
Planning for Architecture!

Enterprise Architecture Open House

June 24, 2008



Office of the Corporate
Chief Technology Officer

Agenda

- 1:00 – 1:10 Welcome
- 1:10 – 1:25 Overview of Enterprise Architecture
- 1:25 – 2:30 Segment 1: *“Starting the Project”*

- 2:30 – 2:45 Break

- 2:45 – 3:45 Segment 2: *“Getting the documents done!”*
- 3:45 – 4:00 Wrap Up

Welcome

Have You Ever:

- ❑ *Searched for something called “checkpoint 0”?*
- ❑ *Asked yourself “do I really need that artifact?”*
- ❑ *Been to ACT or ARB and said... “I didn’t realize I needed to do that!”?*
- ❑ *Felt like there isn’t enough time to get all this done?*

If you answered “yes” to any of these questions....

We hope to help answer these questions!

WELCOME!

Objectives

Provide a pragmatic approach to managing within the Enterprise Architecture process

Provide an overview of the realities and challenges in managing the Enterprise Architecture portion of the project

Provide pragmatic tips and tools to planning for architecture

Today, we will:

- *Review the Enterprise Architecture Process*
- *Apply it to Project Planning Activities*
- *View some scenario videos*
- *Discuss in break out groups what we've learned and experienced*

Expectations

- This is Not Enterprise Architecture 101...
- This is Not a session on Project Management...
- This is an interactive session for all to benefit from participating in...
- This is an opportunity for discussion, discovery and information sharing...

Most of all...

- Have some FUN!

What is Enterprise Architecture used for?

It is not just for “IT projects”

- Enterprise Architecture can be used to support many different transformations and changes going on in your Organization:
 - Partnership Development
 - Program Design
 - Service Design
 - Organization Redesign
 - Alternative Service Delivery
 - Process Redesign
 - Business Process Automation
 - Resource Improvement

Why Take an Architected Approach?

- **Brings Clarity**
 - Provides a common language for describing strategies, programs, services and processes, information and technologies
 - Source of standards, patterns, tools to promote common approaches and vocabulary from business analysis to system design to implementation to operating system

- **Is a vehicle for strategy, transformation and integration**
 - Enables service design and transformation to integrated service delivery
 - Provides a mechanism for understanding programs, services and processes as they exist today
 - Allows alternative program and delivery strategies to be evaluated
 - Spotlights overlaps and inconsistencies – opportunities for simplification and sharing

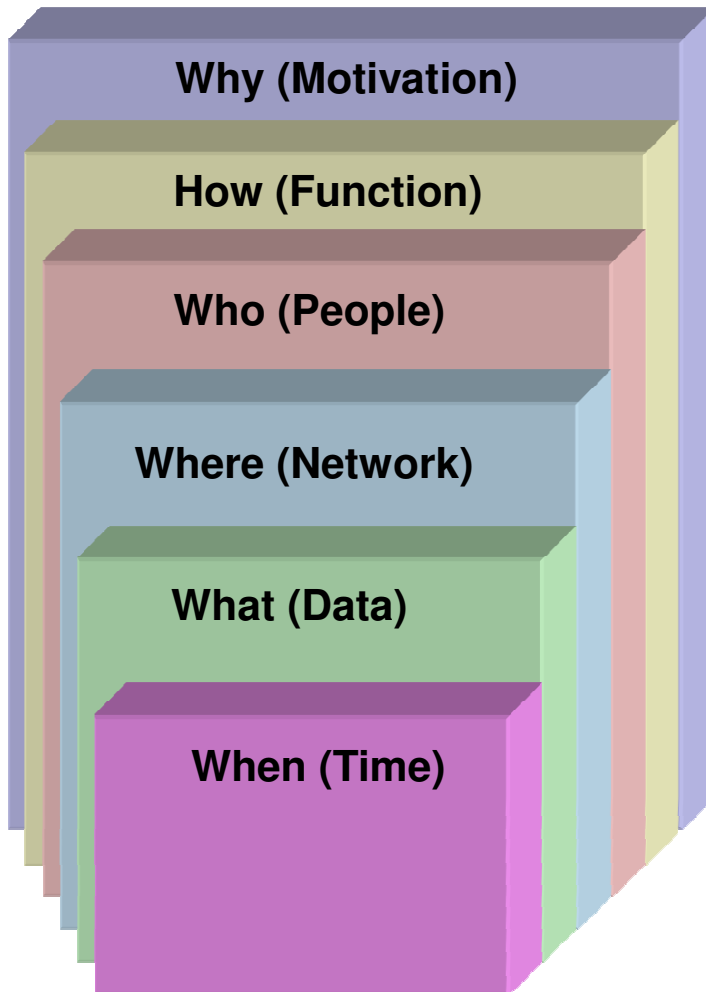
Why Take an Architected Approach?

