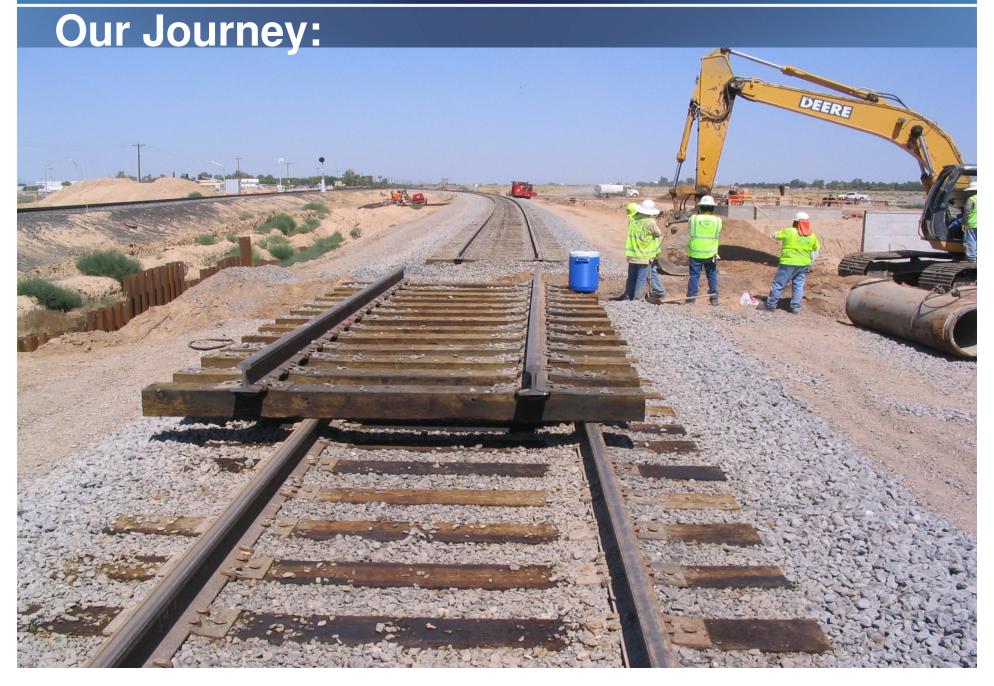
"Information Technology plays a critical role in the effective and innovative operations of the Government of Canada"

### **HRSDC: Our Business The Social Face of Government**



# Where we are today

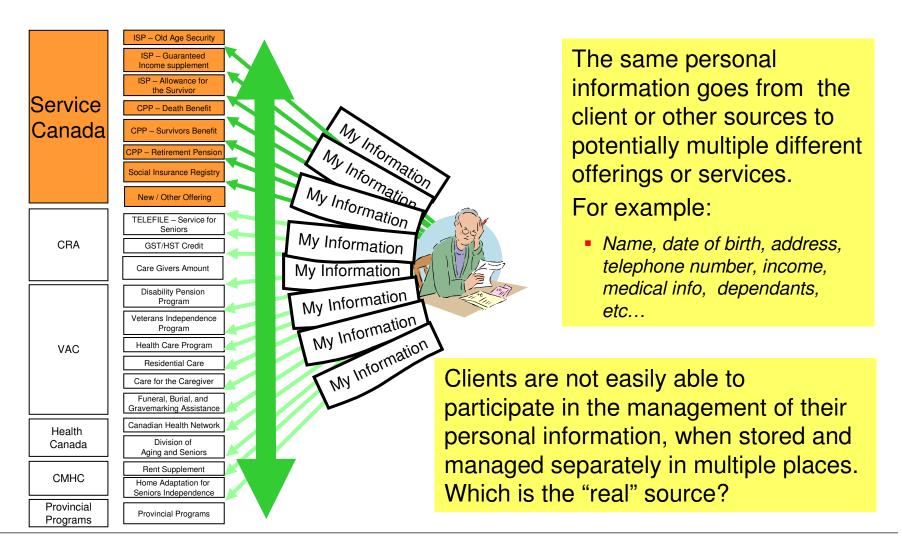
- Ineffective IT governance returns from IT spending are not satisfactory.
- Too many unapproved, client specific or minor enhancement projects.
- Too many aging unintegrated applications, software products and infrastructure.
- A lack of financial accountability The cost of IITB services is not well known and is under managed.
- A reactive culture and mode of operation.
- Difficult to move IITB staff to where they are needed. culture of ownership of staff (client and internal view)
- Continued project delivery and service execution failures.
- A lack of reuse.
- Insufficient focus on strategic enterprise development priorities.
- Very limited strategic IT management or development capability within IITB today.



