



**Enterprise Architecture, Cases, Integrated Semantics and Business Centric IM (Case Study)**

## Making Recordkeeping Work

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Explaining the Directive on Recordkeeping, GC Business Architecture Models and the Integrated Semantics Information System

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## The Focus of this Session

**Making Recordkeeping Work:  
Business Architecture and Linkage to Organizational  
Business Processes**

**The Directive, GC Business Architecture Models and the  
Integrated Semantics Information System**



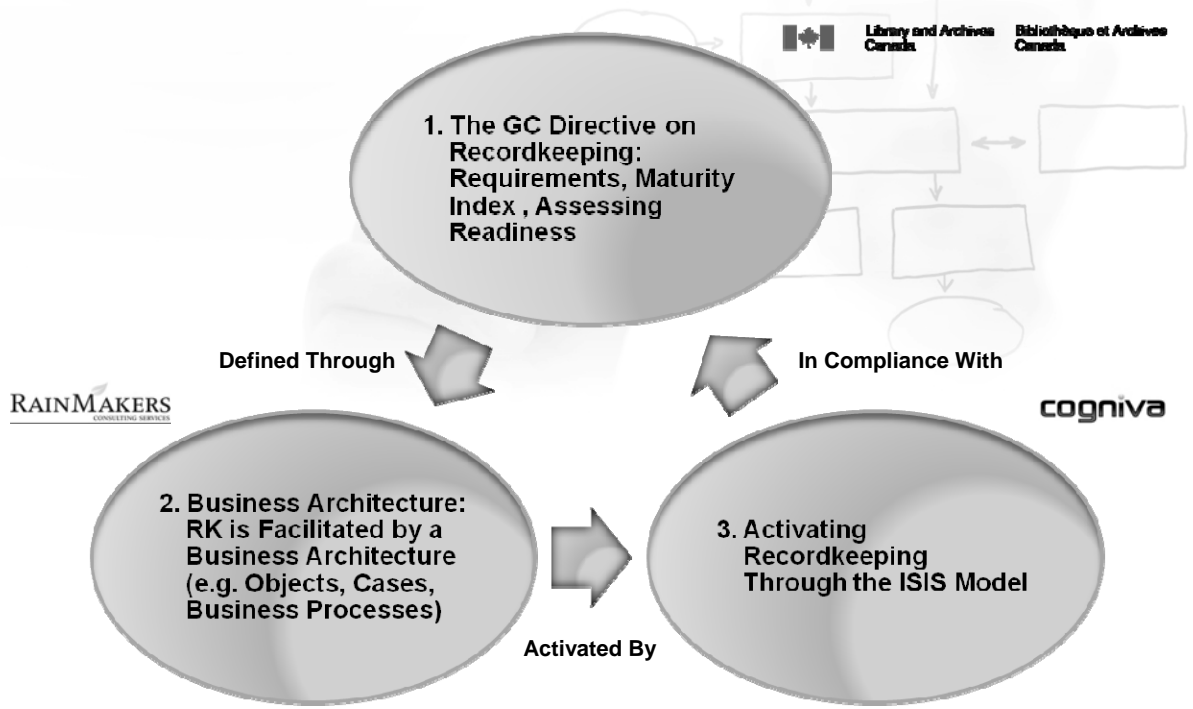
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### Three Related Components: Recordkeeping, Business Architecture and Activating Recordkeeping Capacity



## The Directive on Recordkeeping

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***A framework of accountability and stewardship in which records are created, captured, and managed as a vital business asset and knowledge resource to support effective decision making and achieve results for Canadians.***

*Government of Canada Policy on Information Management, July 2007*

## The Importance of Recordkeeping in the GC

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- “Records must be created, maintained and preserved in such a way that a contemporary democratic government can be held fully accountable to the public for its activities.” (J. Grant Glassco, *Report of the Royal Commission on Government Organization*, 1962)
- At the core of ministerial and managerial accountability – increased pressures with FedAA; increases trust in government



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## Recordkeeping in GC

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***Recordkeeping is “A crisis situation recognized but far from being resolved.”***

***Auditor General of Canada Report, April 2003***

- Cannot effectively deliver business without proper recordkeeping
- Cannot keep up with growing challenges under current framework – paper mountain, electronic records
- Lack of understanding and knowledge of departmental legal and policy obligations – departments not managing records according to established Authorities
- Decentralized and embryonic recordkeeping culture in GC

**This results in high risks to: facing litigation, accountability, audit, decision-making, program/policy development, business continuity**

## GC-Wide Conclusion: A Recordkeeping Initiative is Required

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- **A Recordkeeping Initiative is at the core of change**
  - Parameters of the Initiative:
    - Based on government-wide results and outcomes (PAA, MRRS, MAF)
    - Customization to departmental needs
    - Reliant upon long-term change, with some quick successes

## **GC-Wide Conclusion: A Recordkeeping Initiative is Required**

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- **Elements of the Recordkeeping Initiative:**
  - **Directive on Recordkeeping**
  - **Departmental Recordkeeping Requirements**
  - **Delegation Instruments: Delegated Authorities;  
Records Disposition Authorities**
  - **Legacy Management**
  - **Enablers: capacity; readiness; capture and creation  
tools**



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## Directive on Recordkeeping

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- **Issued by Treasury Board Secretariat (1 June 2009)**
- **Linked to the Policy on Information Management**
- **Mandatory for all departments as defined in section 2 of the Financial Administration Act and highly recommended for all others**



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## What the Directive is:

- **A framework for the management of information resources in order to support:**
  - Decision-making
  - Accountability
  - Governance
- **Basic Principle of the Directive**
  - Government of Canada employees will manage their information resources with the same care and the same attention they use in managing the human, financial and material resources that they are responsible for.



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## The New Paradigm

	<b>Traditional Information Management</b>	<b>Recordkeeping</b>
Policy Framework	Management of Government Information	Directive on Recordkeeping
Format	Paper, desktop computers, databases	Information Resources
Scope	Manage everything	<b>Manage information resources of business</b>
Role of Community	Little community involvement	Community enablement and involvement
Goals of Managers	Deliver programs	Deliver programs, accountability,
Adapted from Crawford and Helm, Government and Governance: The Value of Project Management in the Public Sector, Project Management Journal, Vol. 40, No. 1, 75.		



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## Directive on Recordkeeping

### Objective

• Ensure effective recordkeeping practices that enable departments to create, acquire, capture, manage and protect the integrity of information resources of business value in the delivery of Government of Canada programs and services.

### Expected results

• Information resources of business value are used as strategic assets to facilitate decision making and the efficient delivery of government programs and services.

• Effective recordkeeping practices that ensure transparency and accountability of government programs and services.

This directive came into effect on **June 1, 2009**

<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=16552>

### New requirements

- *Identification of information resources of business value*
- *Protection of information that is of business value*
- *Methodologies, mechanisms, tools and practices*
- *Documentation of recordkeeping practices*
- *Recordkeeping awareness*



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## Business Value

**The first requirement (6.1.1) of the Directive is the identification of information resources of business value, based on an analysis of departmental functions and activities, carried out by a department to enable or support its legislated mandate.**

Information resources of business value include published and unpublished materials, regardless of medium or form, that are created or acquired because they enable decision making and the delivery of programs, services and ongoing operations, and support departmental reporting, performance and accountability requirements.