- Helps manage complexity and risk
 - Provides a way of organizing and summarizing vast amounts of detail
 - Enables improved planning and informed decision-making
 - Is a key component of modern governance, controllership and risk management frameworks

- Enables development of agile systems
 - Is the route to business / IT alignment
 - Enables creation of agile processes and systems that are:
 - Better-focused on business needs
 - More fully able to anticipate future needs
 - More integrated
 - Easier to modify as government evolves

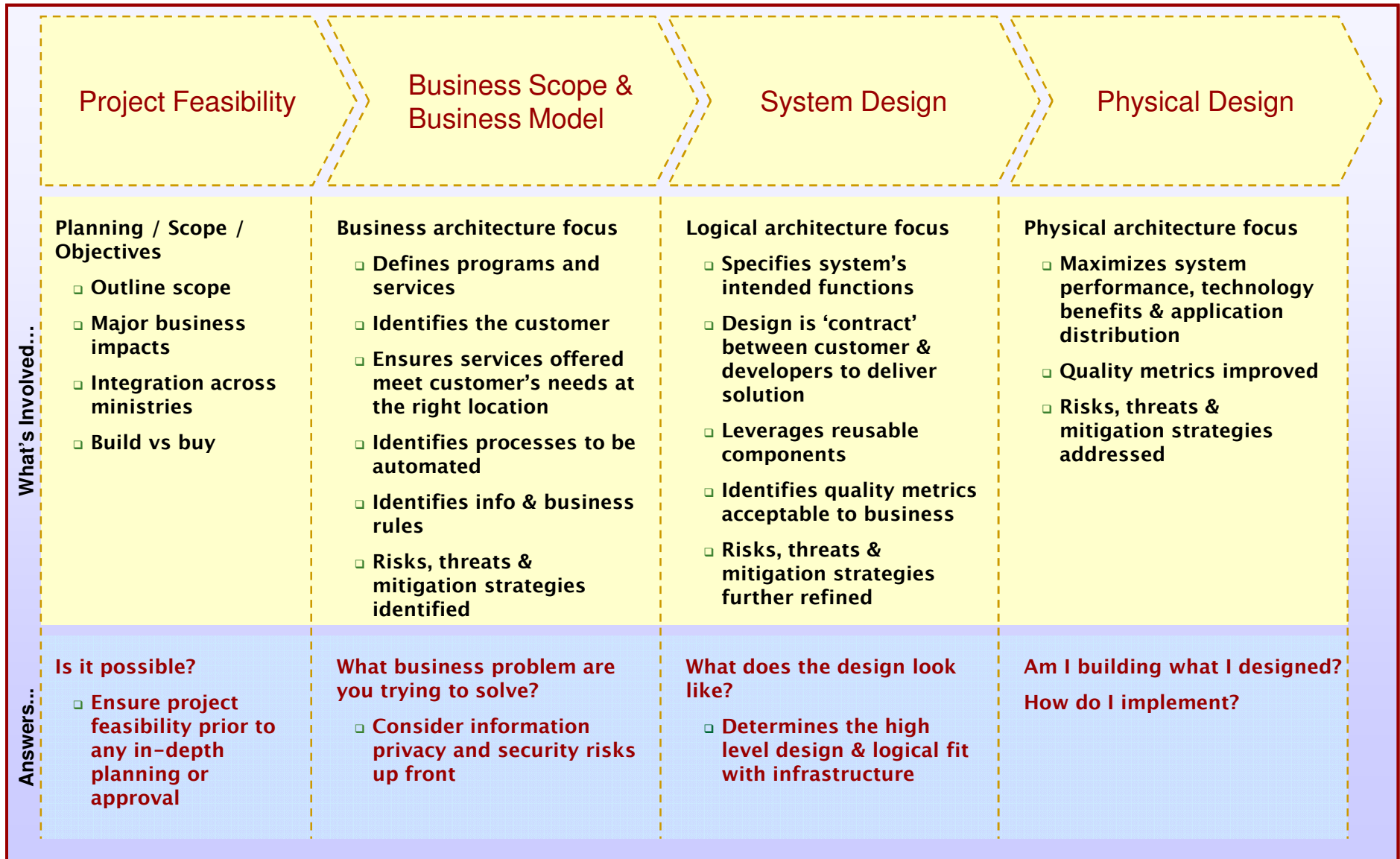
A Quick Review of the EA Approach

Enterprise Architecture asks:



- **Why** does the “enterprise” work the way it does?
- **How** does the “enterprise” carry out its work and deliver value?
- **Who** carries out that work and to whom is it delivered?
- **Where** is the work performed and where do the results go?
- **What** things are needed and used to do the work?
- **When** does work need to happen and over what period of time?

The Accumulative Phases of Enterprise Architecture



Who Contributes to Architecture?

Key Contributors to Architecture	Role
Senior Management (DM, ADM)	Define strategic plans and strategies to transform the enterprise
Program Managers (Directors, Senior Managers)	Define processes to manage the program and deliver program services
Subject Matter Experts	Assist in defining the processes, activities and tasks that manage and deliver the program services
IT Project Managers, PMO Staff	Manage the projects that transform the enterprise to its desired state (vision)
IT Architects & Business Consulting Staff	Engage the business to develop IT solutions that enable the business to manage and delivery quality services effectively and efficiently
IT Solution Development and Maintenance Staff	Develop, implement and maintain the IT solutions that enable the business to manage and deliver quality services effectively and efficiently