### **Information and Data Universe**

- Whole of Government context
- Our information universe
  - Yesterday
  - -Today, and
  - Tomorrow
- Keeping it Do-Able

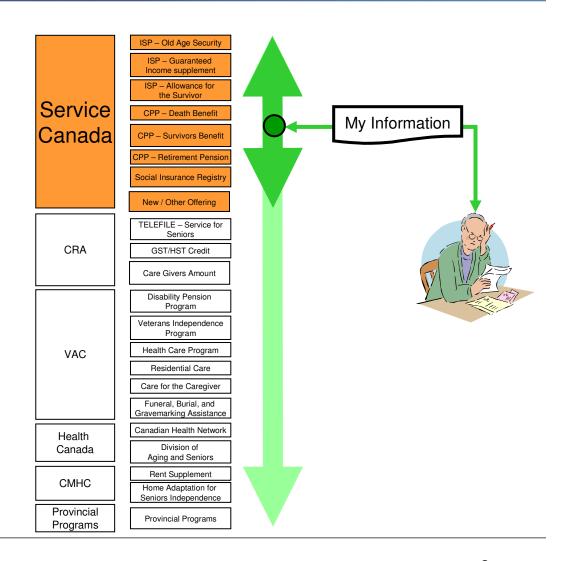
## Today's Architecture: Client View



Client data is gathered and stored multiple times 8

# Tomorrow's Big Picture... The Target Architecture

- In the future...
  - Clients will only need to provide their information once, and will not be asked for the same information already held by HRSDC-Service Canada.
  - -Clients will be able to view and update their information ensuring that the most up to date information is available. For example will only have to change one's address in one place, to make the update.
  - Service Canada will only ask for additional information, if required to deliver a particular service or benefit.
  - Service Canada will improve service integrity due to robust client information.
  - Service Canada will improve operational efficiency through reduced information complexity and duplication, and enhanced accuracy.



# Journey: The Train has left the Station

- Developing a situational awareness
  - Understanding the driving forces
    - From a Client's perspective
    - From a Business perspective
  - Motivation to transform
  - Acknowledging the constraints
    - Past, Present and Future
- Building a Roadmap
  - Aligning with other strategic initiatives
- Monitoring Progress

# **Driving Forces Evolving Business & Client Expectations**

# Entering New Era of Citizen, Business, & Community Sophistication

#### Rising client expectations

- Citizen-centered +
- Responsible and Sensitive: Privacy & security

#### Communities

 Want an ongoing relationship: Horizontal, cooperative, collaborate, partnerships in line with community's aspirations and vision

#### Employers

Looking for modern methods of transacting with government

#### Cross audience shared themes

- -Simple, Responsive
- Modern, Integrated, Coherent

#### Staff

Looking for ways to better serve clients

### **Driving Forces**

- In the current environment, the availability of accurate and complete information has an impact on our ability to leverage client information and to deliver citizen-centered services...
  - Clients are asked for the same information multiple times
  - Concerns regarding the quality of the information currently held; No single authentic source of client information
  - Multiple programs and/or segments may be requesting and/or require the same information
- Legislative Framework
  - Verticals: Employment Insurance Act, Labour, etc.
  - Horizontals: Financial Administration Act, Privacy, PIPEDA, ATIP, etc.
- There is also a very fine line between client identification and client privacy

