

\_experience the commitment



## **CASE STUDY: The Canadian Government and Business Transformation**

**Presented to: Open Group EA Conference Brussels**

**Date: 21<sup>st</sup> of April, 2004**

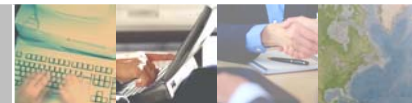
**Prepared by:**

**Robert (Bob) Weisman, Partner and Executive Consultant, EA Leader, CGI**

**Contact: [robert.weisman@cgi.com](mailto:robert.weisman@cgi.com) or (613)566-4689**

# Agenda

- **Wherefore Business Transformation Enablement Program (BTEP) ?**
- **What is BTEP**
- **Concluding Comments**

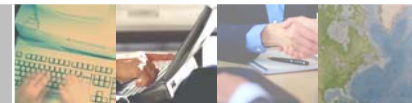


# Business Transformation Rationale and Origin

- **Government of Canada Vision**

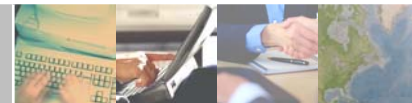
**“Citizen centric service delivery across whole of government”**

- **Integrated and interoperable business processes across government**
- **Need holistic “view”; standardized catalogue of Services**
- **Change to citizen (vice program) centred services**
- **Identify redundancies, gaps and opportunities for integrated program or service delivery**
- **Improve service delivery efficiency**



# Why Business Transformation ?

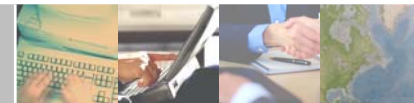
- **Government Priorities needing Business Transformation**
  - Service Transformation
    - Meeting client/citizen expectations
  - Public Safety and Security
    - Society as a whole
    - Identify and rapidly respond to threats
  - Improving Internal Government Operations
    - Increased productivity



# What is BTEP ?

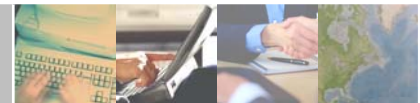
- **Business Transformation Enablement Program**
- **Not a Solution for Departmental Business Transformation !!!**
  - (But it is a methodology !!!)
- **Is a “...standardized means by which such solutions can be planned, designed and cost-effectively implemented”\***
- **Achieve Government Interoperability**
  - **”... the ability to share and exchange data, to combine information management tasks or join-up business processes.**
- **Enterprise Architecture for Business**

\*TB – BTEP Executive Overview V2.2a 23 Sep, 2003



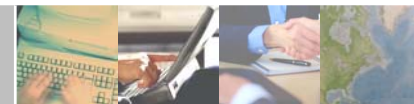
# BTEP Required Outcomes

- **Speed of new/changed service delivery to market**
  - Focus on What not How
- **Ease of use by Citizens**
  - Single-Window Government/One-Stop shop
  - Enable cross-program, cross-department Event and Scenario driven service delivery
  - Efficient use of “infostructure”
  - Sharing and common infostructure components
- **More money for Services vice Service Delivery**



# BTEP Principles

- The adoption of **engineering-oriented design methods** are essential for all levels of the organization.
- Must have an **overall transformation process** that is underpinned by the design.
- Must allow **business service design to drive information systems design**.
- Must have a **consistent and integrated design approach** from the strategic level to detailed implementation
- Must be able to communicate business service design in **public service business language**



# BTEP: The Major Constructs

## ■ Transformation Framework

- for communication, planning & design

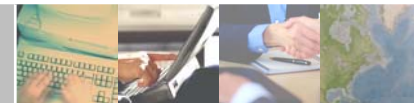
## ■ Strategic Reference Model

- business modelling language that can integrate with technology design methods

## ■ Core e-Enablers

- support a multitude of services and programs and need to be employed strategically to achieve business goals and maximize efficiencies

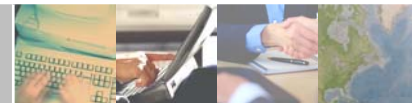
## ■ Implementation Methodology





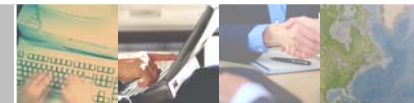
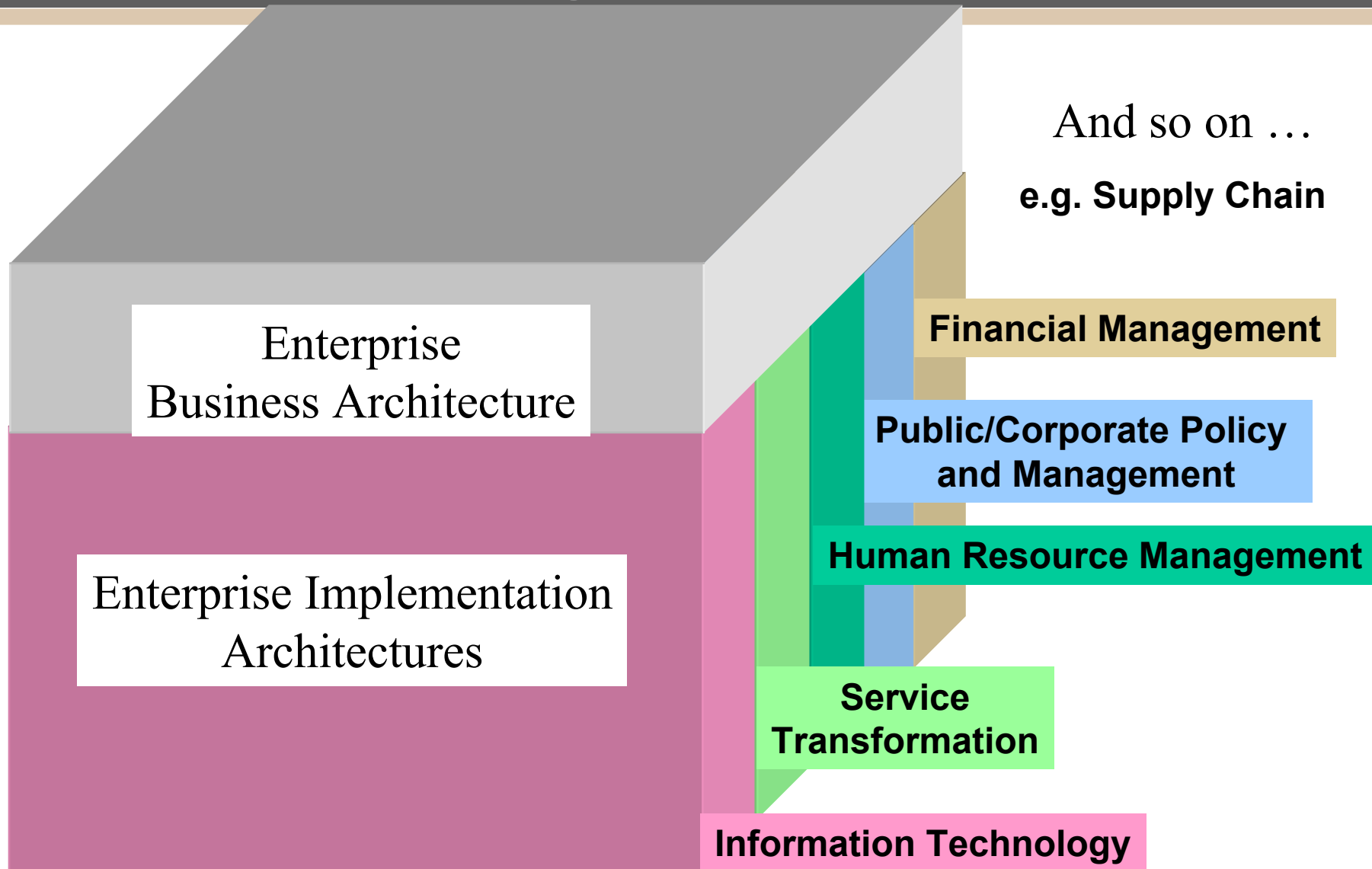
# Transformation Framework

