



4th Annual MGI Forum Verney Conference Management

Metadata and Taxonomy Integration Project (MTIP)

“GC Alignment of Information, Business Processes and Parliamentary Reporting”

February 28, 2006
EDRM #: 148775 v18

Yves Marion,
Knowledge and Information Management Directorate (KIMD),
Chief Information Office (CIO) Sector, PWGSC



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada

Overview

- ⑦ GC Information Management
- ⑦ Federal Landscape on 'Records'
- ⑦ Breadth & Scope of IM Domain at PWGSC
- ⑦ MTIP, GSRM, MRRRS/PAA, MAF
- ⑦ GC – One Enterprise

Information Systems and IT Services Have Evolved in Federal Government....


Mid 1990s

- Focus on standards and infrastructure (GoC “Blueprint”)
- Selection of common software for HR and Finance (117 packages down to 7 Fin and 14 HR)
- Automation on a program-by-program basis

Late 1990s

- Y2K
- Financial Information Strategy (FIS)
- Enhanced Management Framework (EMF) for IT projects

2000-2005

- GOL
 - External Services on line
 - Citizen centred services
 - Common infrastructure (Secure Channel)
 - Capacity building in IT and IM communities
- 

- ...and industry leaders and colleagues in other jurisdictions are now tackling:
- Horizontal service delivery models and a focus on transformation
 - Internal Services to be approached as one Government – one Enterprise
 - Creation of modern workplace with self serve tools employees and managers need
 - New service models to deal with commoditization of IT infrastructure

Source: TBS

Horizontal Reviews Findings: Challenges in Information Management

Lack of reliable data

- Information defined and tracked differently in each department
- GoC chart of accounts implemented in different fashion in each organization
- Expensive and time-consuming to get reliable GoC-wide information

Weak support for decisions

- Results not linked to resources expended, except in annual reporting
- Operational capability to adjust activities based on results being achieved not possible at any level (from unit through dept'l to GoC level)
- GoC lacks sound information on vendor/supplier impacts

Cumbersome internal processes

- Transferring individuals from one department to another takes many months, and often requires manual re-entry of data.
- Numerous administrative paper processes burden operational staff

Duplicative expenditures

- Total corporate administrative and IT services \$9.3B or more annually
- Corporate systems applications expenditures average \$300-\$400M per annum (e.g. Fin, HR, Compensation, Pensions systems)
- Significant immediate savings from consolidation to single systems

Conclusion

Multi-year enterprise-wide program is required to develop and coordinate improvements and transform Internal Services in the Government of Canada

Source: TBS

The Federal Landscape on 'Records' ... all roads lead to Rome.

Gomery: “Recommendation 16: The Government should adopt legislation requiring public servants to document decisions and recommendations, and making it an offence to fail to do so or to destroy documentation recording government decisions, or the advice and deliberations leading up to decisions.”

Federal Accountability Act: “Oblige public officials to create the records necessary to document their actions and decisions.”

Open Government Act: “2.1 Every officer and employee of a government institution shall create such records as are reasonably necessary to document their decisions, actions, advice, recommendations and deliberations.”