## Business Value

Information  
resources  
of business value

=

Information resources that  
must be created, received, and retained  
for the purposes of accountability,  
transparency, decision-making,  
and program delivery

- There are different ways to do this
- Different processes will allow you to achieve the same outcome



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## Implementing the Directive

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- **Assessment Projects to test methodologies**
- **A Recordkeeping Readiness Assessment Tool to measure current ability to comply with the Directive's requirements**



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### Objectives of RK Readiness Tool

- Provide an enterprise- wide assessment of recordkeeping practices within an organization
- Bring together all the elements of recordkeeping practices as elaborated in the RK Directive
- Educate and enable
- Provide information to assist management in developing plans for improvements to their recordkeeping practices
- Provide a starting point



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## Maturity Indicators

- Maturity indicators were developed to enable standardized recordkeeping across GC
- Indicators were developed by considering:

GC Recordkeeping Directive Requirements and GARP indicators

IMCC indicator views

Capability Maturity Model Index (CMMI)

Relevance to all audiences



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## Maturity Levels Definitions (Pilot)

Maturity Levels					
	Level 1 Initiated	Level 2 Aware and Defined	Level 3 Established	Level 4 Monitored and Managed	Level 5 Optimized
<b>RK Directive CCM Level Definitions</b>	<p>Level 1 describes an environment where recordkeeping concerns are either not addressed at all, or are addressed in a very ad hoc manner. The organizational vision and strategic outcomes aligned with recordkeeping are not defined; recordkeeping is not a corporate priority and has not been addressed in organizational IM plans and strategies.</p> <p>The business value of information resources is not formally recognized or documented and information retrieval is challenging.</p> <p>There are no clear rules for recordkeeping and records disposition.</p> <p>Organizations that identify primarily with these descriptions should be concerned that their organizations are at risk, will continually be subject to information management related liabilities and will struggle to meet program / service delivery legal or regulatory scrutiny.</p>	<p>Level 2 describes an environment where the organization is recognizing the impacts of poor recordkeeping and is beginning to develop plans, strategies and build awareness in order to address the challenge.</p> <p>There is growing recognition that the organization cannot meet accountability, stewardship, performance measurement, reporting and legal compliance. It recognizes that they are not prepared to effectively address needs related to commissions of inquiry, access to information requests, litigation or personal information protection.</p> <p>In Level 2, the organization is still vulnerable to legal or regulatory scrutiny since practices may not be defined or part of day to day business and program delivery operations and is still largely ad hoc in nature.</p>	<p>Level 3 describes an organization which has established the minimum recordkeeping capability required to conform to accountability, stewardship, performance measurement, reporting and legal requirements.</p> <p>Recordkeeping is recognized and in practice as a resource management function through which IRBVs are created, acquired, captured and managed in departmental repositories and used as strategic assets to support effective decision making and facilitate ongoing operations and the delivery of programs and services.</p> <p>At this level, recordkeeping is still performed as an "add-on" activity and is not intuitively integrated as part of routine operations. However, the organization has begun to plan on how training, technology and process integration can enable effective recordkeeping.</p> <p>Organizations that identify primarily with Level 3 descriptions may still be missing significant opportunities for streamlining processes related to information access, sharing and controlling costs.</p>	<p>Level 4 describes an organization that is initiating recordkeeping improvements throughout its business operations. RK issues and considerations are integrated into business decisions on a routine basis, and the organization easily meets its legal and regulatory requirements.</p> <p>The basic elements required are in place but are not fully optimized and comprehensive. Programs and strategies to monitor and review ongoing compliance to RK Directive requirements are being developed, communicated and activated.</p> <p>This level describes an organization that is implementing and rolling out RK improvements throughout its business operations. RK is integrated into business decisions on a routine basis, and the organization easily meets its legal and regulatory requirements.</p>	<p>Level 5 describes an organization that has integrated recordkeeping into its overall corporate infrastructure, service delivery strategy and within its business processes to such an extent that compliance with requirements to recordkeeping principles is routine.</p> <p>The organization has recognized that recordkeeping plays a crucial role in effective service delivery, and has fully implemented the vision, processes and procedures, training, communication and technology to enable its programs and business units to manage their ongoing operations, deliver services, and ensure key organizational capacities for accountability, stewardship, evaluation, audit, and access to information, privacy, security and policy compliance.</p>



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## Next Steps

- Pilot tool with 3-4 select departments – Q1
- Assess results of pilot assessments – Q1
- Revise tool based on pilot findings – Q2
- Release revised version of tool – end of Q2



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# Making the Case for Case Management & Enterprise Architecture to Enable Recordkeeping



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## Overheard During the Course of Developing Recordkeeping Capability

**“Having a defined and repeatable business architecture is at the heart of implementing Recordkeeping...without a BA you cannot implement recordkeeping”**

An Economic Development Agency

Head of records for a research organization

**“We started out trying to fulfill our recordkeeping requirements and ended up transforming the way we do business!”**

The Enterprise Architecture Lead for a GC Agency

**“It became evident early on during our project that defining a business architecture and a multi-faceted information classification model would be the only way to meet our organization’s recordkeeping requirements while enabling users to integrate recordkeeping in their day to day work .”**



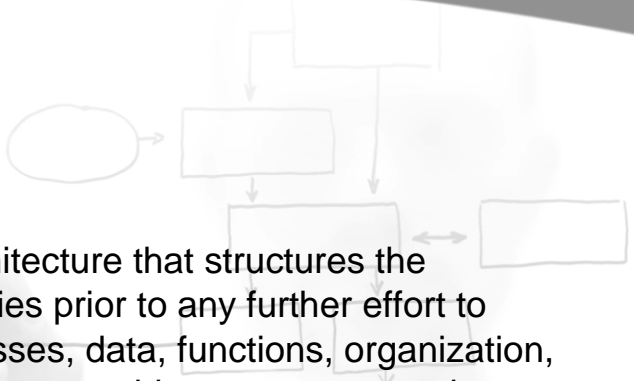
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## Business Architecture



**Business Architecture:** is an architecture that structures the accountability over business activities prior to any further effort to structure individual aspects (processes, data, functions, organization, systems, applications, etc.). A business architecture arranges the accountabilities around the most important business activities (for instance managing client cases, managing projects, finance etc.) into domains.

Source: Gartner Definition



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## Information Architecture

An Information Architecture is a set of models, definitions, rules, and standards that give structure and order to an organization's information so that information needs can be matched with information resources.

It defines:

- what types of information exist in the organization
- where the information can be found
- who are the creators and owners of the information
- how the information is to be used.

It may contain several of the following:

- A model or representation of main information entities and processes;
- A risk profile
- A taxonomy or categorization scheme;
- A set of standards; definitions and interpretations of terms;
- A link to a set Directories, repositories or inventories;
- resource maps and description frameworks;
- designs for developing information systems, products, services.

Source: University of Toronto



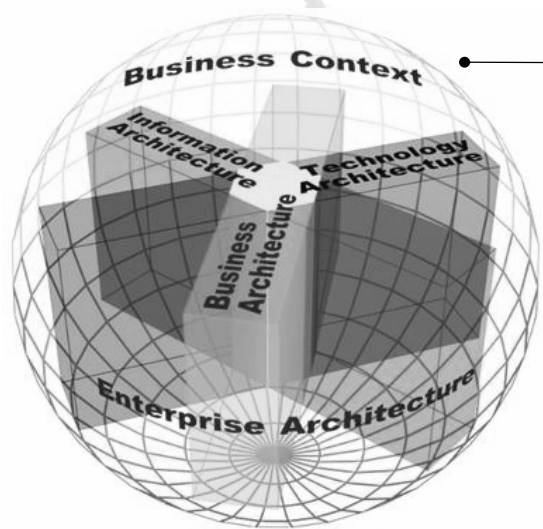
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## The Enterprise Architecture Connection



The linkage between the BA and IA helps us define an organization's Recordkeeping Architecture – and in turn helps us establish the business and operational context for Recordkeeping