### Considerations from a Citizen's view: Legislative Framework, & our Business Reality

### **Client Expectations**

Common suite of services

Client's choice of service delivery channel

 Only one face of Government holding their information

### **Our Response**

- Established centre of government information and services in the community
- Equal access and service levels
- Inter-jurisdictional initiatives

# Our motivation for change

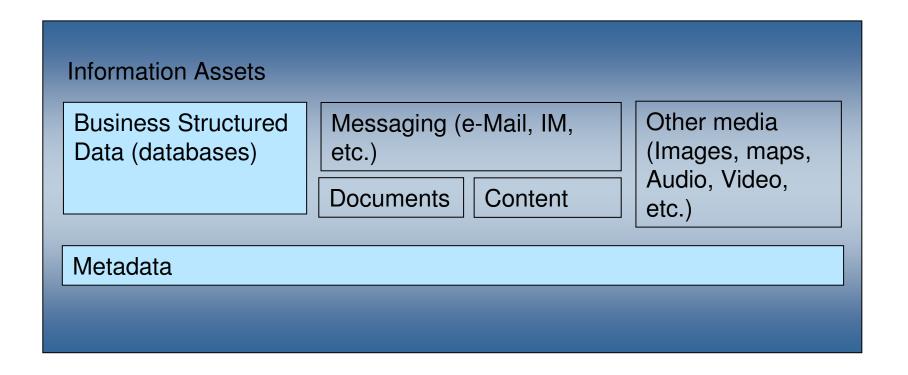
- Increased demand for essential Departmental programs and services
- End-of-life and/or aging technology
- Progress made to standardize and stabilize a large and complex IM/IT environment and asset base
- Failing grade on Management Accountability Framework for Information Management
- 40% non-compliance with minimum GoC Management of IT Security (MITS) Standard
- Increasing cost for IT operations, capital and maintenance
- Limited ability to drive greater value out of current assets and investment

## **Constraints**

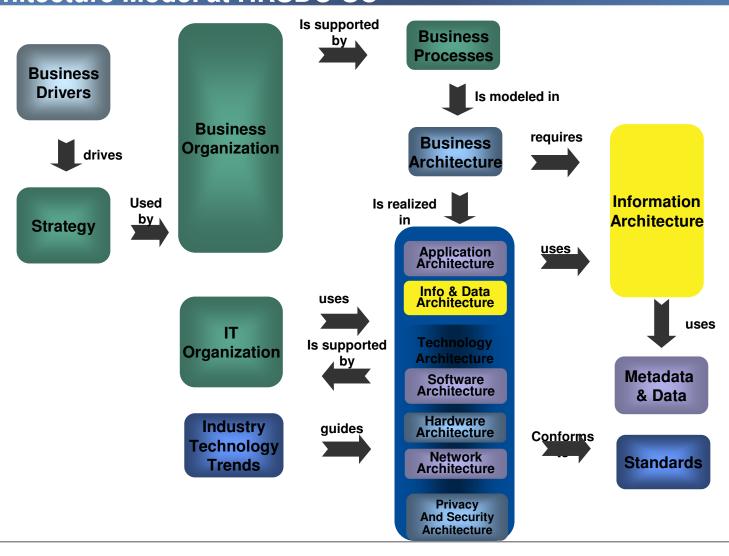
- Some of considerations in our reality
  - Boiling the Ocean
  - Living with the Past



### **Focusing on transforming the supporting Data Architecture**



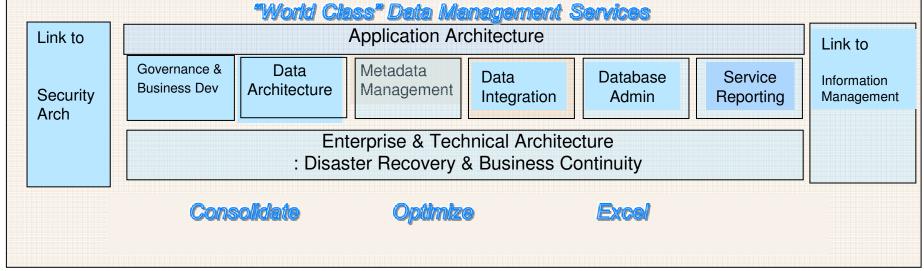
# Positioning the Data & Information Architecture in the Enterprise Architecture Model at HRSDC-SC