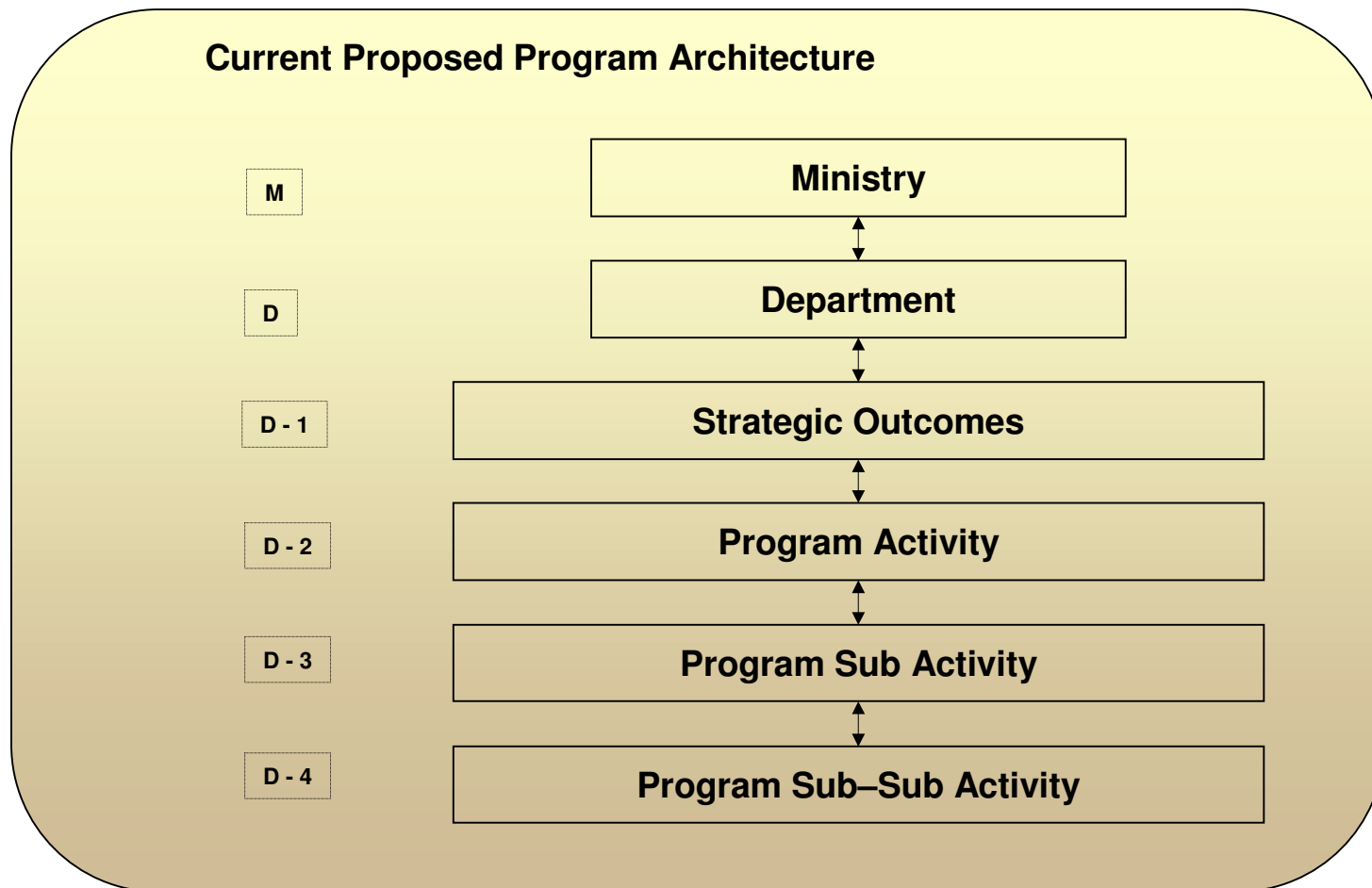
Treasury Board Secretariat: “High quality, consistent and timely information for evidence-based decision-making; drawn from authoritative sources.” + “Transparency to public, Parliament and stakeholders on outcomes and performance.”

Management, Resources, and Results Structure (MRRS) Policy

Policy Objective:

- ⑦ Development of a common, government-wide approach to collect, manage, and report on financial and non-financial performance information against clearly defined and measurable Strategic Outcomes
- ⑦ Report to citizens and Parliament on resources, program activities and results, consistent with the Management Accountability Framework (MAF)
- ⑦ The Program Activity Architecture (PAA) is the business architecture reflecting department's mandate, linked to GoC priorities and results + horizontal links between departments with similar Strategic Outcomes

MRRS and the Program Activity Architecture (PAA)



Source = Treasury Board Secretariat

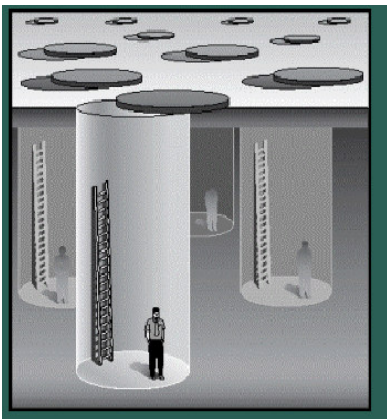
The Information Layer ...

- ⑦ The GoC requires a consistent method of capturing information (processes, architectures, templates, data capture fields, related metadata, etc...)
- ⑦ The GoC has expressed a need to improve the aggregation of information (vertically for Ministerial accountabilities and horizontally for cross-departmental programs/services/themes)
- ⑦ ***All GoC activities start with the Planning cycle (RPP, Ops Planning, Budgeting)***
- ⑦ Consistently capturing information during the planning cycle will provide significant guidance to the underlying information schemas across the GoC (for example: COA, file plans, web, databases)