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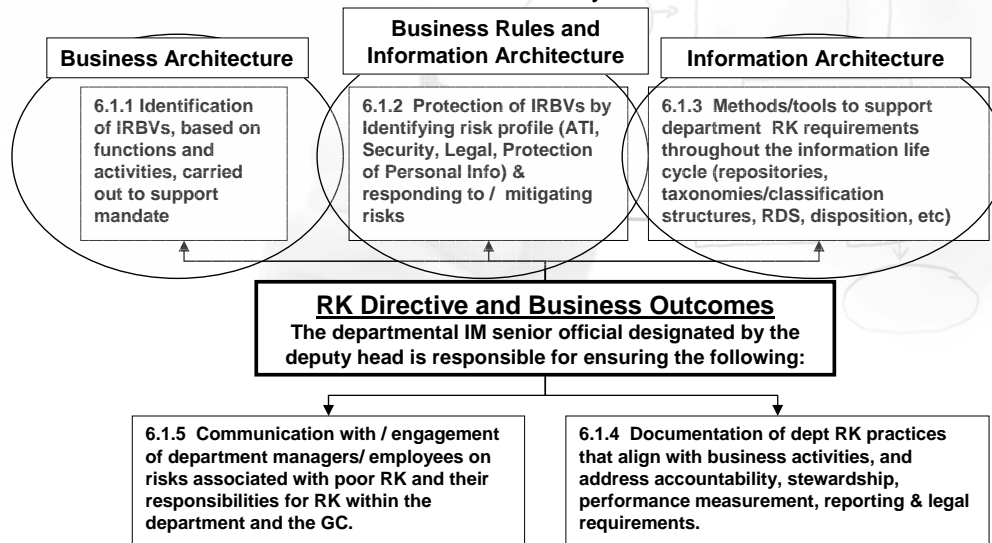
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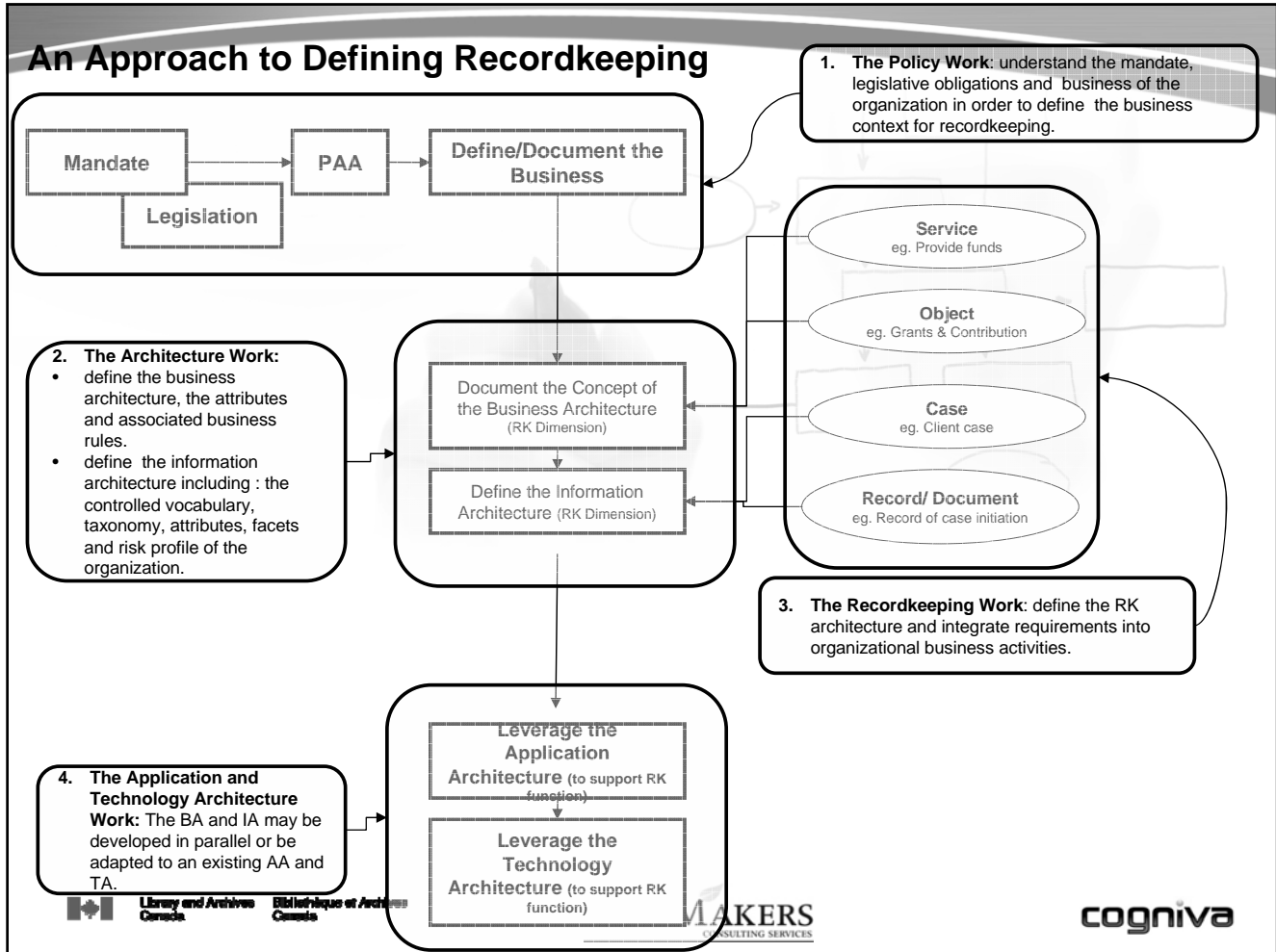
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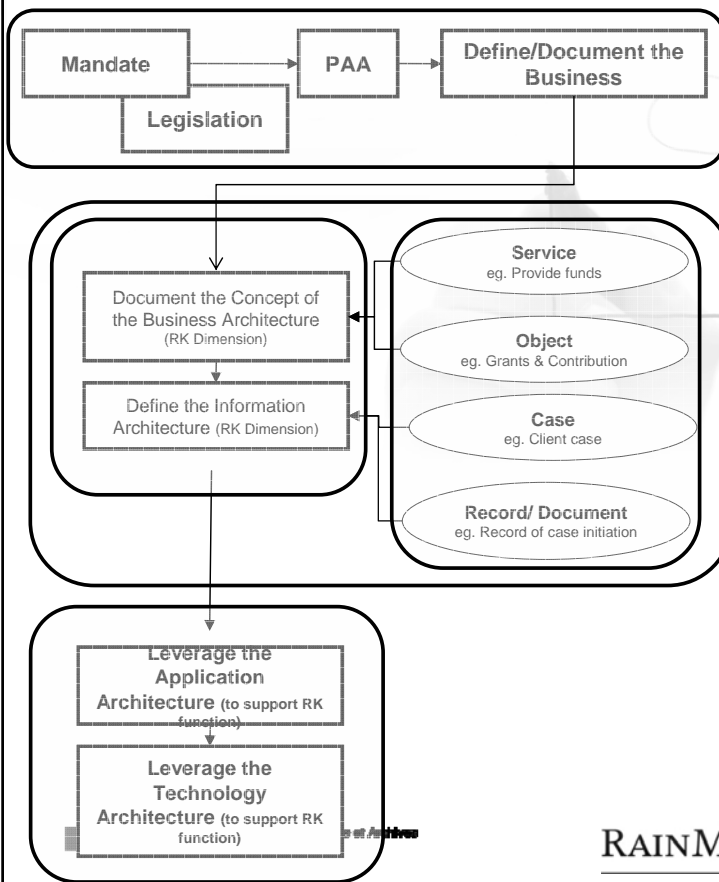
Recordkeeping model seeks to intuitively enable program to be accountable, transparent and traceable ...but at it's core, it's also centred on **enabling efficient** business service delivery