- **Profound change requires broad cooperation**
- **Effective cooperation requires clear communication**
- **Clear communication requires a common vocabulary and framework**

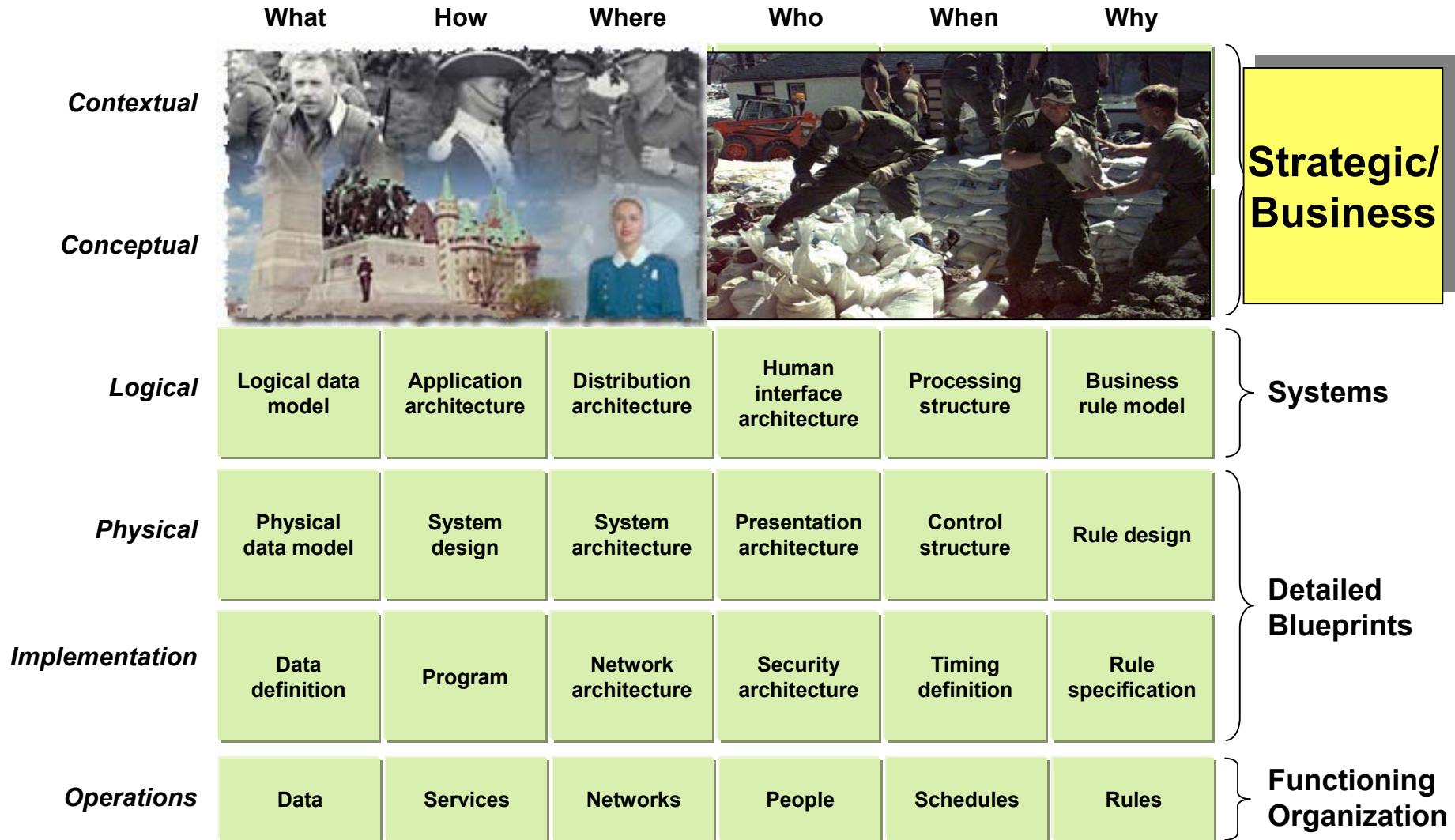


# A New Way of Looking at EA

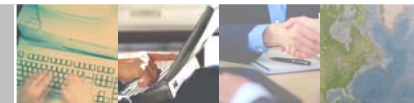
## A General Planning Framework



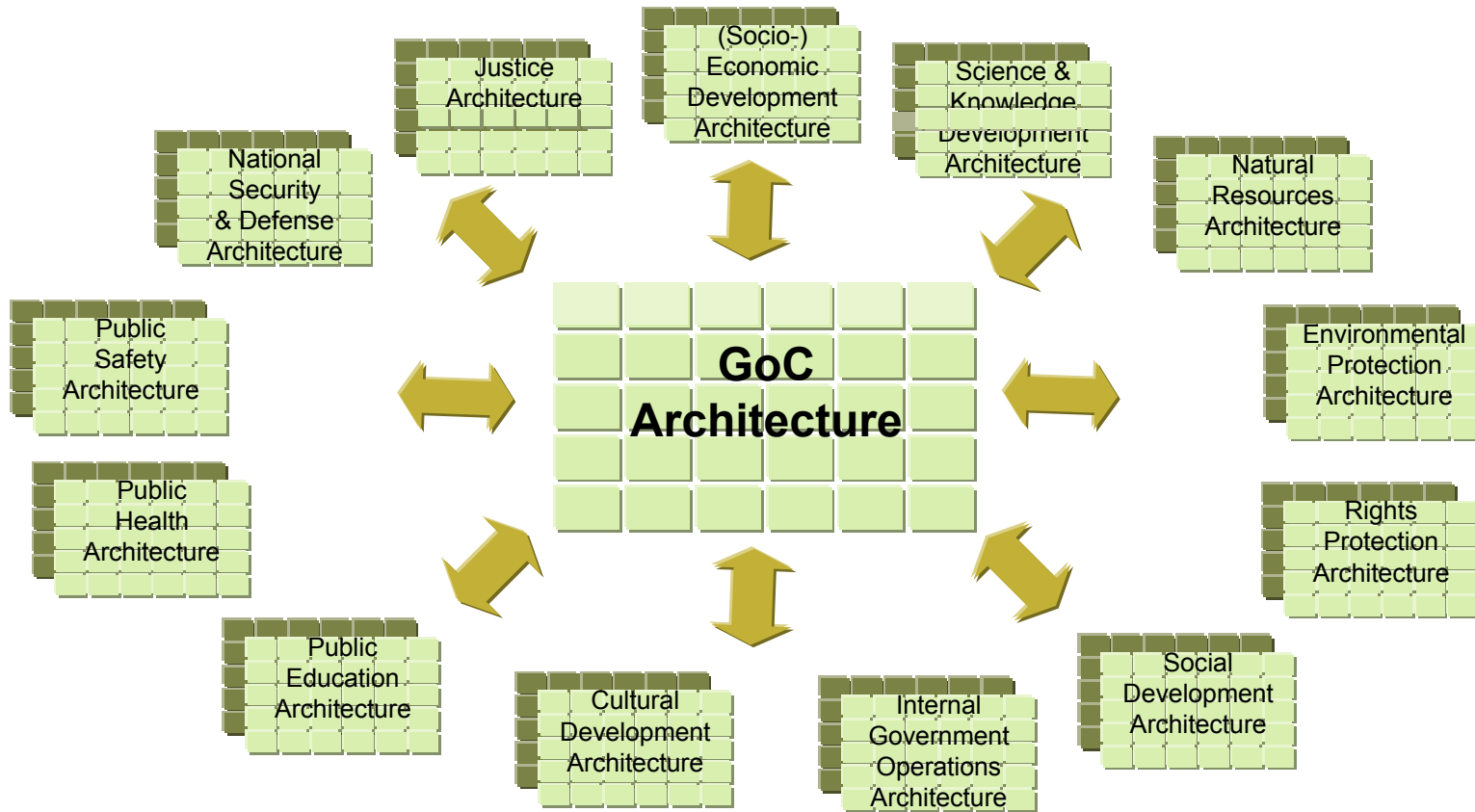
# BTEP Transformation Framework



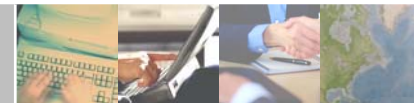
Framework Copyright by John Zachman



# Transformation Framework



**Super Programs are views**



# The Government Strategic Reference Model (GSRM)

## ■ Why

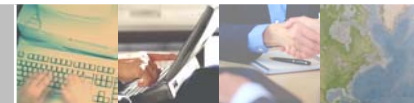
- Clear communication requires common vocabulary and framework
- Scope impacts of cross-program transformation demand rigour

## ■ What

- Business modelling language/Public Service vocabulary describes designs
- Operates at strategic levels of framework
- Based on **Public Service Reference Model (PSRM)**
  - Developed and used in 40 cities in Canada and US and 2 Canadian provinces
- IM/IT independent business designs

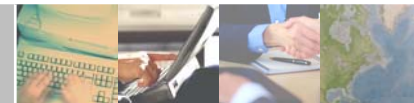
## ■ Used to

- Align programs and services to business goals and client needs
- Align IS to business
- Identify opportunities for transformation
- Assess impacts of business solutions and technologies