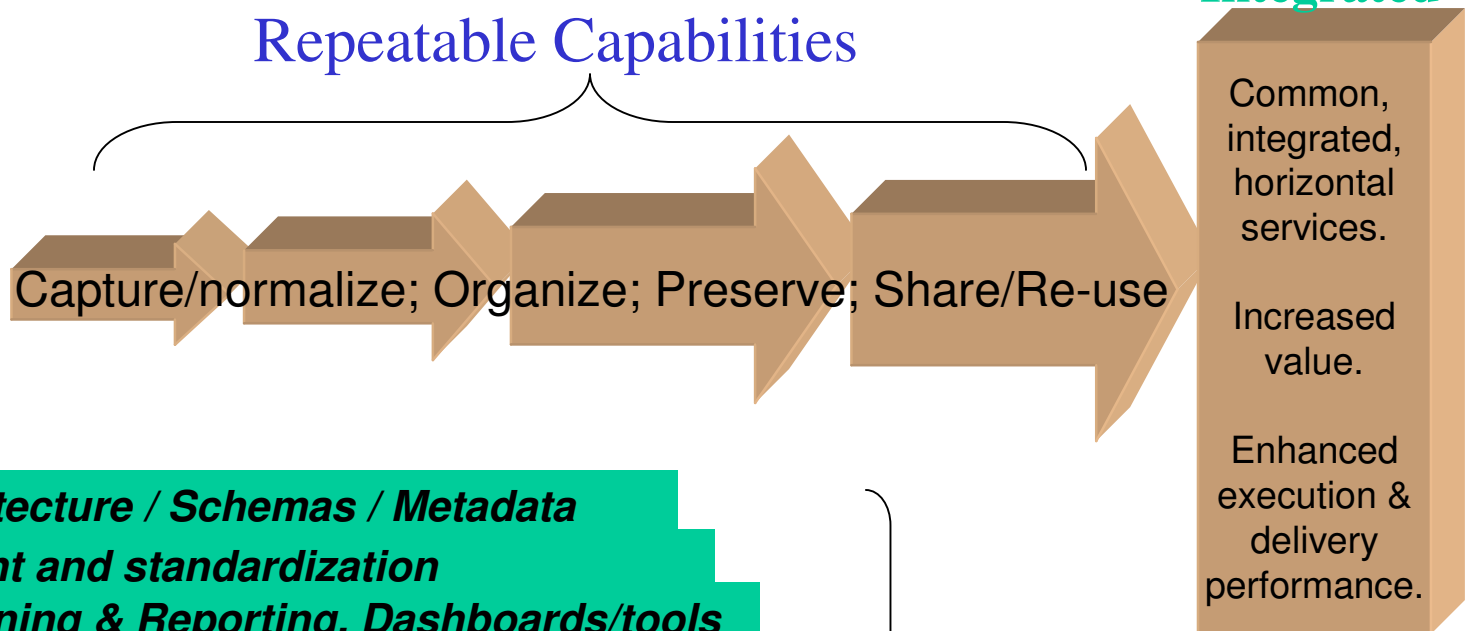
The information layer is the enabler for MGI, MRRS and GoC transformation ...

Breadth/scope of IM Domain at PWGSC

Current State “Siloed”



Repeatable Capabilities



Future State “Integrated”

Information Architecture / Schemas / Metadata
Data Management and standardization
Corporate Planning & Reporting, Dashboards/tools
Desktop Computing / RDIMS / Collaboration/BI tools
Customer Relationship / Portfolio Management
Document and Records Management (+ e-mail)
Web / Portals / Content Management
Security / Privacy / Access to Information

IM Domain:
Vertical & Horizontal
Initiatives
(+ Governance)

IM Challenges ... Horizontal Flow of Information

Disconnected Schemas

Parliamentary Reporting schema. PWGSC's Program Activity Architecture (PAA) is the department's primary schema.