...Activating Recordkeeping will require organizations to define their business and information architecture...and integrate RK practices in business and service delivery environments



## Value of Recordkeeping Element of Enterprise Architecture



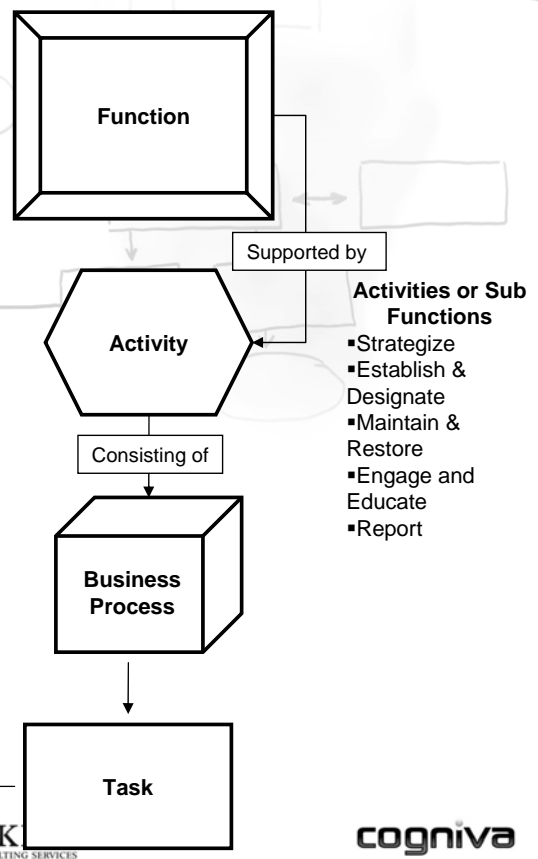
Value	Source
<ul style="list-style-type: none"> <li>Establishes the archival and business context</li> <li>Helps establish the focus for RK</li> </ul>	<ul style="list-style-type: none"> <li>PAA, RPP, DRP, Mandate, Raison d'être</li> </ul>

Value	Source
<ul style="list-style-type: none"> <li>BA and IA help us document the triggers, process steps, outcomes and rules for managing records</li> <li>Provide the IM context for RK</li> <li>Develop SOP and a common understanding of business/service</li> <li>BA &amp; IA don't change unless mandate changes</li> </ul>	<ul style="list-style-type: none"> <li>Standard Operating Procedures</li> <li>SMEs</li> <li>Business Impact documents</li> <li>Business Continuity Planning docs</li> </ul>
<ul style="list-style-type: none"> <li>Helps display RK requirements based on business and service terms</li> <li>Defines functional requirements for TAA and TA</li> </ul>	<ul style="list-style-type: none"> <li>Program SMEs</li> </ul>

Value	Source
<ul style="list-style-type: none"> <li>Define a AA &amp; TA in a consistent fashion regardless of system or repository</li> <li>The AA &amp; TA can evolve as technology changes w/o having to re-design BA and IA</li> </ul>	<ul style="list-style-type: none"> <li>BA and IA</li> </ul>

**Business Architecture View:** Defining Functions and Activities and Identifying IRBVs

In a function-based approach, starting from the generic and moving to the specific, a **Function** is supported by **Activities**, which in turn are made up of **Business Processes** (or sub-processes). Processes are made up of **Tasks**, which are made up of **Transactions** which lead to the creation of **Records**. If the process is high-level, such as establishing a new national park, the process may be supported by a number of Activities.



## Start with the high level Function & and Sub-function view

### Activity: Strategize (Plan)

As legislated in the Agency Act, Agency must table a number of strategic plans: e.g. Strategic Plan, Corporate Plan, Systems Plans, Management Plans.

### Activity: Establish (PA1)

The Agency is responsible for negotiating, and recommending to the Minister, the establishment of new national parks, national marine conservation areas and other protected heritage areas and the designation of national historic sites, persons, and events.

### Activity : Maintain & Restore Integrity (PA2)

Agency is responsible for the maintenance and restoration of ecological integrity in national parks, ensuring the commemorative integrity of national historic sites managed or influenced by the Agency, the protection and management of heritage areas under the administration of the Agency, and the ecological sustainable use of national marine conservation areas.

### Activity : Report

A key component in the Agency Management Planning Cycle, the Report sub-function is represented across Agency.

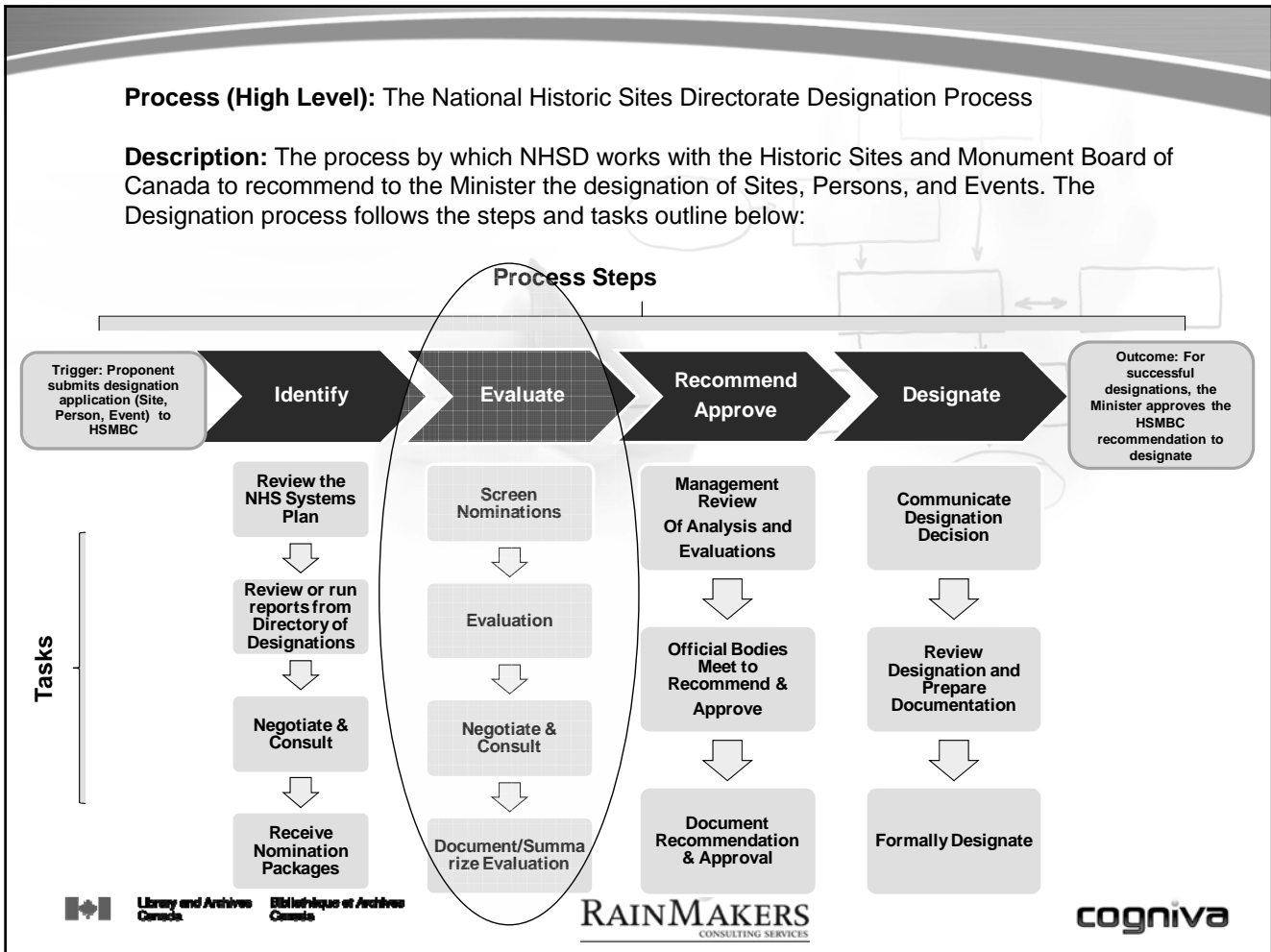
**PROTECT,  
PRESENT  
&  
EDUCATE**

### Activity : Engage and Educate (PA 3-4)

The Engage and Educate sub-function includes activities that support the delivery of meaningful, high-quality experiences through the provision of information, infrastructure, facilities, programs, services and personnel, to ensure stakeholders and partners maintain a vested interest in Agency activities.