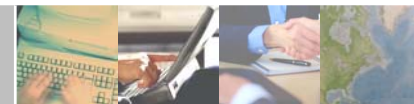
# GSRM Core Models

- **Programs and Services Model (PSM)**
- **Service Design Model (SDM)**
- **Information Reference Model (IRM)**
- **Logistics Reference Model (LRM)**
- **Community Portfolios Model (CPM)**
- **Events and Cycle Model (ECM)**
- **Performance Reference Model (PRM)**



# GSRM and Zachman Models

	<i>What</i>	<i>How</i>	<i>Where</i>	<i>Who</i>	<i>When</i>	<i>Why</i>
	Data	Process	Network	People	Time	Motivation
<b>Scope/Objectives</b> (Ballpark View)	<i>Programs and Services Model</i>					
<b>Model of Business</b> (Owner's View)	<i>Information Ref</i>	<i>Service Design</i>	<i>Logistics Ref Model</i>	<i>Community Portfolio</i>	<i>Events &amp; Cycle</i>	<i>Performance Reference Model</i>
<b>Description of IS</b> (Designer's View)	Business and Technical Architecture Transition					
<b>Technology Model</b> (Builder's View)	Technology Architecture					
<b>Detailed Description</b> (Out-of-Context)						
<b>Actual System</b>						



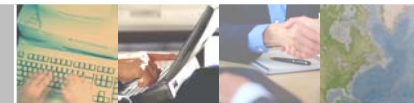
# GSRM: Programs and Services Model

## ■ Program Fields

- **Public-Facing** Program Fields (12)
- **Provider** Program Fields (11)
- Each Program Field is comprised of one or more government programs (not all existing in one organization).