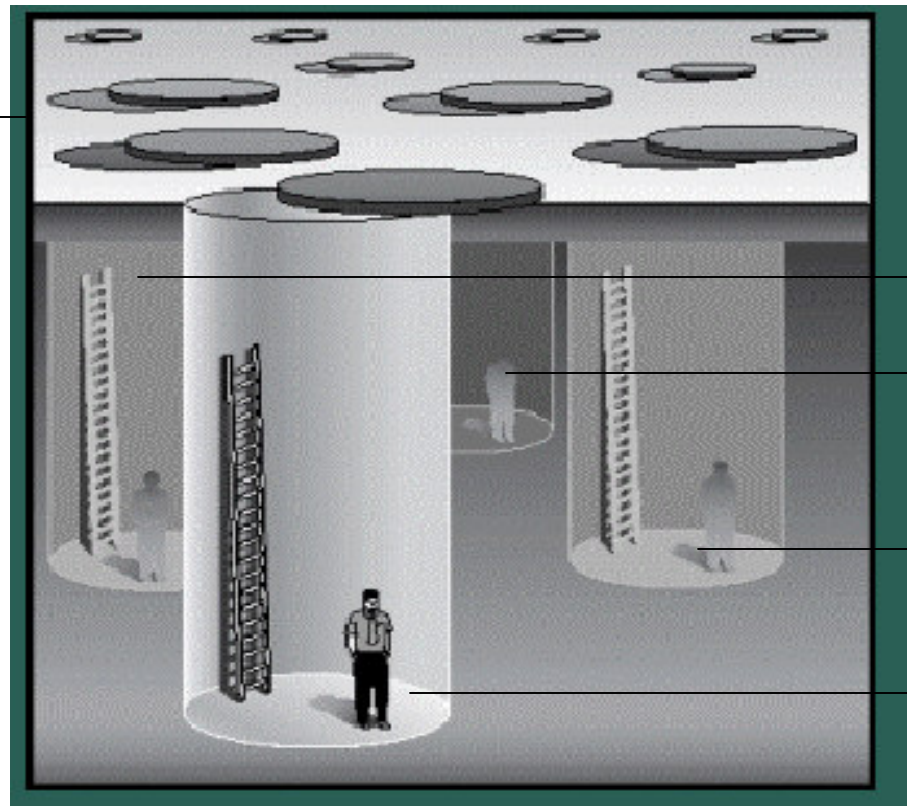


Chart of Account schemas

Records and Document Mgt schemas

Intranet schemas

Databases

A New Way Of Thinking – GSRMs and BTEP

To harness the full potential of transformation, we need

- A “whole-of-government” approach – government as an enterprise
- A common language
- Harmonized legislation, regulations & policies
- Interoperable & integrated business systems

If WE REALLY WANT harmonization, interoperability and integration, we need to design the services and products to work together “before” they are implemented, not try to integrate them after they have been bought or built.

Leveraging the Government Strategic Reference Models

- ⑦ GSRMs are strategic business models stemming from the GoC's Business Transformation Enablement Program (BTEP)
- ⑦ Within GSRMs, the Programs and Services Model (PSM) is the top level model classifying all GoC lines of business as defined in the Main Estimates

GSRM is being used at the three levels of government in various jurisdictions across Canada. As a result of MTIP, TBS is currently investigating ways to incorporate a “programs and services” view in the PAA.

Leveraging the GSRM business models will lead to better interoperability of our information resources over time.