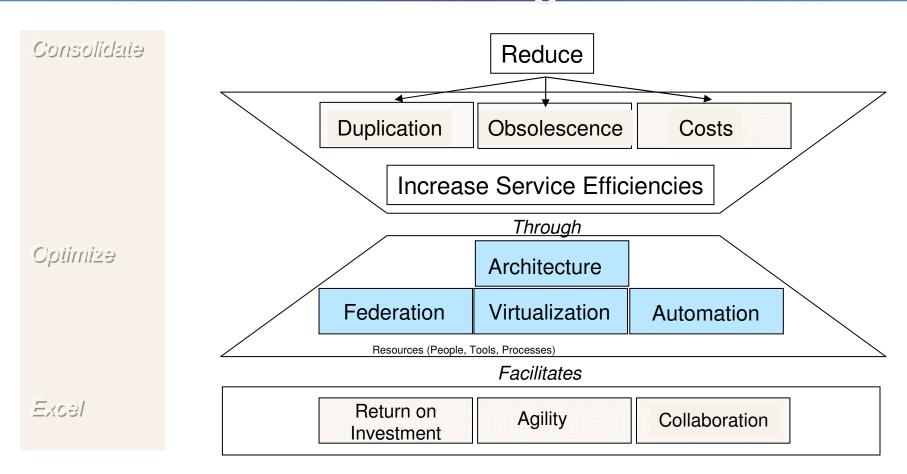
# HRSDC-Service Canada Data Management Goals:

To offer "world class" data management services the following fundamental building blocks must be in place.





## "World Class" Data Management Trends



# Challenges we faced on our Journey

- The current client information environment has an impact on our ability to deliver citizen-centered services...
- On-going challenge of how to quickly and efficiently introduce new services and program offerings, and without creating a new database
- Moving towards gathering and reusing client information will bring other responsibilities related to managing large volumes of client information – which is the right copy, which should be maintained, etc

### Privacy Act – Per HRSDC Investigations Guide, Legal Parameters

- It is recognized that in some cases, can collect, use and disclose information without having to obtain consent from the client. A few exceptions to the consent rule are:
  - if the action clearly benefits the individual or if obtaining permission could compromise the information's accuracy;
  - where such data can contribute to a legal investigation or aid in an emergency where people's lives and safety could be at stake; and
  - if disclosure aids matters of legal investigation or facilitates the conservation of historically important records.
- Subparagraph 7(3) of the Personal Information Protection and Electronic Documents Act says:
  - "(…) an organization may disclose personal information without the knowledge or consent of the individual only if the disclosure is
  - (c.1) made to a government institution or part of a government institution that has made a request for the information, identified its lawful authority to obtain the information and indicated that
  - (iii) the disclosure is requested for the purpose of administering any law of Canada or a province;"

# Service Canada Consent Forms Today

#### In a general search for consent related forms found:

- 37 different numbered forms with "consent" in title
  - Some are duplicates between the OAS and CPP program
  - 28 are repeated for different country packages for CPP
- Main intended use for forms are:
  - For medical evaluation
  - To communicate information to a representative (on behalf of)
  - For authorization to communicate information (like 3rd parties insurers)
  - For deduction or payment