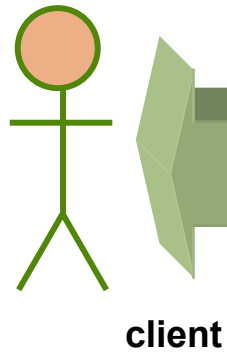
## ■ Services & Outputs

- Standard Services (19 used across the Program Fields)
- **Patterns** have been developed for many of these.





# GSRM - PSM - Common Programs

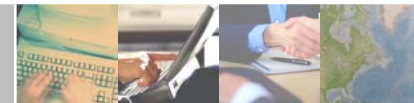


## Public Programs

- (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 & Defence
- Justice

## Provider Programs

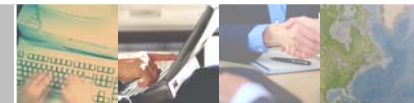
- Public Policy, Planning and Management
- Corporate Policy, Planning and Management
- Human Resources Management Services
- Financial Management Services
- Information & Information Technology Management Services
- Facilities, Fleet and Equipment Management Services
- Communications Management Services
- Supply Chain Management Services
- Administrative Services
- Professional Services



# GSRM – PSM

## Common Standard Services

<i>Periods of Permission</i>	Regulating, licensing, permitting, certifying, identifying, authorizing
<i>Periods of Agreement</i>	Creating collaborations, negotiating agreements, settling disputes
<i>Findings</i>	Inspecting & investigating
<i>Rulings &amp; Judgements</i>	Applying rules & dispensing justice
<i>Penalties &amp; Periods of Sanction</i>	Enforcing compliance, meting out punishment, penalizing
<i>Periods of Protection</i>	Monitoring, warning, guarding, storing, eliminating threats, reducing risks
<i>Interventions</i>	Intervening, responding to threats & emergencies, giving aid, restoring order
<i>Care &amp; Rehabilitation Encounters</i>	Providing care & rehabilitation to people and things
<i>Recreational &amp; Cultural Encounters</i>	Providing recreational & cultural experiences
<i>Educational &amp; Training Encounters</i>	Providing education and training experiences
<i>Advisory Encounters</i>	Providing information & advice
<i>Promotional Encounters</i>	Influencing, advocating, persuading, promoting awareness
<i>New Knowledge</i>	Conducting research
<i>Funds</i>	Acquiring and providing financial resources
<i>(Units of) Resource</i>	Providing resources such as goods, equipment, accommodations (apart from funds and human resources)
<i>Movements</i>	Moving people and things
<i>Matches, Referrals &amp; Linkages</i>	Brokering, referring, connecting, matching
<i>Rules (laws, regulations, policies, strategies, plans, designs, standards)</i>	Creating and changing rules
<i>Implemented changes</i>	Changing existing organization, practices, systems



# Primitive vs Composite Models

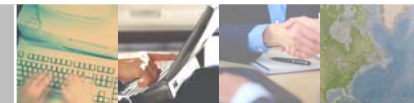
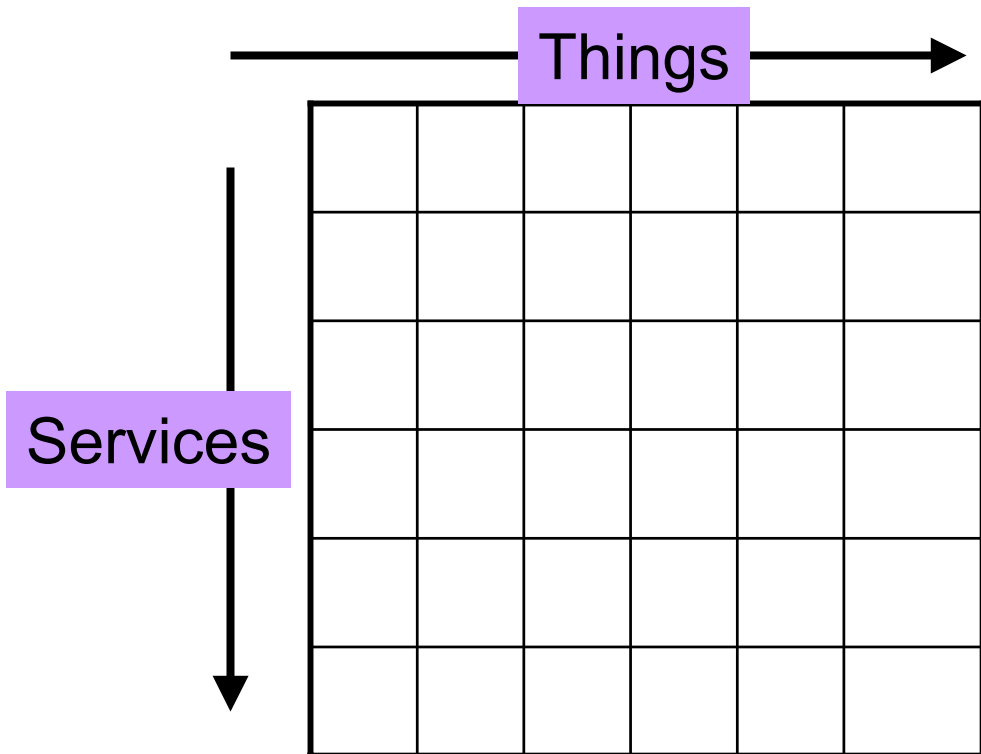
## *Primitive (and Stable)*

- One-Dimensional  
(eg List of Things)
- Zachman Framework cells
- Enables composites

## *Composite (and Dynamic)*

- Uses Two or more  
Primitive models
- (eg. ye olde CRUD matrix)