IM Opportunity ... Vertical Flow of Information

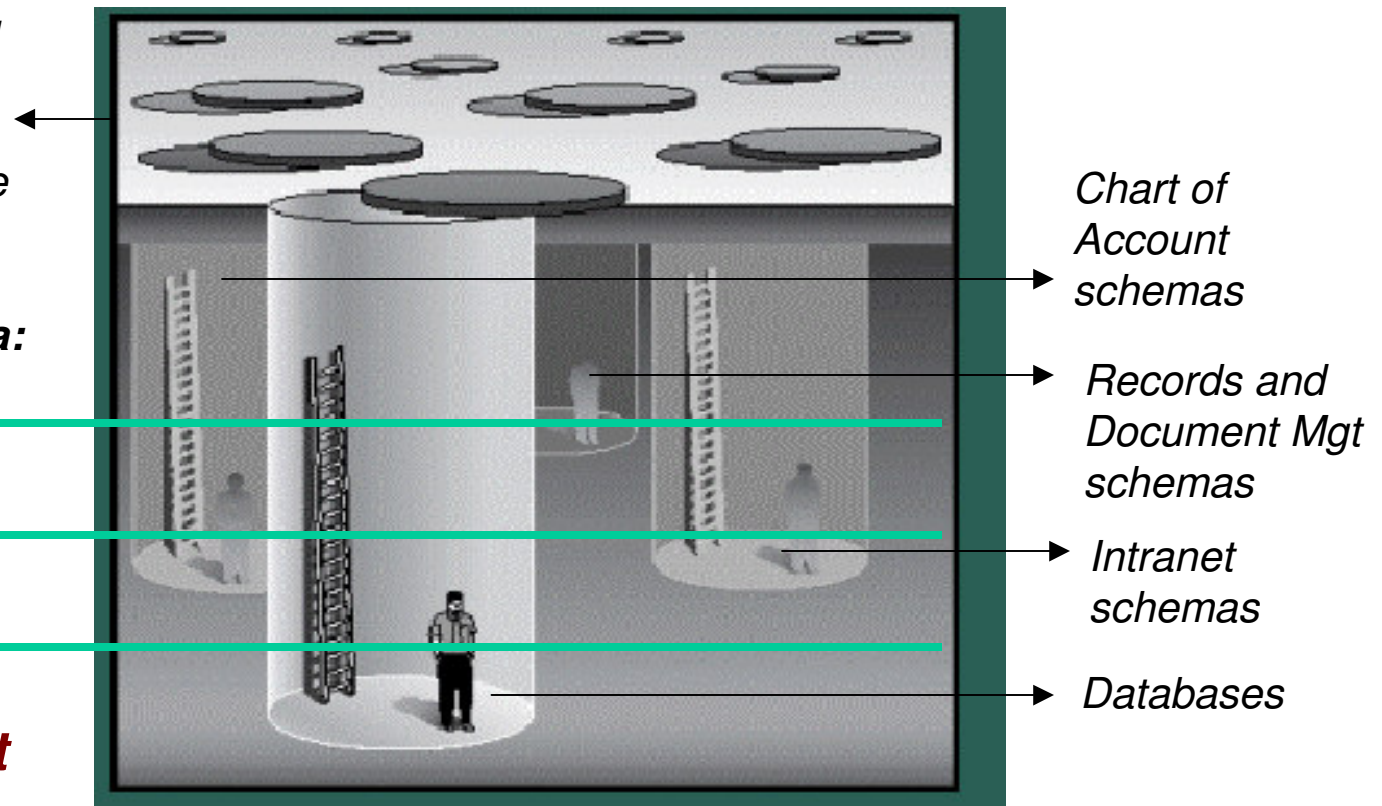
Re-using PWGSC's Primary Schema ... PAA

Parliamentary Reporting schema. PWGSC's Program Activity Architecture (PAA) is the department's primary schema.

PWGSC's PAA schema:

- Activities
- Sub-Activities
- Sub-sub-Activities

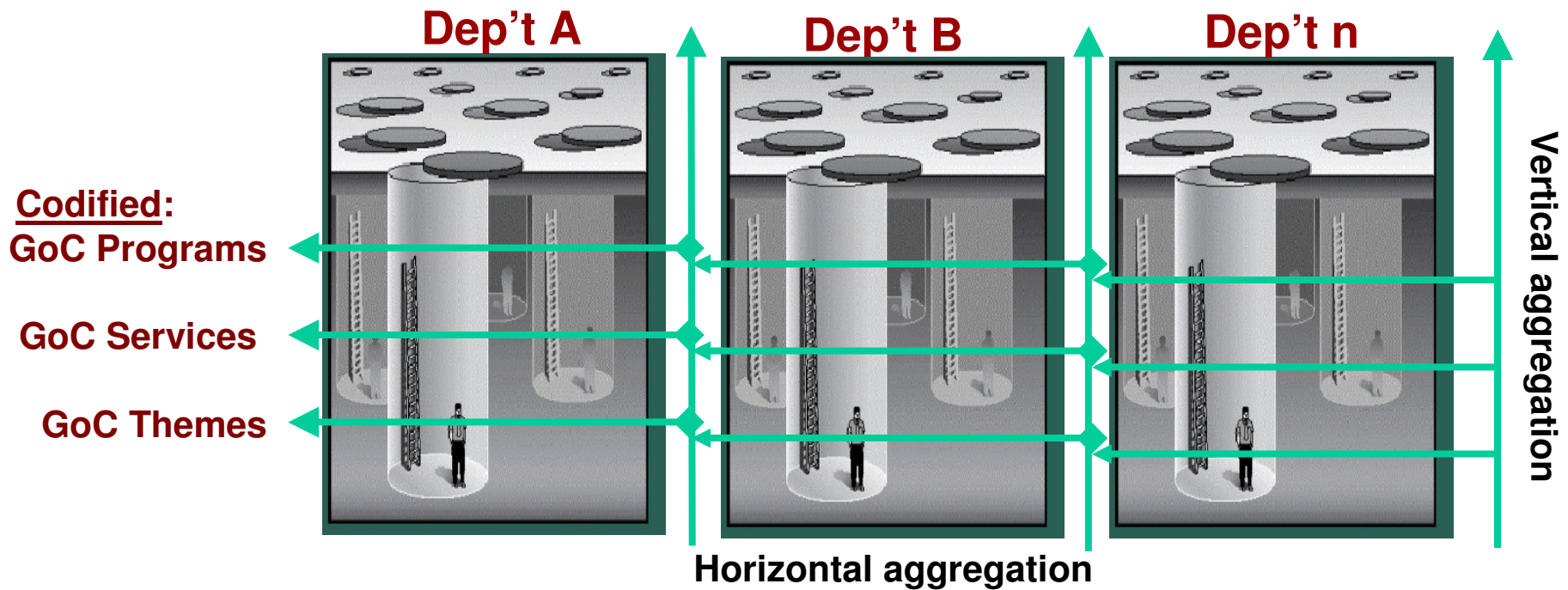
Business Context



IM Opportunity ... Vertical and Horizontal Flow of Information (responds to MRRS requirements)

Enterprise Architecture (PAA/GSRM)