What Is Required at Architecture Checkpoints

Checkpoint	Key Deliverables
✓ Checkpoint 0	<ul style="list-style-type: none">■ High Level overview of the business case and what the project will be accomplishing
✓ Checkpoint 1	<ul style="list-style-type: none">■ Business architecture documentation (contextual and conceptual)■ Conceptual Privacy Impact Assessment (PIA) and Threat Risk Assessment (TRA)■ Acquired Solutions: Checkpoint 1 and high-level information and application architecture sufficient for acquiring a solution (hardware / software)
✓ Checkpoint 2	<ul style="list-style-type: none">■ Information and application architecture sufficient to document a developed application and/or an acquired solution■ Logical PIA and TRA
✓ Checkpoint 3	<ul style="list-style-type: none">■ Information, application and technology architecture documentation sufficient to build and/or maintain an application or acquired solution■ Physical PIA and TRA
✓ Checkpoint 4	<ul style="list-style-type: none">■ Post implementation assessment■ Lessons learned

Recap: The Value of EA

- Ensures a viable business value
- Provides quality solution meeting enterprise needs
- Leverages standards & principles
- Implements corporate I&IT strategies
- Consistently applies designs, patterns, standards
- Identifies links to other projects; integration
- Controls costs & makes better use of resources & assets

Segment 1: Starting the Project

Starting The Project!

Have You Ever:

- ❑ *Had another “top priority” project land on your desk?*
- ❑ *Wondered about the architecture requirements & how they fit together?*
- ❑ *Felt like Enterprise Architecture is a Check List Process?*
- ❑ *Misunderstood the Corporate ACT and ARB processes?*

If you answered “yes” to any of these questions....

We hope to help answer these questions!