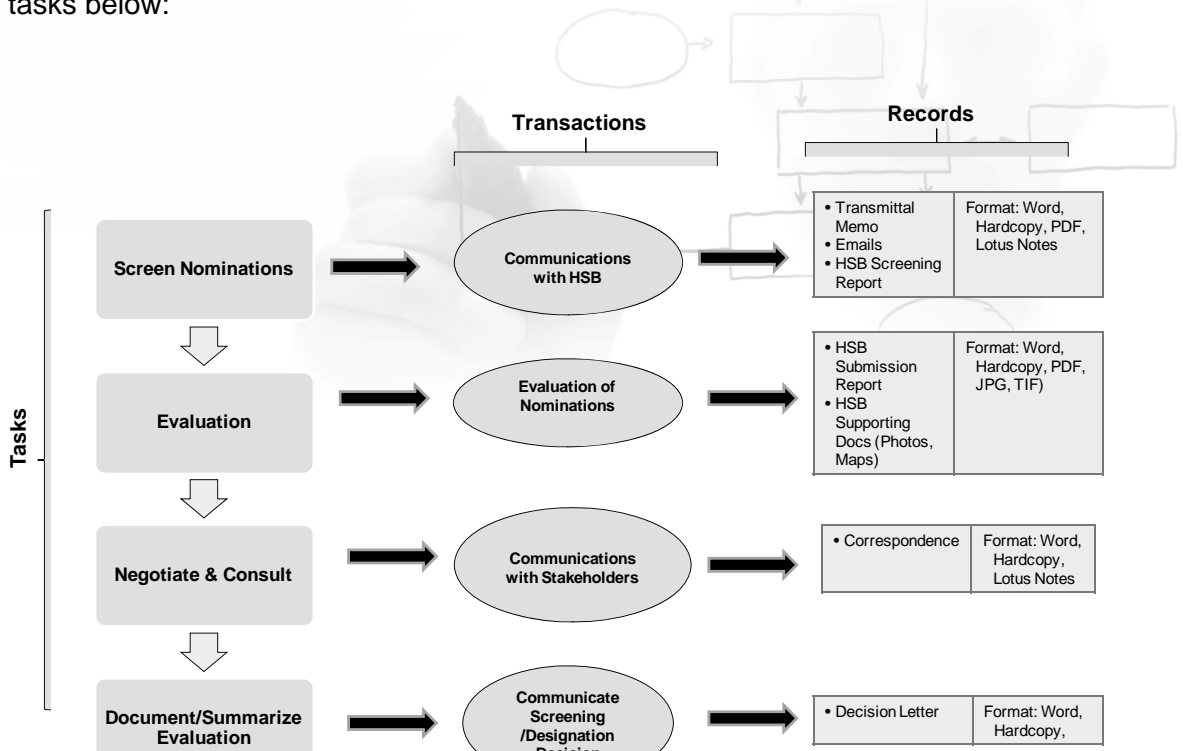
**Process (High Level):** The National Historic Sites Directorate Designation Process

**Description:** The process by which NHSD works with the Historic Sites and Monument Board of Canada to recommend to the Minister the designation of Sites, Persons, and Events. The Designation process follows the steps and tasks outline below:



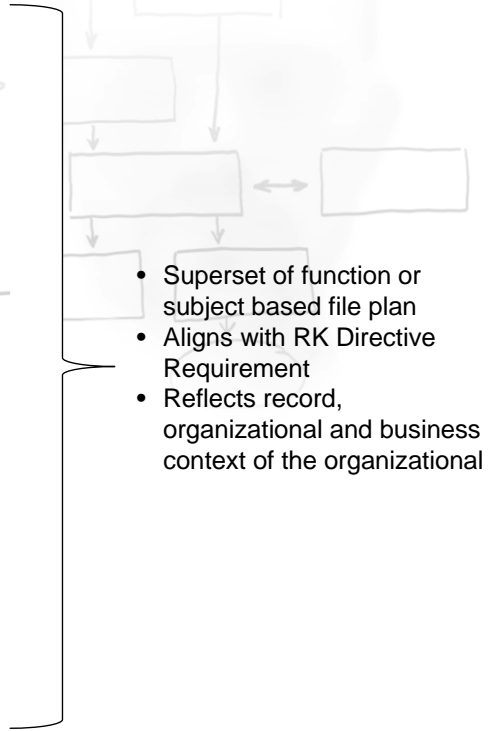
**Process Step: Evaluation**

**Description:** The evaluation step produces the following records, associated with the tasks below:



## Information Classification Model / The ISIS Model

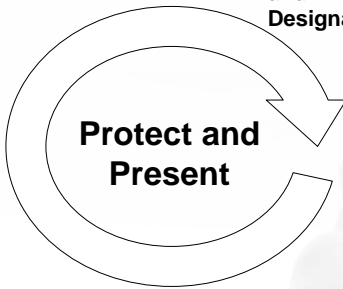
Facet Type	Facet
Context	PA
	Activity
	Branch or Business unit
	Process
	Process Step
	Business Value
Content	Record Name
	Description
	Document Type
	Role
	Subject
	Author
	Date
Control	RDA
	Access rights
	Format
	Security
Common Discovery	Unique Identifier
	Keyword
	Social Tag
	Origin of Document



# Developing the context for RK by leveraging the BA and IA:

Strategize

Establish and Designate



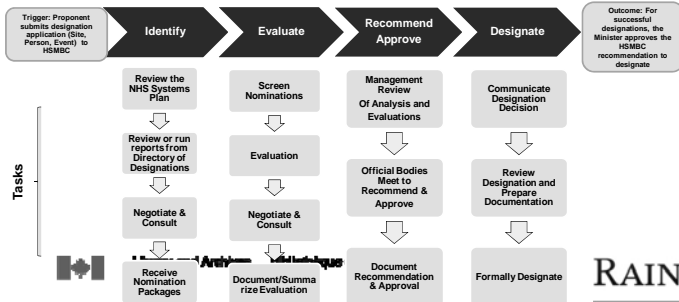
Maintain and Restore

Report

Engage and Educate

Sub Function Activity Views Inform Process Maps

Process Steps



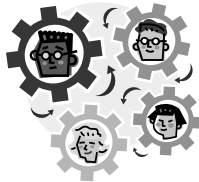
Facet Type	Facet		
Context	PA		
	Subfunction		
	Program, Branch or Business Unit		
	Activity		
	Process Step		
	Business Value		
Content	Record Name		
	Description		
	Business Unit		
	Subject		
	Author		
Control	RDA/RDS		
	Access Rights		
	Format		
	Security		
Common Discovery	Unique Identifier		
	Keyword		
	Social Tag		
	Origin of Document		
Capacity/Capability	Trigger for related process		
Communications	Connected to organizational and infrastructure capacity		
Classification	Elements related to Communications		
Classification	Facets related to additional classification needs		