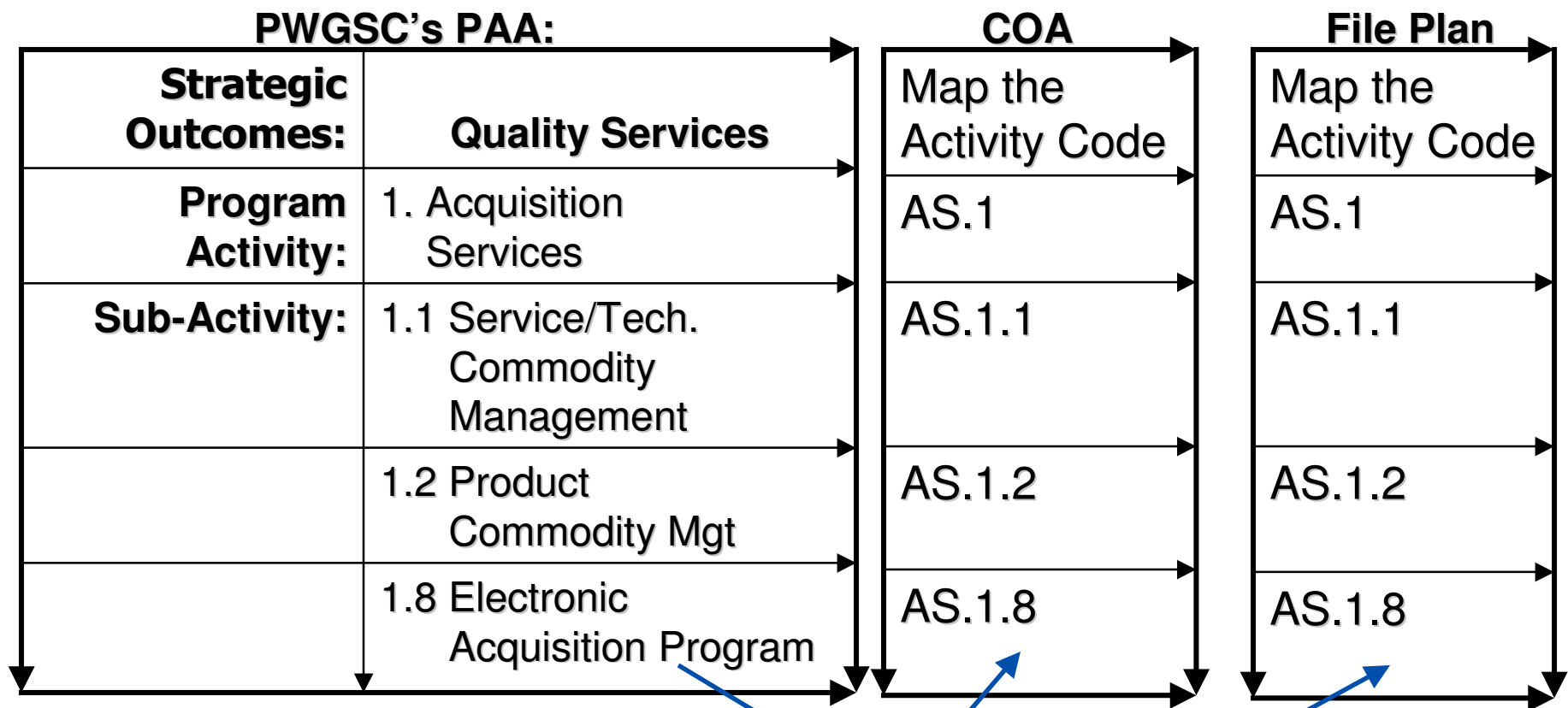
Defines outcomes and performance measures for DPR & MAF



Achieves vertical and horizontal aggregation of information across departmental schemas based on a converged enterprise business architecture (PAA/GSRM)

Metadata and Taxonomy Integration Project - MTIP

Codified Information Across Information Schemas (example)



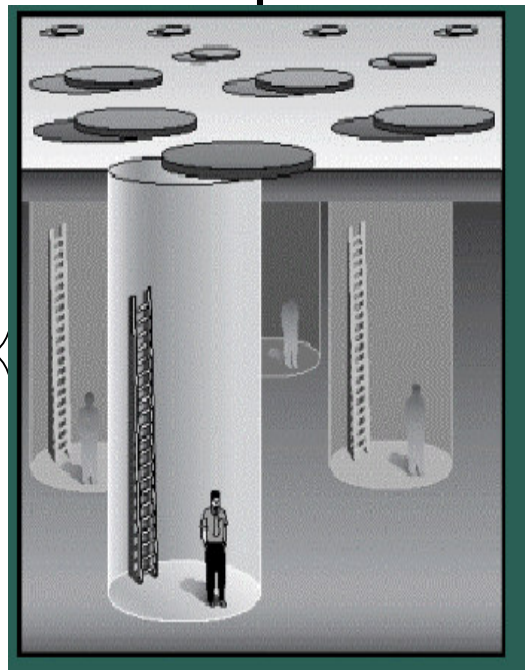
Using common vocabulary and consistently codifying information schemas.