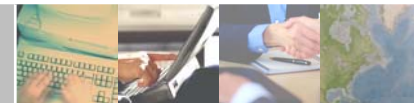
**Business Value  
is in  
The Composite  
Models**



# Evolving Row 1 Models

## An Ongoing BTEP Pathfinder

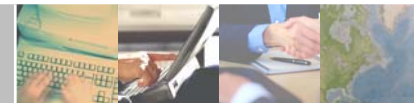
COLUMN	ROW 1 MODELS
<b>WHAT</b>	<b>1. Things Important to the Business</b>
<b>HOW</b>	<b>2. Program Fields</b> <b>3. Programs</b> <b>4. Services</b>
<b>WHERE</b>	<b>5. Jurisdictions</b> <b>6. Business Locations</b> <b>7. Geographical Areas</b>
<b>WHO</b>	<b>8. Target Groups</b> <b>9. Roles</b>
<b>WHEN</b>	<b>10. Events &amp; Cycles</b>
<b>WHY</b>	<b>11. Vision</b> <b>12. Authorities</b> <b>13. Targeted Needs</b> <b>14. Outcomes</b> <b>15. Environment Things</b>



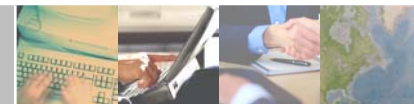
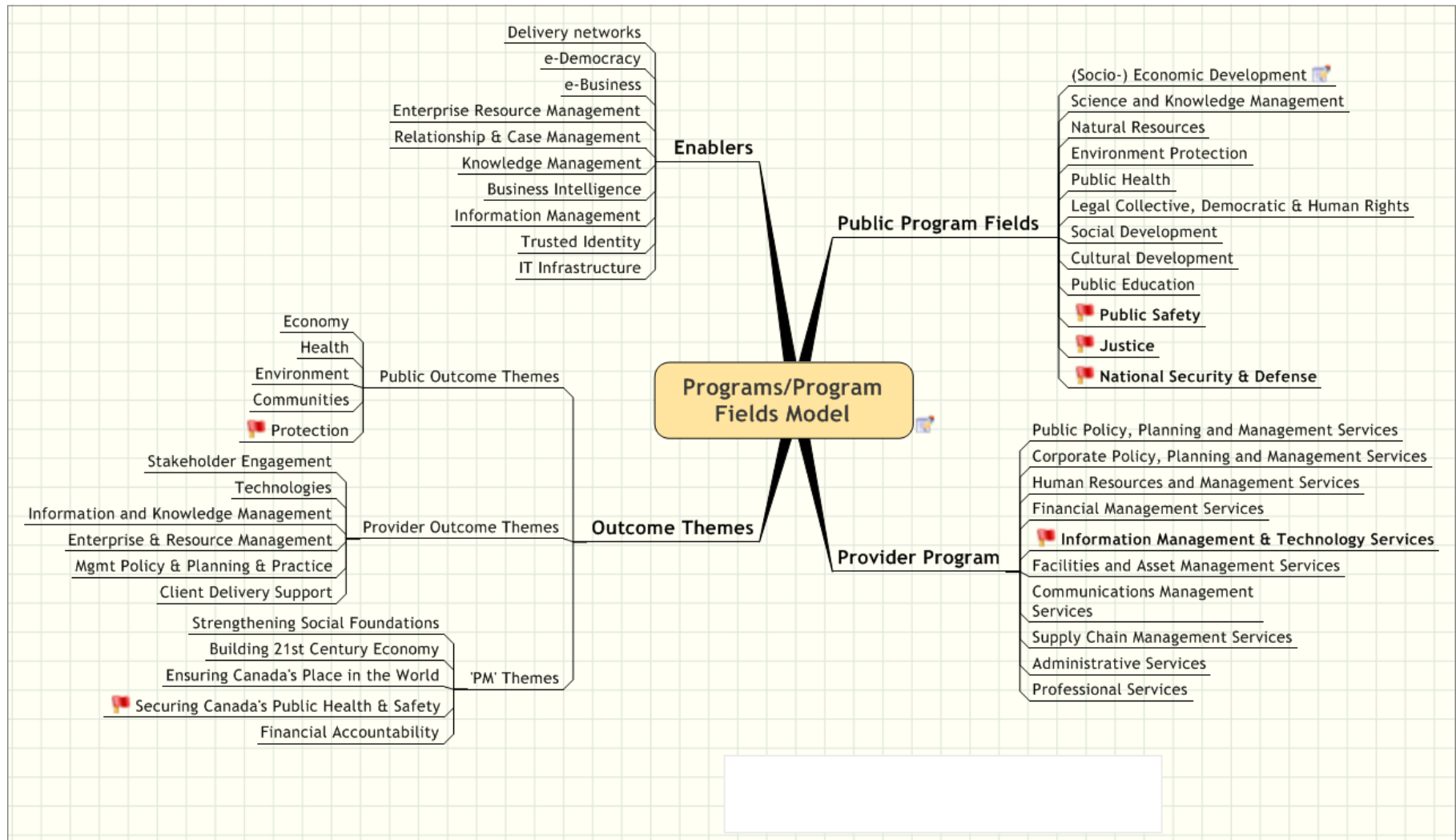
# Evolving Row 2 Models

## Primitive and Composite

'CENTRE OF GRAVITY'	ROW 2 & Composite MODELS
TOP MODEL	1. GSRM Top Model
WHAT	2. Information Reference Model
HOW	3. Program Service Alignment Model 4. Service Integration & Alignment Model
WHERE	5. Operational Model 6. Logistics Model
WHO	7. Target Group Model 8. Community Model* 9. Organization Responsibility Model* 10. Culture & Workforce Model
WHEN	11. Events & Cycles Model 12. State Transition Model*
WHY	13. Authority Model (Governance Model†) 14. Performance Model
BTF CUSTOMIZED -	15. Risk Model* 16. Value Model*

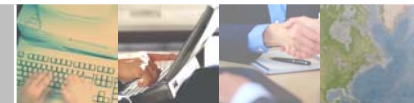


# Sample Top Level Model Mindmap Output



# IM/IT Enablers = e-Enablers

- Organizing principle for information systems
- Represents transformation of IM/IT strategy and work
- Designed & built across enterprise to be
  - re-usable, flexible and reliable.
- Aimed at enabling business interoperability & transformation from an IM/IT perspective
- Evolving standard way of designing and measuring of IM/IT
- Currently identified 10 e-Enablers
- IM/IT Foundation for all Programs
- Roughly correspond to initial Architectural Domains of Government of Canada Federated Architecture