# Our strategy unfurled

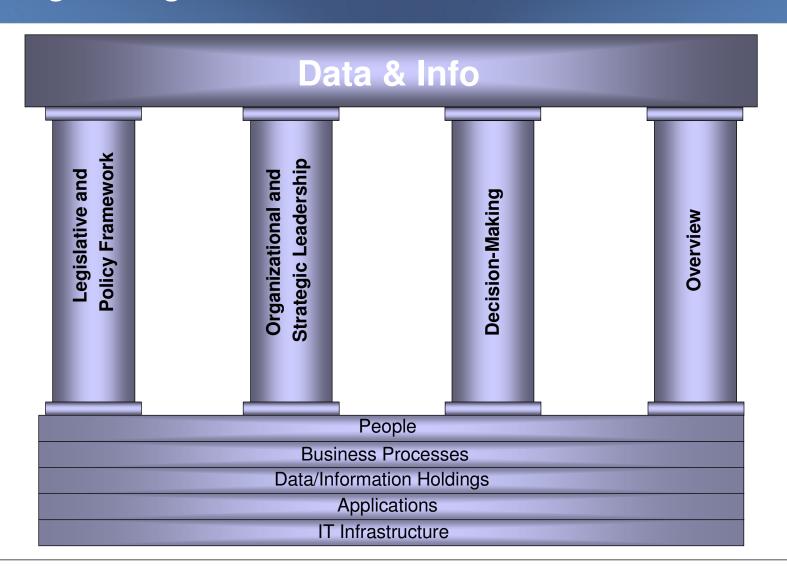
#### **Business Governance View**

- Adopt a <u>Project Portfolio Approach</u> to IT Governance
- 2. Develop a Tracking System
- 3. Review Projects
- 4. Establish Review Levels
- 5. Culture of Ownership
- 6. IT Governance "process" is established and followed
- 7. Establish Clear Process
- 8. Adherence to Process

#### IT / Data Perspective

- Inventory of Systems and Services
- Accountabilities of Information and Data related Committees and Working Groups
- 3. Chart of Accounts and Accountability Matrix
- 4. Policy Review
- SWOT Teams and Centres of Expertise
- 6. Overview
- 7. Communications Strategy

## Strengthening the Governance Framework



**Practices and** 

Horizontality

Greater

Low

#### **Governance Options** A "Federated" style of **Governance is best suited** considering the pressures and the business decision-Line of Business (LoB) making style at HRSDC-SC Pressures for **Enhanced** High Centralized **Federated** LoB **Business** Coherence and Organizational Cohesiveness, **Increased** Harmonization of

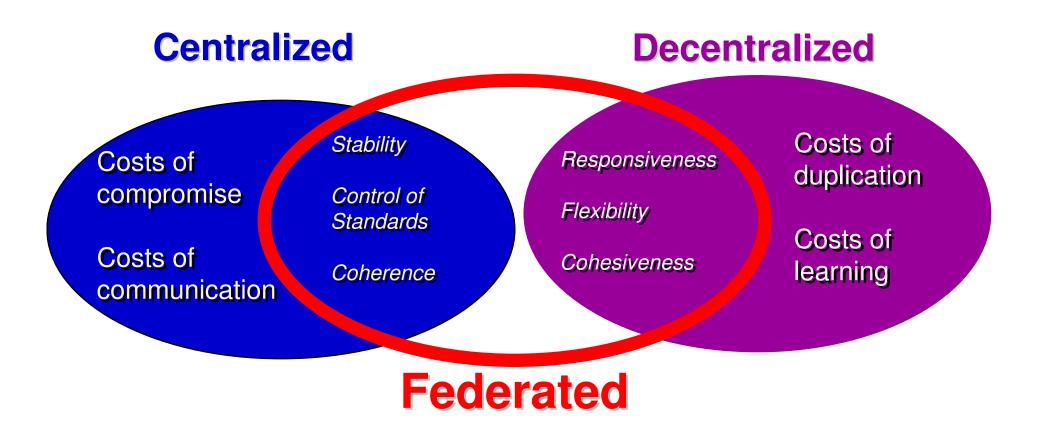
Pressures for Flexibility and Local responsiveness

Low

Decentralized

High

# The Federated Model: Getting the Best of Both Worlds



### **Key Features of Proposed Data Governance**

- Stewardship
- Sustainability
- Federated Governance
- Formal Accountabilities

### Data Governance Fundamental Truths & Performance Measures

There are 6 strategic goals that the governance enables:

- 1. Support HRSDC SC Business Transformation
- 2. Facilitate adherence to the Legislative Framework and Provide Innovative IM Governance, Policy And Strategies
- 3. Provide Integrated Data, Information And Knowledge Structure
- 4. Provide Global, Secure & Legal Access to Data
- 5. Provide Business Driven Information Quality
- 6. Transform Conduct of Data Management at HRSDC SC

### Principles: The First Hurdle

Data is a Strategic Business Resource

Does the project involve the business?