Segment Objectives

- Discuss what is involved in taking the architected approach for your project
- Understand the value of Enterprise Architecture (EA)
- Highlight the risks and mitigation strategies during your EA start up phase

Starting with Enterprise Architecture

Common things we all consider when starting the EA portion of a project:

1. Understand the EA approach to be taken
2. Understand the “business” of your project
3. Identify your stakeholders and resources
4. Determine milestones & interdependencies

What Is Required at Architecture Checkpoints

Checkpoint	Key Deliverables
✓ Checkpoint 0	<ul style="list-style-type: none">■ High Level overview of the business case and what the project will be accomplishing
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Understanding the EA Process

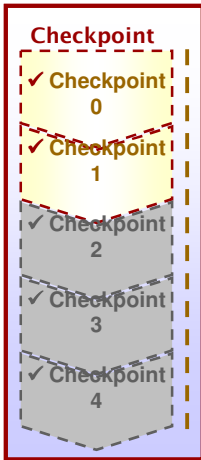
The following happens at each Checkpoint

	1. Development of Deliverables and Checkpoint Materials	2. IT Cluster Architecture Review	3. Corporate Architecture Core Team (ACT) Review	4. Corporate Architecture Review Board Approval
What occurs at each Stage	<ul style="list-style-type: none"> Developed in conjunction with all business and IT stakeholders guidance & support through IT Cluster architecture experts 	<ul style="list-style-type: none"> The material you prepare will be carefully reviewed by corporate and cluster architecture experts. If necessary, your team will receive feedback prior to your Corporate ACT presentation. 	<ul style="list-style-type: none"> Review & provide feedback Endorse to proceed to ARB for approval Satisfy all ACT- directed action items before presenting to Corporate ARB for approval. 	<ul style="list-style-type: none"> Final review and approval at ARB ensures that the architecture is reflective of the business and fully integrates and leverages with the enterprise

**** Having your material submitted on time, in its completed form, and on the proper templates will give adequate time for this feedback process. It will also increase the probability of your project passing the checkpoint.**

Who's Involved	1. Development of Deliverables and Checkpoint Materials	2. IT Cluster Architecture Review	3. Corporate Architecture Core Team (ACT) Review	4. Corporate Architecture Review Board Approval
Business	<ul style="list-style-type: none"> Development of Materials 		<ul style="list-style-type: none"> Typically Presents Checkpoint 1 for 30-40 minutes 	<ul style="list-style-type: none"> Typically Presents Checkpoint 1 for 20-30 minutes
IT / Cluster	<ul style="list-style-type: none"> Development of Materials 	<ul style="list-style-type: none"> Review and Provide Feedback Approve; Endorse to proceed to Corporate, as required 	<ul style="list-style-type: none"> Typically Presents Checkpoint 2/3 for 30-40 minutes 	<ul style="list-style-type: none"> Typically Presents Checkpoint 2/3 for 20-30 minutes

Understanding the EA Process



What are they “really” looking for at ACT and ARB...

Checkpoint	Key Deliverables	Key Items that ACT and ARB are looking for
<p>✓ Checkpoint 0</p>	<ul style="list-style-type: none"> ✓ High Level overview of the business case and what the project will be accomplishing 	<ul style="list-style-type: none"> ■ Key stakeholders, cross ministry integration or reuse opportunities ■ Timelines & who consulted ■ Exceptions to architecture documentation or standards with rationale ■ Buy/build ■ New components, standards
<p>✓ Checkpoint 1</p>	<ul style="list-style-type: none"> ✓ Business architecture documentation (contextual and conceptual) ✓ Conceptual Privacy Impact Assessment (PIA) & Threat Risk Assessment (TRA) ✓ Acquired Solutions: Checkpoint 1 as above and high-level information and application architecture sufficient for acquiring a solution (hardware / software) 	<ul style="list-style-type: none"> ■ Demonstrated context of the business is adequately defined ■ The “story” of how the high level business is further detailed with each row and artifact ■ Consideration of how the “business architecture” fits with the overall enterprise ■ Consistency and traceability amongst the documents

Understand the “business” of your project

Key things to consider:

- While you may be building a system, you must demonstrate why this system is required and in what business context is it required.
- Allow the business and their requirements to define what functional supports are required from technology
- Understand the business services and how their delivery will be supported by any technologies

Where to get started:

- ✓ Talk to your business lead and explain the difference between organizations, business/services and systems – it’s more challenging than you think!