# IM/IT Capabilities = e-Enablers

**CROSS-CUTTING THEMES:**  
accessibility,  
privacy,  
security

## **BUSINESS INTEROPERABILITY**

eDemocracy  
eBusiness

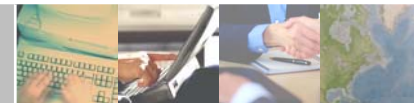
Enterprise resource management  
Relationship and case management

## **INFORMATION INTEROPERABILITY**

Knowledge management  
Business intelligence  
Information management  
Trusted identity

## **TECHNICAL INTEROPERABILITY**

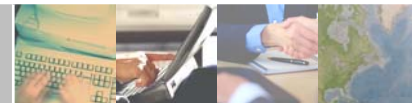
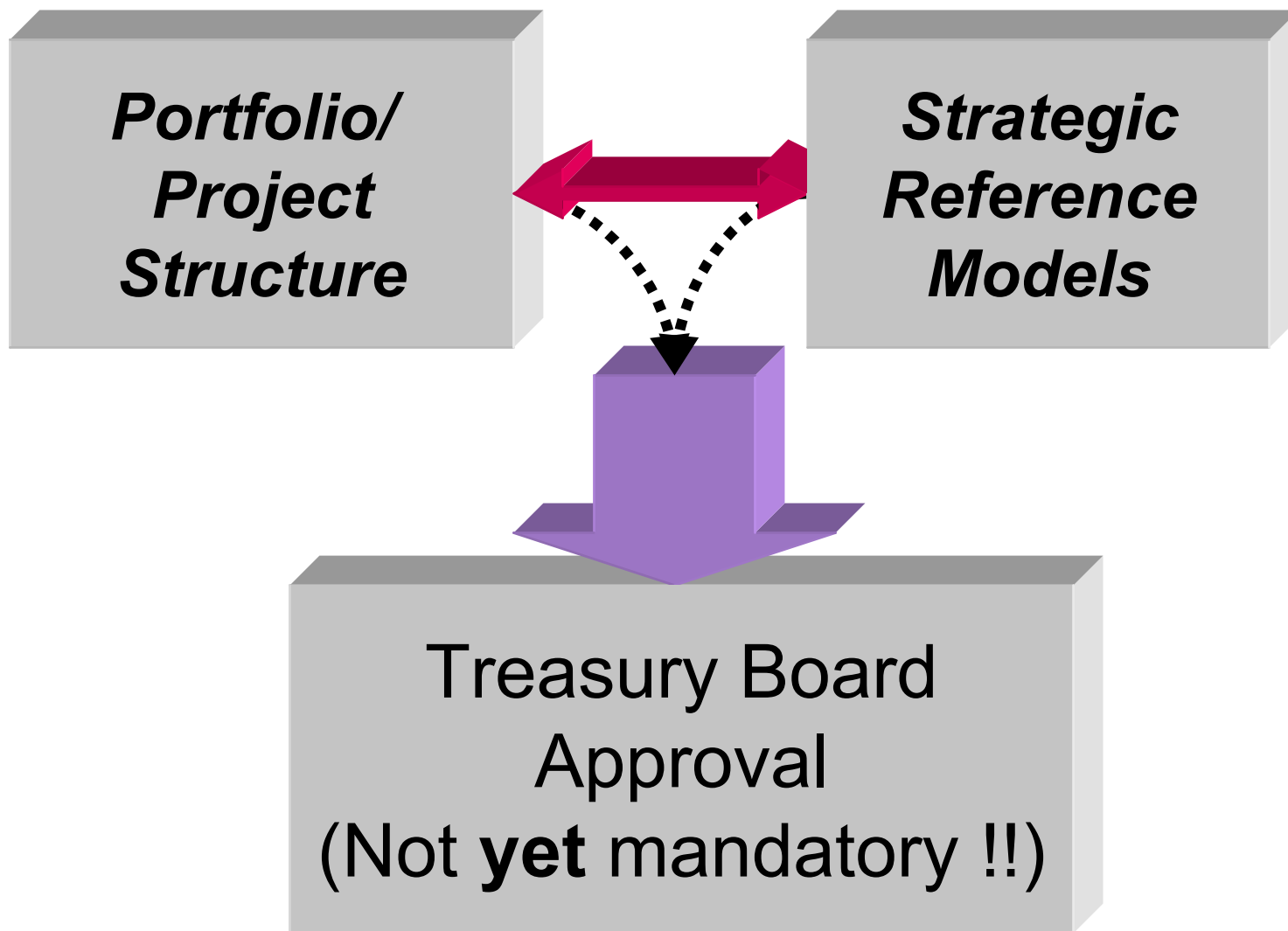
Information and infrastructure protection  
IT infrastructure





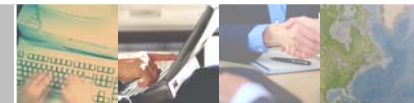
# BTEP Methodology

## Close Linkage to Portfolio Management



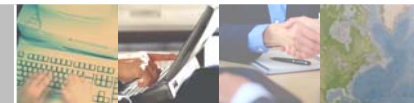
# BTEP Methodology

- Tied into Project Management Framework
- Creation of Corporate Portfolio
  - Corporate Portfolio broken down into domain Portfolios (e.g. IM/IT)
    - Domain Portfolio broken down into projects
      - Projects broken down iterations
        - Iterations broken down into phases
- **Deliverables tied to iterations & phases**
- **Funding tied to quality of Deliverables**