Data is Everyone's Duty to Manage

Does the project manage the information?

Data is to be Shared

Does the project enable information sharing?

Data Quality is Essential

Does the project account for information quality?

Security, Privacy Confidentiality and Protection

Does the project address and handle these issues?

Adherence To DM Architecture

Does the project adhere to the IM Architecture?

Flexibility & Responsive To Change

Is the project flexible and responsive to change?











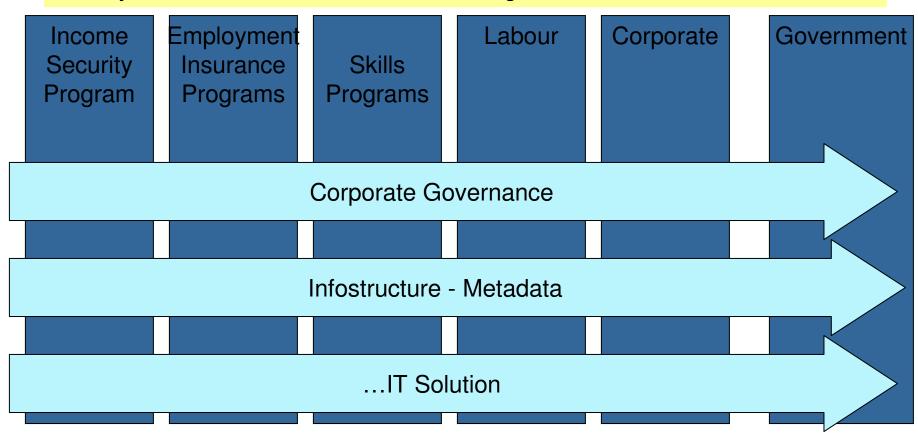




# **Engaging Business Partners**

### Our Approach:

Nurture Client Centric Relationships with Program Areas to garner their support to transforming within their our jurisdiction and then extending pragmatically and bridging across jurisdictional boundaries and then extending the reach across Government



### Recap: Our Journey

#### **Stories & Lessons Learned**

- Extensive Consultations
  - Senior Management
  - Workforce
  - Other Government Departments
- Identified
  - Strengths
  - Best Practices
  - Risks of not doing anything
  - Opportunities
  - Gaps and Strategies
- Several workshops and brainstorming sessions to validate and build upon findings

In closing, the Dalai Lama's was quoted to utter these word of wisdom "Learn the Rules so that you know how to break them properly!". Thank you for being here today.





### **Initial Information Elements**

- Proof of Concept will develop a prototype to access relevant core client information (core biographical information) and to pull it into a single virtual view for SIN based programs services and benefits.
- A sample of basic core personal information elements required for a client are:
  - Last name
  - Middle name
  - First name
  - Date of Birth
  - Place of Birth
  - Mother's Maiden Name and/or Name at Birth
  - Social Insurance Number
  - Gender

## **Possible Sources for Core Data Elements**

	SIR	OAS- CPP	EI	CRA	RRQ	Other?
Last Name	<b>~</b>	<b>&gt;</b>	<b>~</b>	~	<	
Middle Initial	<b>*</b>	<b>✓</b>	~	~	<b>&gt;</b>	
First Name	<b>&gt;</b>	<b>~</b>	~	~	>	
Date of Birth	>	<b>Y</b>	<b>~</b>	~	<b>&gt;</b>	
Place of Birth	<b>~</b>	<b>&gt;</b>			*	
Mother's Maiden Name	<b>&gt;</b>		>			
Name at Birth		<b>&gt;</b>				
Social Insurance #	•	<b>&gt;</b>	*	~	>	
Gender	<b>&gt;</b>	>	>		<b>&gt;</b>	