Metadata and Taxonomy Integration Project - MTIP

Business Architecture

PAA = Vertical View
GSRM = Horizontal View

*Internal Processes
... build life cycle into the architecture*



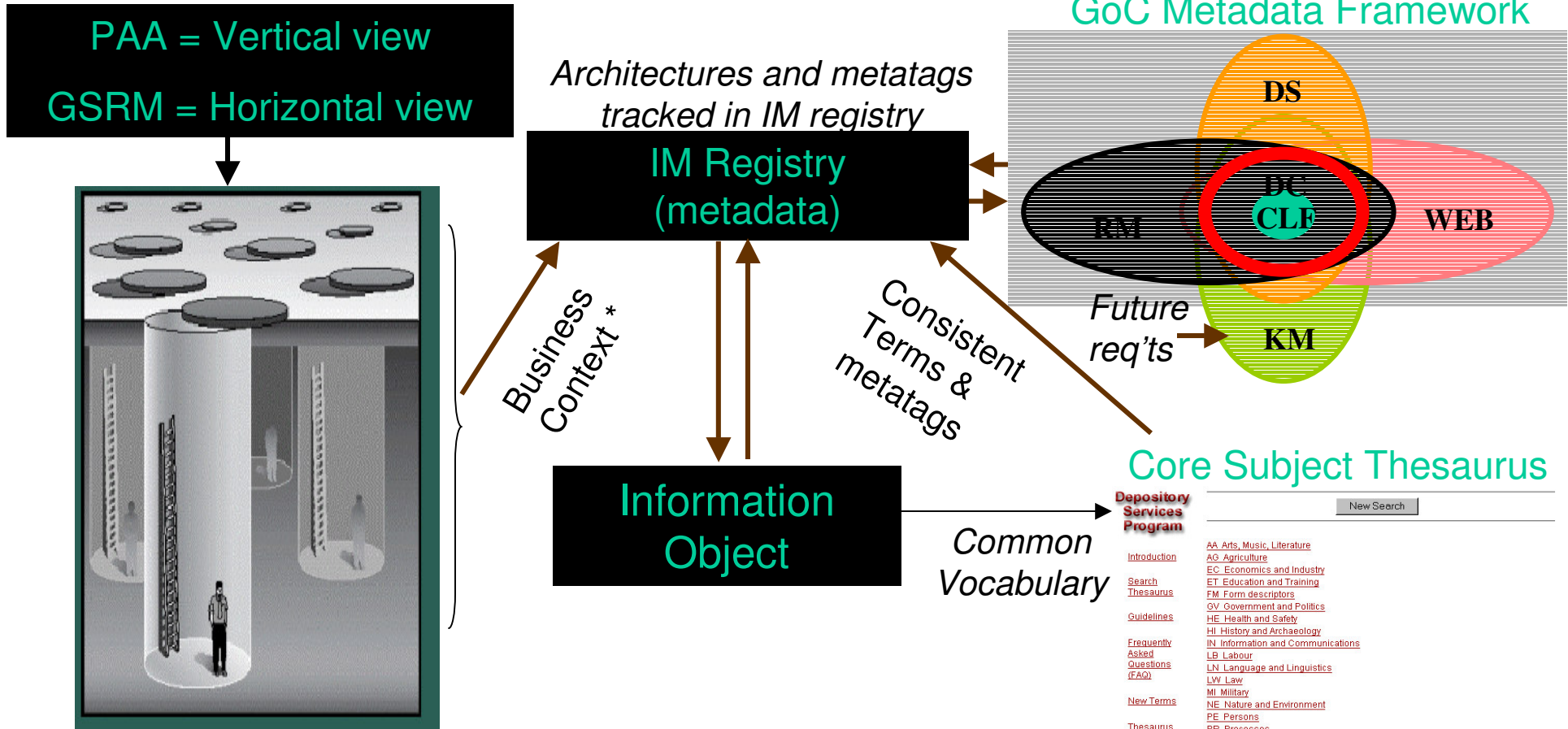
Automate life cycle management and ATIP requests therefore, helps the user at the desktop.