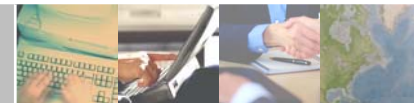
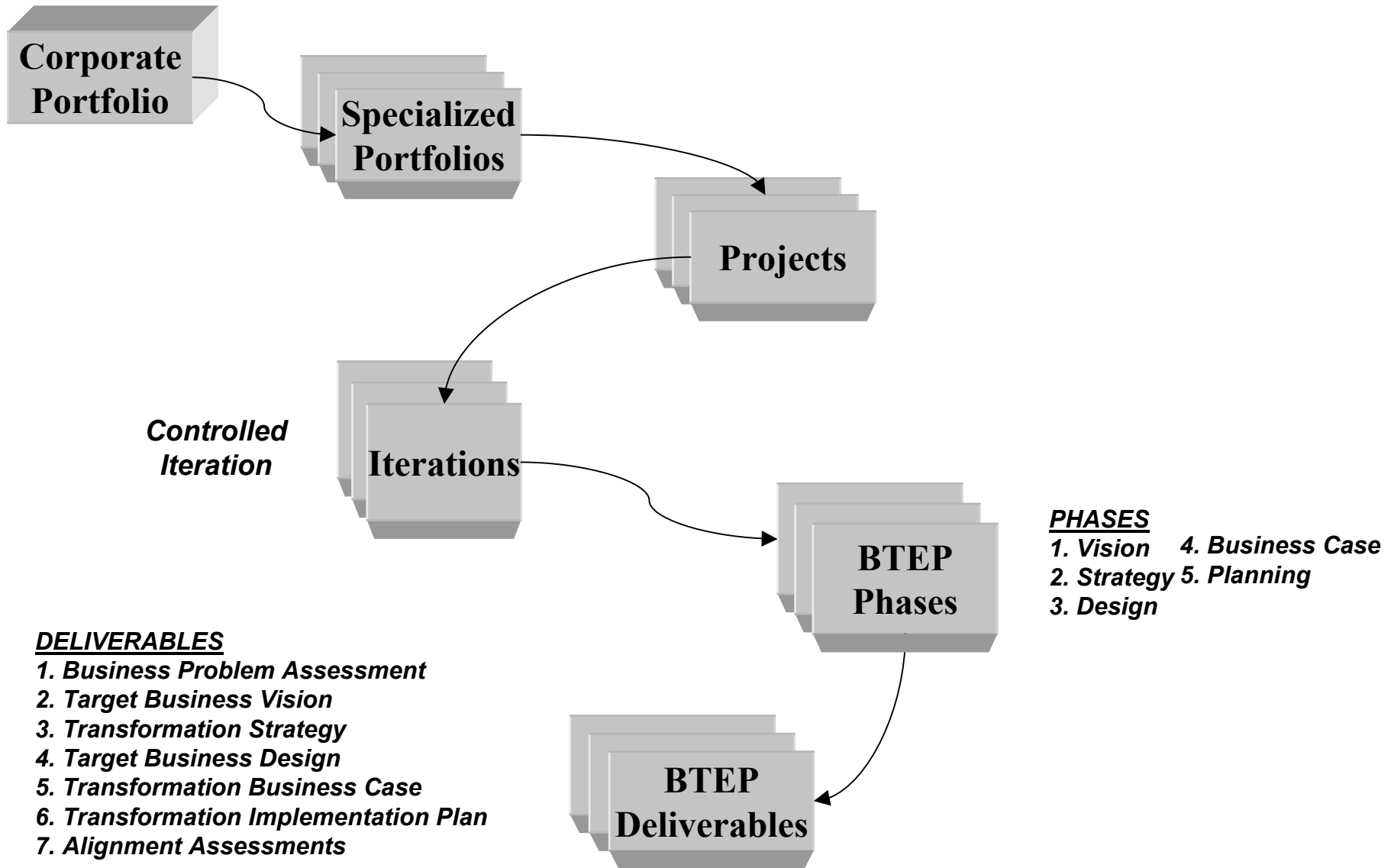


# BTEP Primary Deliverables by Phase

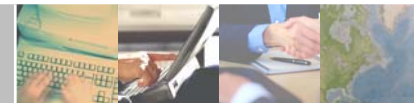
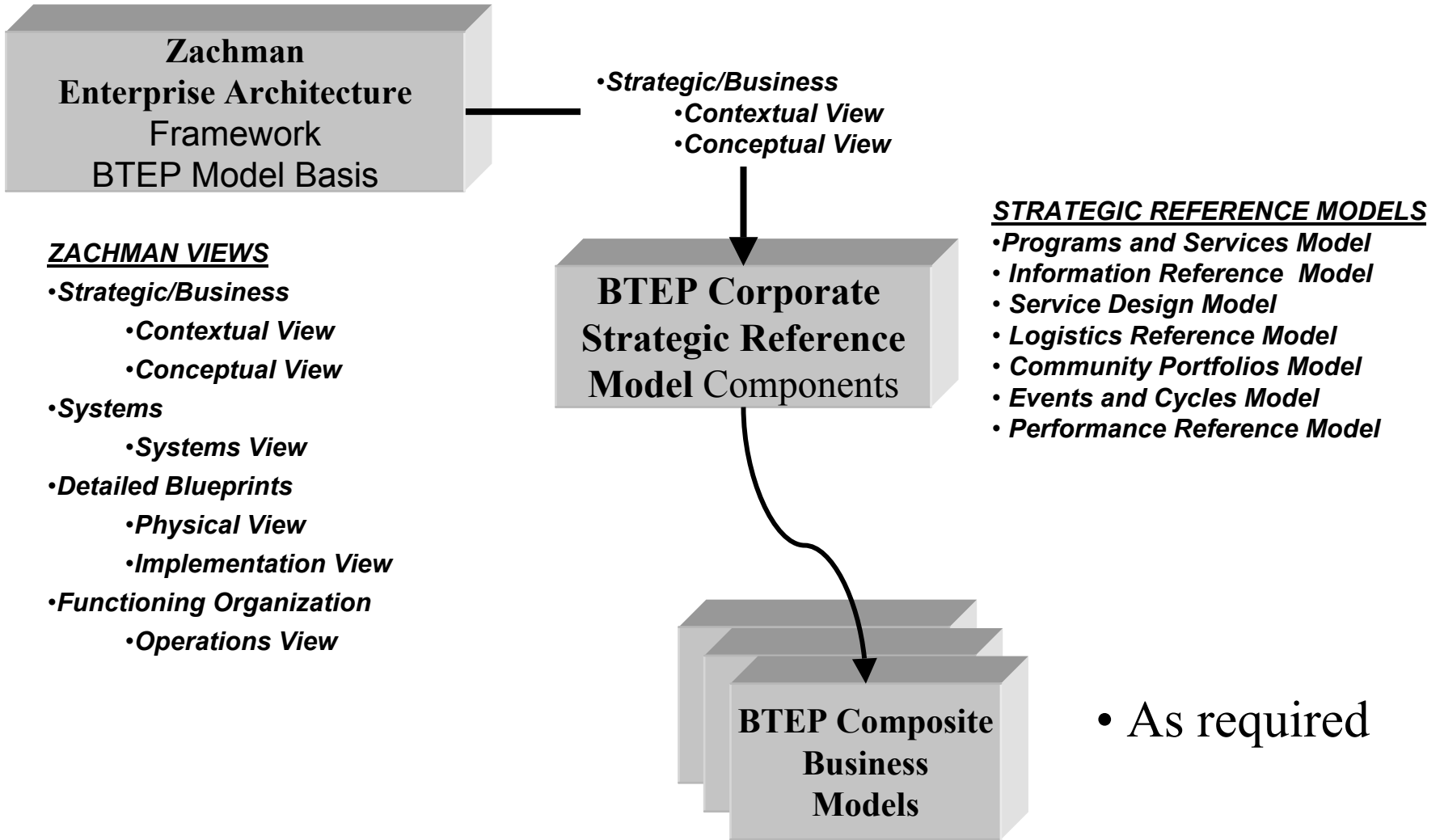
Primary Deliverables	Phases				
	Vision	Strategy	Design	Bus. Case	Plan
Business Problem Assessment					
Target Business Vision					
Transformation Strategy					
Target Business Design					
Transformation Business Case					
Transformation Implementation Plan					
Alignment Assessments					