### **Sustainability = Responsible Stewardship**

- Five dimensions
  - Economic sustainability
  - Technology sustainability
  - Information sustainability
  - Services sustainability
  - People sustainability

### **Considerations for Selecting an Authoritative Source**

Some elements to consider for the selection of an authoritative source:

- Timeliness of data is it current?
- Appropriate volume or amount of data...coverage and completeness of data set - representative for Service Canada
- Consistency of format?
- Quality: correctness, reliability, credibility of data
- Accessibility or availability of the information
- Maintainability of data --- important lifecycle (eg., update, backup, archive)
- Scalability, extensibility of source and its structure
- Restrictions and security of data

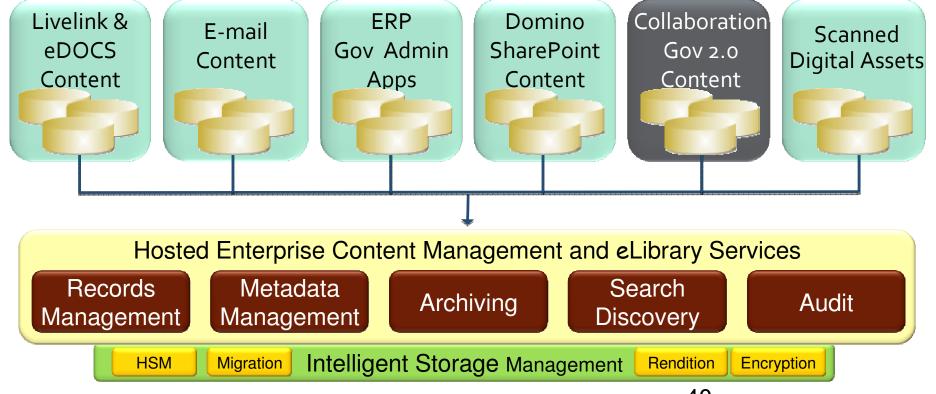
## Strawman for an Authoritative Source Selection

	Criteria	Description	Weight	Element * Source n	Element * Source n <sub>+</sub>
1	Coverage	Representative of "population" - How well information reflects reality	.3		
2	Timely	How current or up to date is the data.	.2		
3	Valid	Acceptable format, consistent and uses standard conventions	.15		
4	Usable	Ease with the database or data element may be understood, accessed, and or maintained.	.2		
5	Quality	The data element is present and complete, correct and reliable.	.15		
		Raw Score			
		Ranking	<b>\</b>		

## GC Business Alignment for Collaboration and IM

Portal and Integrated Desktop User Interfaces
Hosted Portal Business Views; Outlook, MS Office, Browser Integration
OTC - Enterprise Connect & LECM Extensions