Process Maps Provide Context and Rules for ICS

**Expected Outcomes: “When we are done, we will...”**



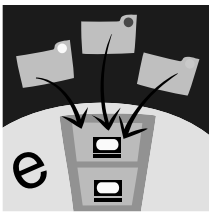
have a good understanding of the mandate and legislations that support the organization



have knowledge of the business of the organization and their supporting business rules



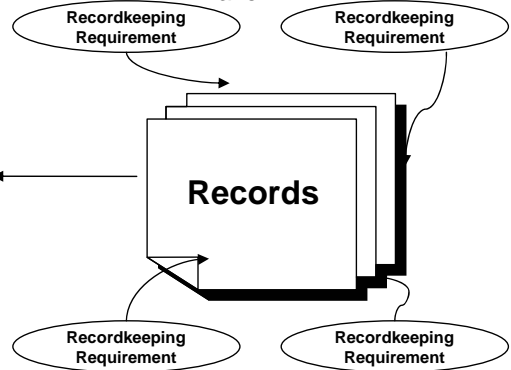
understand the triggers that cause tasks and processes to be launched ...and have a documented view of the business unit that even they won't have



Create an Intuitive, non Intrusive Information Classification System that reflects the business, language and culture of the Agency



Be able to identify and integrate into RK the OPIs, roles, responsibilities....



## Case Management (Project-Case)

- From a line department perspective, program delivery can be viewed from several perspective, two of these are; the Program Activity Architecture (PAA) and the Service dimension (the services we provide).
- The PAA dimension is focused on why we do things and what outcomes we should expect related to the needs of a target group.
- The Service dimensions identifies the processes (and inputs) that are required to deliver a service that will eventually result in an outcome. The two dimension intersect at the case (project / output) level.
- Project-Case is a generic term that can be used to represent any collection of tasks that consume resources to produce an output to benefit the client. (Outcome)



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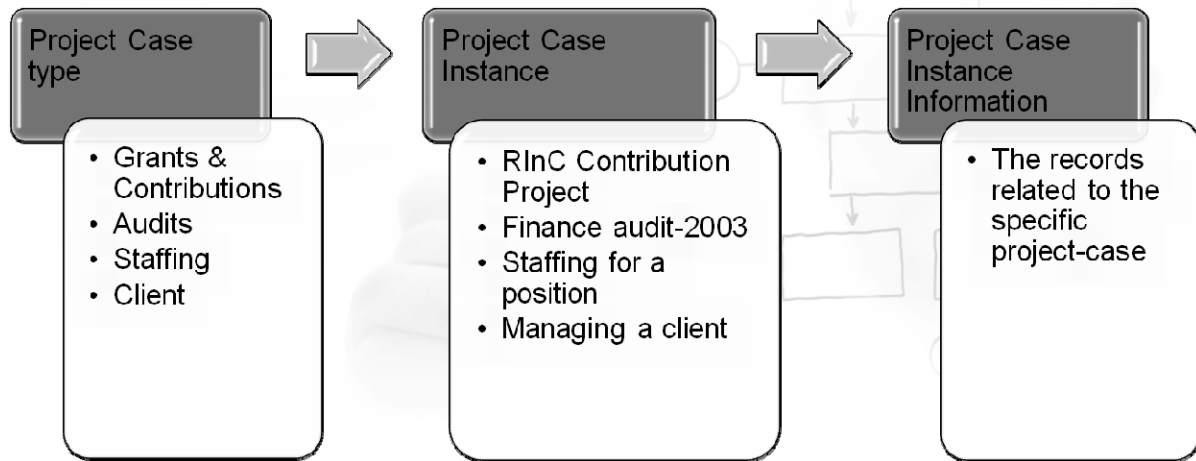
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## Cases and recordkeeping

- Each case may have an corresponding electronic case file that contain the case electronic records
- The file is classified with a file classification number
- Each case may have a corresponding paper case file that contains the case paper records.
- The existence of the electronic and paper case file is recorded in the case profile.



## Project Case information



Records can be in the form of:

- documents,
- items in a list
- data in a database

Enterprise content management technology permits the identification of **document type** and **list item types** that are specific to a project-case type and therefore common to all project case instances



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## Cases (and Case Files) have multiple facets

In addition to being part of PAA dimension and the service dimension, the case may also be identified by several other facets (dimensions)

### ▪ **Accountability**

- Who is responsible for the case?

### ▪ **Finance Responsibility**

- Which budget is supporting the case expenditures
- What program(s) is(are) funding the case

### ▪ **Risk Profile**

- What are the risk elements to this case?

### ▪ **Geography**

- The Geo-code (or Postal Codes) attached to the case

### ▪ **Time**

- Start and end date along with case milestones

### ▪ **Client Segments**

- Various target groups of clients

▪ **And More ... reflecting Content, Context and Control views**



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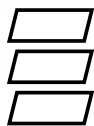
# Case Management Object Model

## Case Team Objects



Case team members are assigned Cases, BAs and Tasks dependent on their Role.

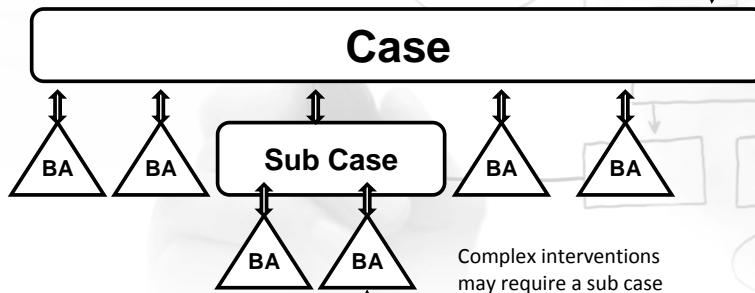
One case usually requires several Business Activities. One Business activity is required to Open (Create) the Case Object and one to Close it.



## Supporting Objects

Supporting objects constitute a wide array. Examples: Organizations, Offices, Courses, Studies, Regions, etc.

Case members and supporting objects are created and modified through Business activities.



Cases, Sub-Cases, Business Activities, Tasks and Case team members are objects that have attributes. Modules are used to capture the data related to these attributes.

Complex interventions may require a sub case composed of several BAs

## Task Objects (Templates)

Task Objects represent the work undertaken by case members. Simple tasks may not be recorded while complex tasks may generate considerable information.

Task Objects are represented as a record and have a module (form) for data entry

A Case does not have a defined workflow but the Business Activities may benefit from workflow.