# BTEP and Portfolio Management



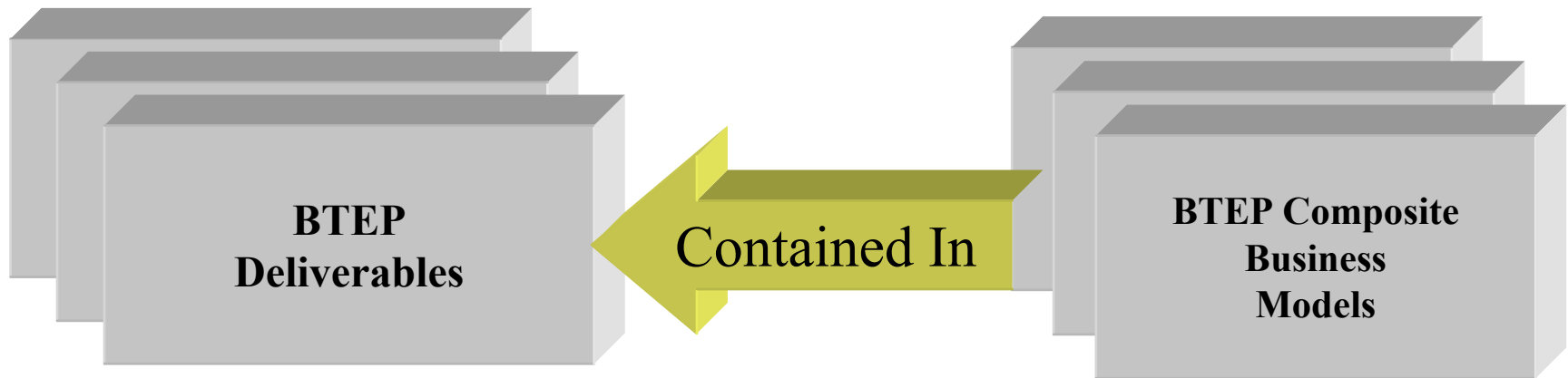
# BTEP and Strategic Reference Model



# Strategic Model Fit in Portfolio Management

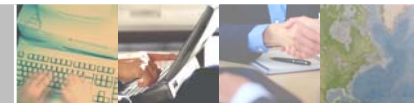
## Portfolio Management

## Strategic Modeling



### DELIVERABLES

1. *Business Problem Assessment*
2. *Target Business Vision*
3. *Transformation Strategy*
4. *Target Business Design*
5. *Transformation Business Case*
6. *Transformation Implementation Plan*
7. *Alignment Assessments*



# BTEP – Concluding Comments

## ■ Provides

- Clear, holistic view and context of transformed business processes
- Determine where processes can be re-designed and IT enablers
- Sustainable and resourced designs and implementation plans

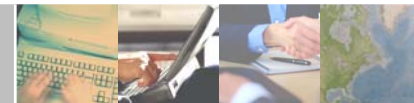
## ■ Benefits

- Standardized approach to Enhance interoperability and Optimize service delivery
- Common Public Service Language to enable collaboration
- Reuse through standardized service designs

## ■ Challenges

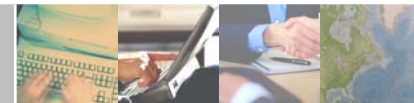
- Significant change to way that program service delivery currently conducted
- Higher up-front cost of being generic
- Need for collaboration (Federal, Multi-jurisdictional, NGOs)

## ■ **Still a work very much in progress and not universally accepted**



# Open Group and Business Transformation

- **Need to clearly differentiate between**
  - Enterprise Architecture
  - Enterprise Technology Architecture (IM/IT)
- **EA is a solid strategic planning framework for non-IM/IT and is being increasingly used as such**
- **EA still too associated with strictly IM/IT**
  - Dir EA in CIO shop, “primitives”, ...
- **BTEP coined to engage Business Executives**
- **Architecture Design Method**
  - Solid means to derive **Enterprise Technology Architecture**
  - Not intended for Enterprise Business Architecture
- **Need care when employing term EA**





Thank-you for your attention

# Questions ?

\_experience the commitment



## **CASE STUDY: The Canadian Government and Business Transformation**

**Presented to: Open Group EA Conference Brussels**

Robert (Bob) Weisman, Partner and Executive Consultant, EA Leader, CGI

Contact: [robert.weisman@cgi.com](mailto:robert.weisman@cgi.com) or (613)566-4689