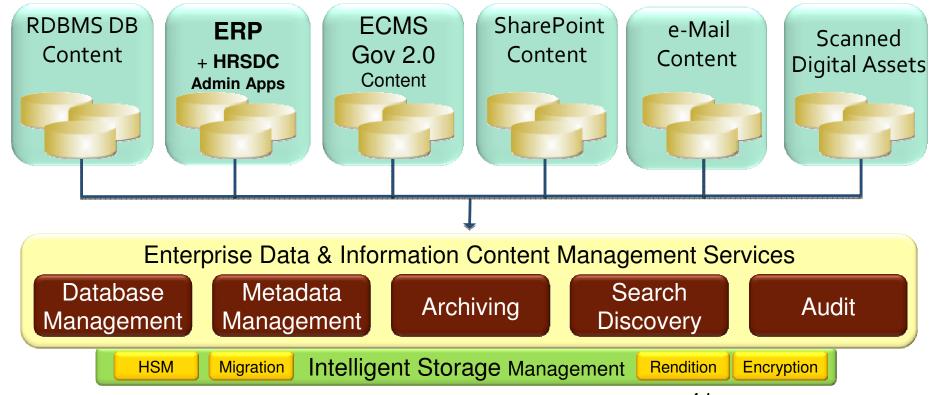
#### Information and Content Sources



## GC Business Alignment for Collaboration and IM

# Architecture for Information Access Solution Portal and Integrated Interfaces

#### Information and Content Sources



# GC IM Strategy – Framework

Programs & Services | Trust in Government | Effective Decision-making

#### IM Vision

#### GC IM STRATEGY

Policy & Governance

People & Capacity

**Enterprise Information Architecture** 

**IM Tools and Applications** 

Information Handling and Delivery

Fed AA

Public demand for increased accountability and transparency in government decision-making

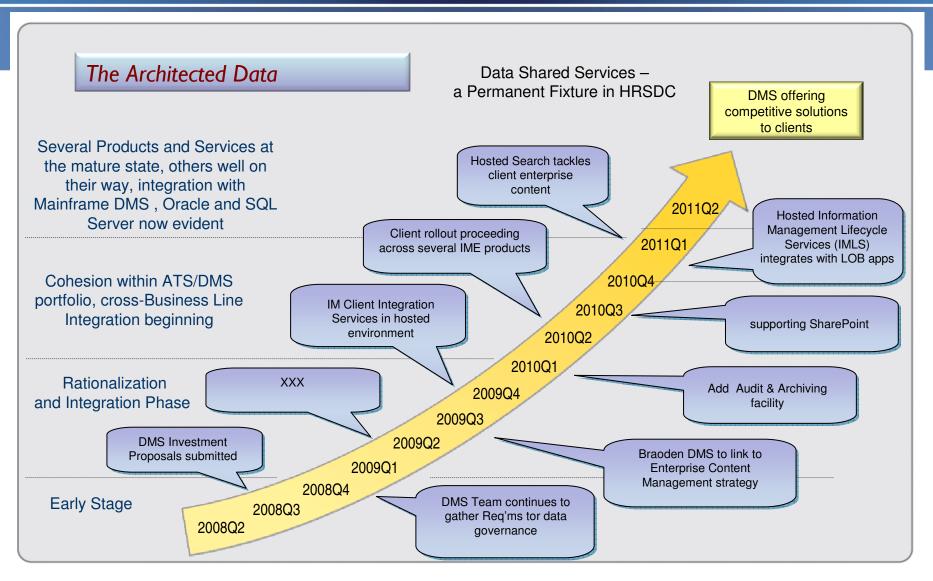
Expenditure management and financial reporting improvements Full and clear *information* on programs and operations

GC Enterprise

Interoperability and integration

Service transformation across organizational boundaries requires efficient and effective aggregation of information

Source: TBS presentation to IM Lifecycle WG 01/09



# Stewardship: Three concepts

- Stewardship = Management (with a twist)
- Only some of us are managers. Yet we are all stewards of public information resources (a trust) entrusted to us
- As stewards of a public trust, each of us has five fundamental obligations (from John Locke, Treatise on Government, 1690):
  - To act out of loyalty in the best interest of the beneficiary of the trust (Canadians), not those of the trustee, and, in the process, to preserve and enhance the value of the asset entrusted (Enhance value);
  - Not to delegate the entire administration of the trust (Ongoing, continuing obligation);
  - To provide the beneficiaries with information concerning the trust (Accountability);
  - To enforce claims on behalf of the trust (Protection); and
  - To make the trust property productive (Increase yield)

- Cavadian lace lesing confidence in Sovernment's management of their personal data
- Complying with Legislation such as Access to Data, Privacy
   & Security, etc. is problematic
- Data continues to be gathered, managed and used, along program specific needs which does not allow the client and staff to simultaneously view and update data in one place
- Current situation of maintaining over 450 databases and their accompanying meta data is not fiscally sustainable
- The Big Bang approach as repeatedly failed to resonate with Business and Senior Management

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