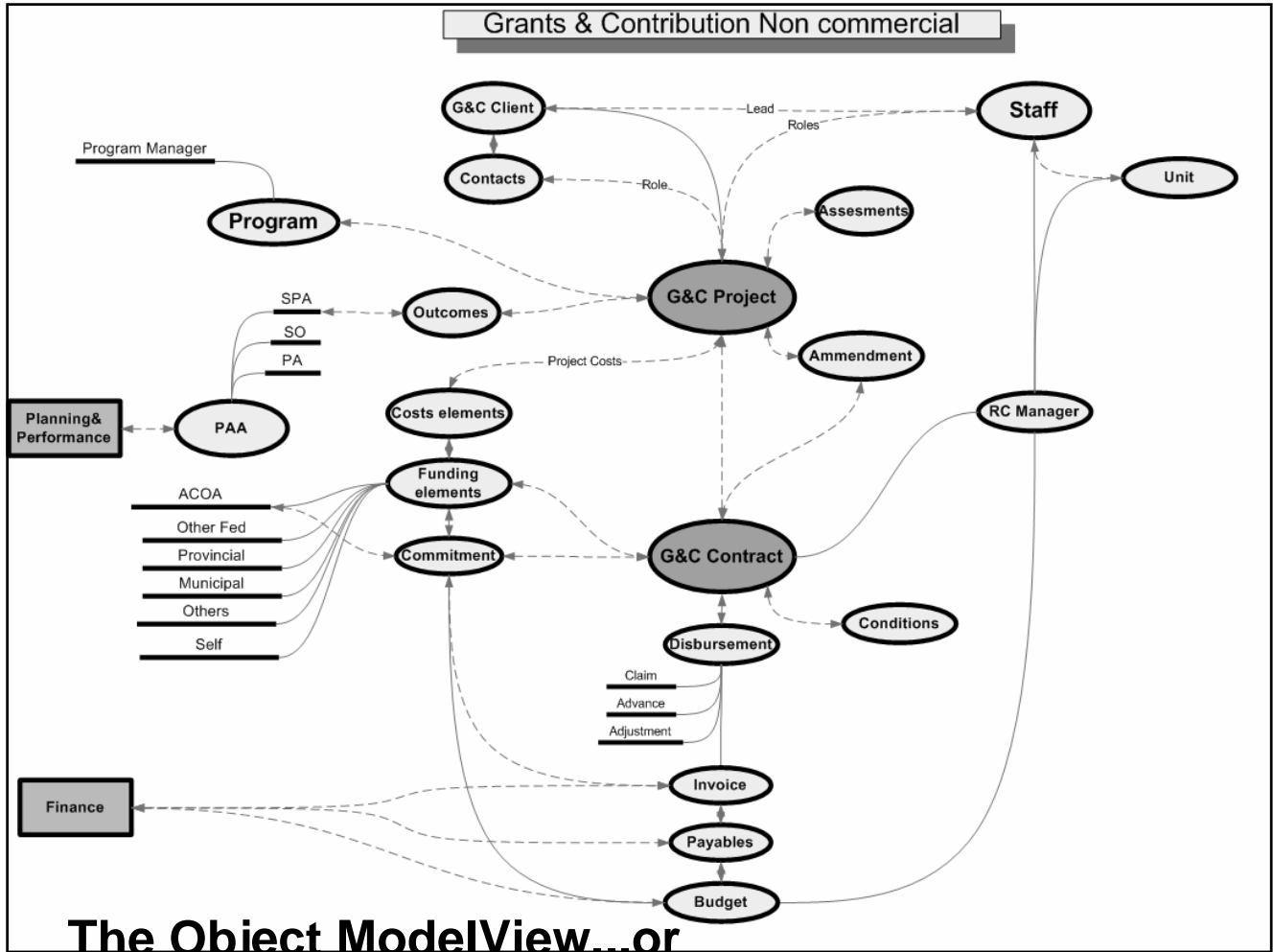


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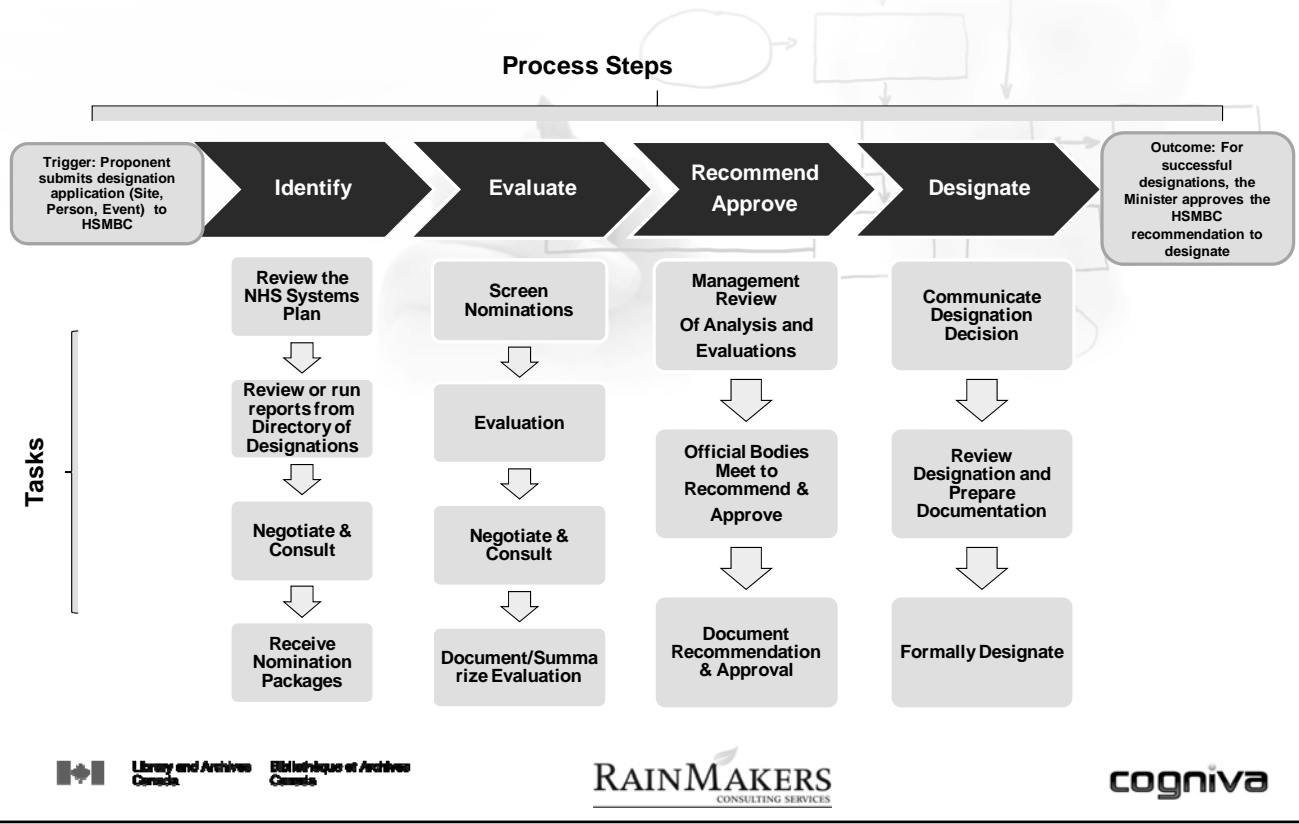
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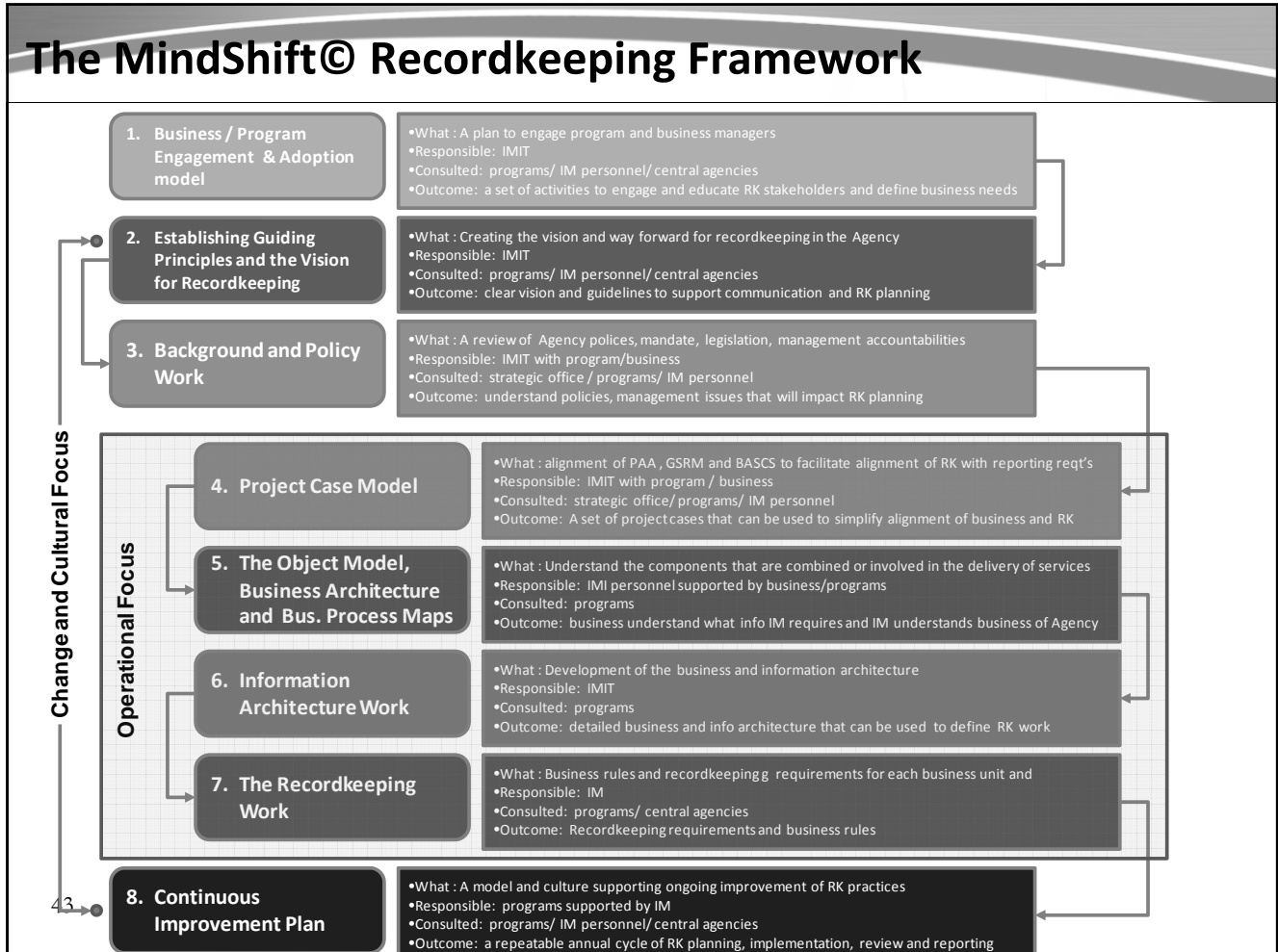
# ...the Business Process Map View