Desktop Computing

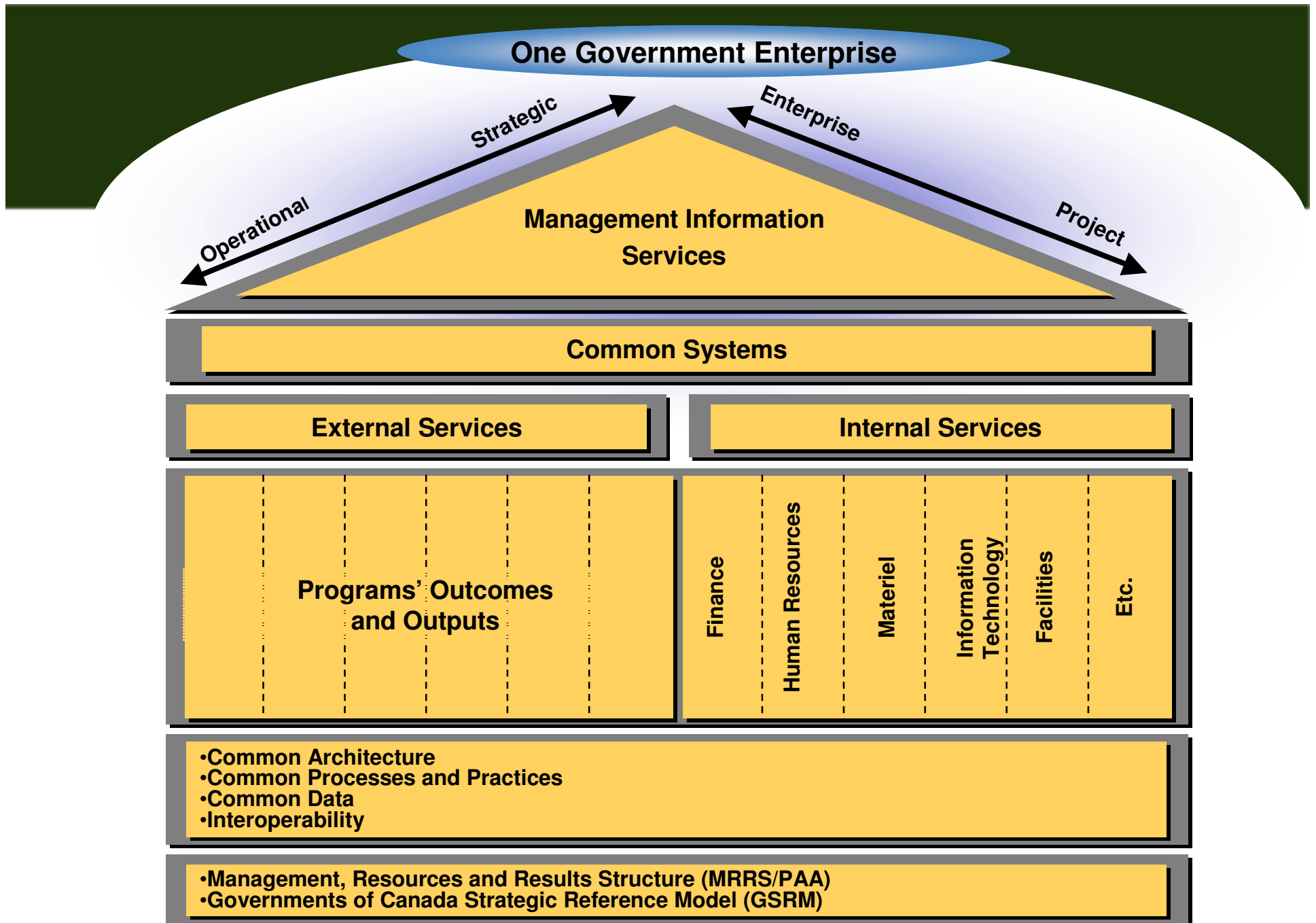
RDIMS,
Web CMS,
E-MAIL,
CRM / BI,
Databases
re-using
Information
Architecture
Schemas

“Content integration enables departmental alignment of information”

Metadata and Taxonomy Integration Project – MTIP's Conceptual Information Management Model



* Business Context for aggregation is applied across departmental information schemas (COA, databases, file plan, etc...)



Source: TBS

Where are we now?

- ⑦ Executive Summary and recommendations from MTIP Pilot project provided to TBS in August 2005.
- ⑦ TBS are actively in discussions to align/incorporate GC programs AND services in the PAA
- ⑦ TBS are gearing-up to develop the strategic design using GSRM for key GC priorities (Service Canada, Climate Change, Common Administrative Shared Services and Information Technology Shared Services)
- ⑦ LAC are continuing the development of the business-activity structure classification system (BASCS) seeking alignment to the GSRM and integration of client portfolio management
- ⑦ IM Registry will be tested for metadata management between the RDIMS and Web CMS tools
- ⑦ Core Subject Thesaurus business case has been reviewed by a sub-work group of the GOL Metadata Working Group – the GC requirements need to be defined further

A Vision for Information Systems

- ⑦ Effective Public Sector Management requires:
 - An enterprise approach
 - Enterprise solutions based on common standards, a common architecture and common processes
 - High quality, consistent and timely information for evidence-based decision-making
 - Drawn from authoritative sources
 - Transparency to public, Parliament and stakeholders on outcomes and performance

The goal of Information Services is:

Get the right high quality information in the right format to the right audience at the right time, in a cost-effective manner, to enable one government

Source: TBS

Closing thoughts

The Government of Canada's transformation creates a need for much more horizontal collaboration.

The information layer is at the centre of many of these initiatives (schemas/taxonomies, metadata, standards, integrated policy frameworks, improved management reporting, etc).

New information law(s) and possible integration of IM into the Management Accountability Framework will help define our value proposition.

Metadata and Taxonomy Integration Project (MTIP)

Thank you!