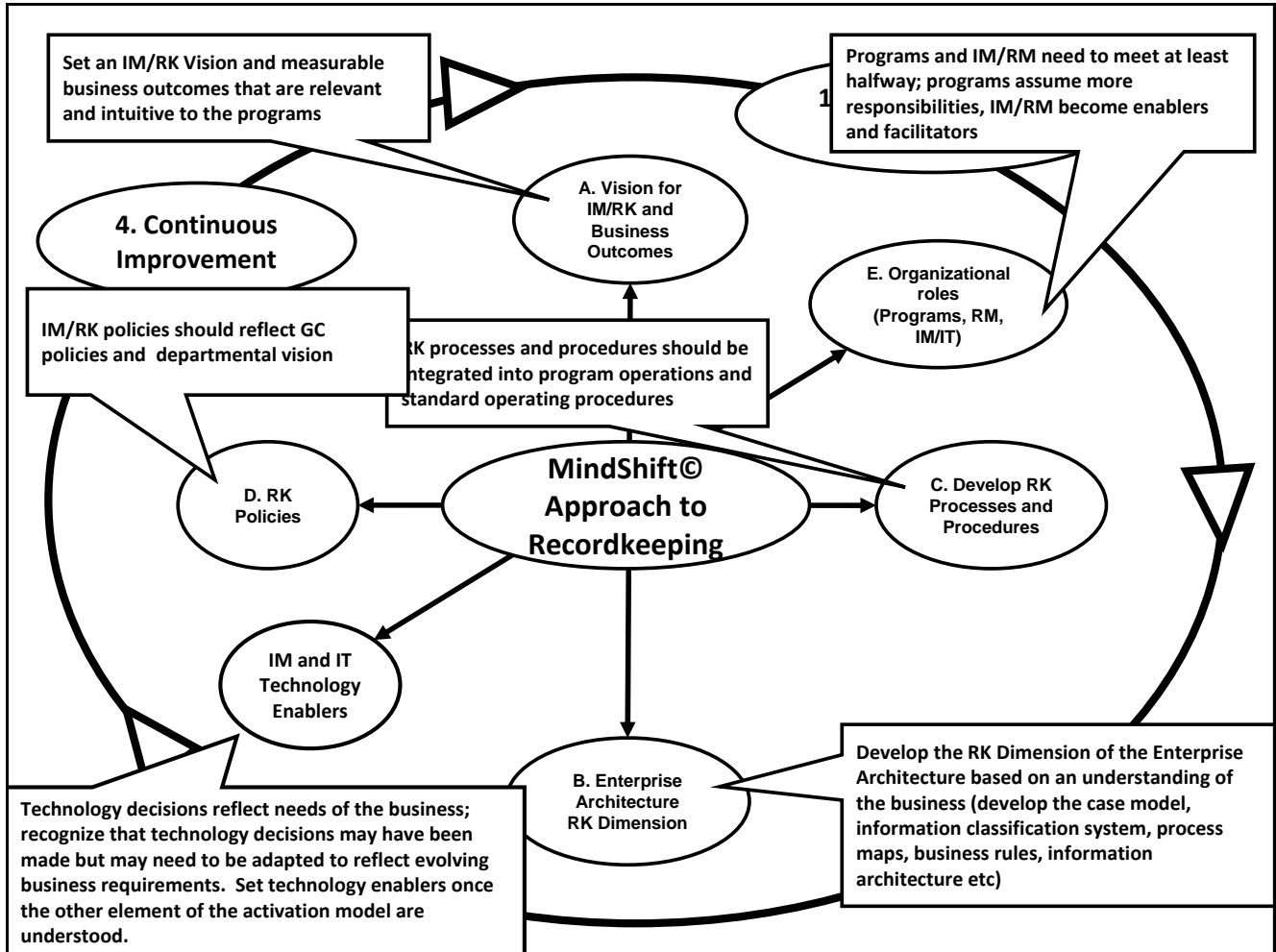


## Faceted Information Classification Model: MindShift ICM and the Cogniva ISIS Model

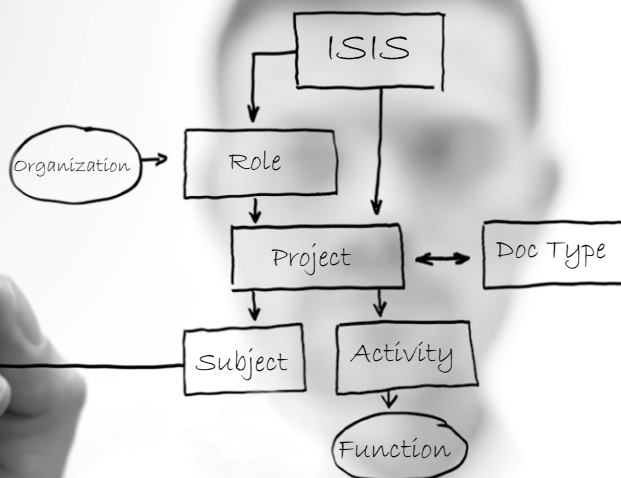
Facet Type	Facet
Context	PA
	Activity
	Branch or Business unit
	Process
	Process Step
	Business Value
Content	Record Name
	Description
	Document Type
	Role
	Subject
	Author
	Date
Control	RDA
	Access rights
	Format
	Security
Common Discovery	Unique Identifier
	Keyword
	Social Tag
	Origin of Document







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## Cogniva ISIS and GEN-ISIS

Intuitively Activating Recordkeeping

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# Cogniva ISIS Demonstration



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