Identify your Stakeholders and Resources

Key things to consider:

- Don't forget who the client of the business and service is
- Look for stakeholders beyond the branch/division/organization (business & IT)
- Engage all your stakeholders early and often
- Define roles and responsibilities for all stakeholders in all phases

Where to get started:

- ✓ Brain storm with your business lead and EARLY
- ✓ Talk with your IT cluster architecture team
- ✓ Talk with Corporate Architecture experts
- ✓ Corporate Security Branch, Infrastructure Technology Services and Office of the Corporate Chief Information and Privacy Office are key contacts and resources in the EA process

Determine Milestones and Interdependencies

Key things to consider:

- Determining milestones and developing timelines will require input from many sources and stakeholders
- In some cases interdependencies may go beyond the program area and may be relevant at the enterprise level (e.g., corporate strategies, applications and tools, etc.)
- Step back and see how your projects fits within the overall “enterprise”

Where to get started:

- ✓ Engage with your stakeholders and get them to validate milestones and assumptions
- ✓ Talk with your IT cluster architecture team
- ✓ Talk with Corporate Architecture experts
- ✓ Corporate Security Branch, Infrastructure Technology Services and Office of the Corporate Chief Information and Privacy Office are key contacts and resources in the EA process

Scenario: “What Project is this?”

The Scenario:

- You're swamped. Deadlines on several projects are looming and there is very little time to spare. All of a sudden a new top priority project lands on your desk and it says Enterprise Architecture all over it.....

- Clip 1a: What possibly could go wrong?

Scenario Clip 1b: “What Project is this?”

Summary of Key Tips

- Don't go it alone; know & understand the resources available & involve them early and often throughout the process;
- Cluster architecture teams know the process & requirements & is a valuable resource;
- Business SMEs are critical but also the infrastructure domain (e.g. ITS), Corporate Security (TRAs) and OCIPO (PIAs). It's never too early to involve them as they can give a heads up & insightful info if there will be requirements/challenges down the road;
- Plan for architecture review & approval timelines. Understand the process & its value. The time invested early will be time saved later on...e.g. reuse...
- EA is NOT a check mark activity towards implementation that takes up a lot of time;
- Risks increase if all parties aren't fully engaged throughout the architecture;
- Need to consider the enterprise viewpoint (not always the project perspective). Architecture proves value!

Segment 2: Getting the Documents Done!

Getting the Documents Done!

Have You Ever:

- ❑ *Been at the mercy of your technical folks when it gets to Checkpoint 2 and 3?*
- ❑ *Wondered where your business stakeholders went beyond Checkpoint 1?*
- ❑ *Really wondered if you fully understood what the business wants?*

If you answered “yes” to any of these questions....

We hope to help answer these questions!

Objectives

- Discuss how to ensure your end product meets the business needs
- Identify potential risks and impacts
- Discuss how to ensure you meet the business needs

Beyond the Conceptual Model

The Scenario:

You've just completed Checkpoint 1. Its been a long detailed process with the business stakeholders to get you this far. Now you must translate business requirements into a technical design

There are several pitfalls and challenges at this stage:

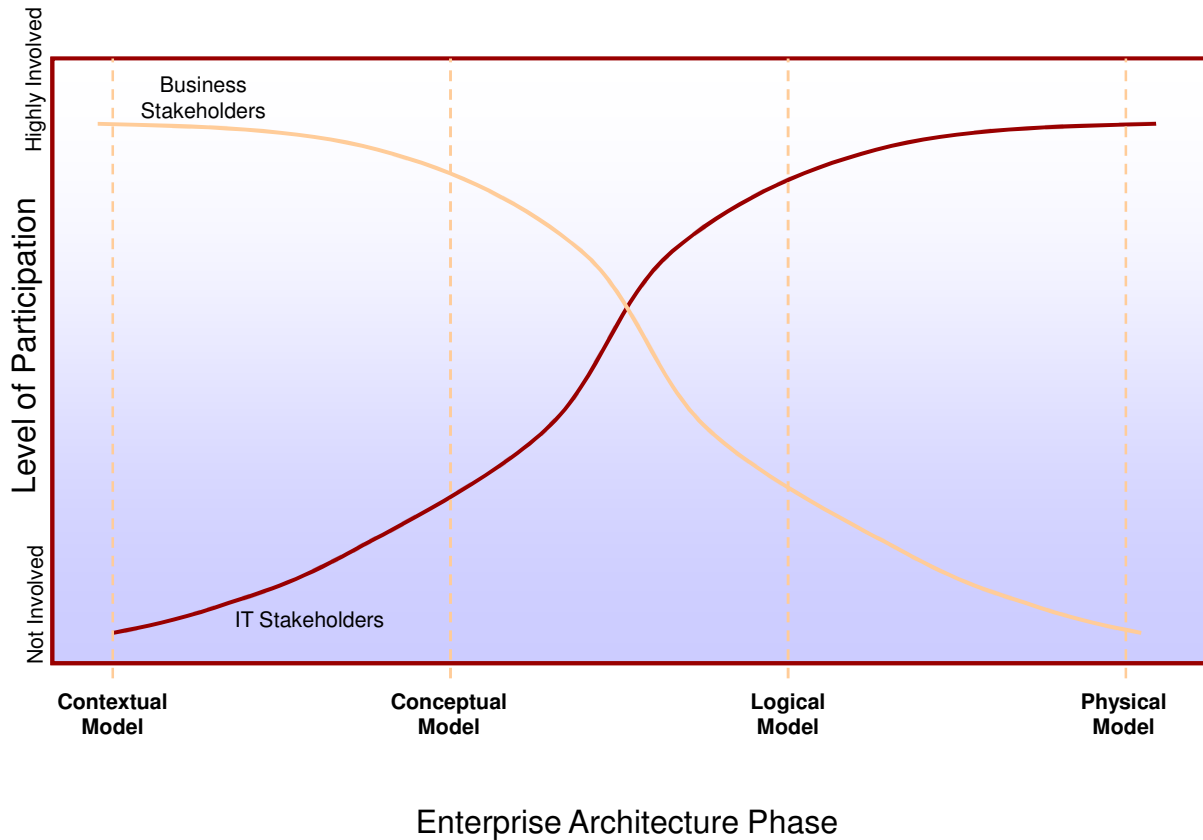
- IT not always involved in planning & scoping stage with the business
- Not involving stakeholders early makes it harder to recover later on
- Business involvement drops once IT design & development gets underway; business may not see their role at this point
- Business needs not always clearly articulated
- EA is only a check mark activity towards implementation that takes up a lot of time
- Not all stakeholders are known to the project team

Issues Projects Face with EA

- Perceived Problems and Risks
 - Too much theory or too little practice
 - Costs too much to prepare all the documentation
 - Process slows the project down
 - Don't involve the right people early enough and throughout the process; makes it more difficult to recover from "surprises"
 - Number of stakeholders/partners increases as you move along
 - The business changes its mind often; hence ensuring traceability is critical
 - Tight timelines make for difficult decision-making
 - Resources (financial & human) are limited

Participation Transition between Business & IT

A common **mistake** to artifact development



- A common mis-practice is to have business only focus on business deliverables and IT focus on IT deliverables
- This leads to miscommunications, loss in translation and eventually end products that don't meet business needs

EA means working together

- **Business and IT** working together in ALL phases of architecture development – to ensure traceability within the deliverables and building towards a stronger solution
- **Cluster Architecture** teams are a valuable source of information and first point of contact for project teams throughout the process
- **Architecture Core Team (Cluster or Corporate) and Domain Working Groups** facilitate cross government exchange of information and best practices
- **Corporate Security Branch, Infrastructure Technology Services and Office of the Corporate Chief Information and Privacy Office** are key contacts and resources in the EA process that can help your project align with enterprise level strategies and take advantage of common enterprise solutions.

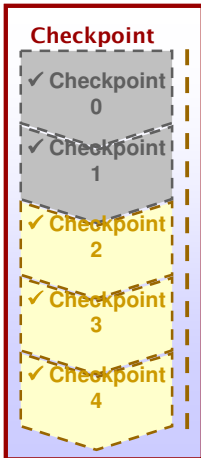
The Project Manager: An Architecture Champion



- Maintain relationships and engage with all stakeholders at all phases
- Educate and communicate on the Enterprise Architecture and make sure all stakeholders understand what is being developed
- Enable the enterprise view and integration activities
- Maintain the timelines and the approval processes
- Ensure that the product meets the business needs

The Architecture Champion Enables...	And Mitigates Risks...
<ul style="list-style-type: none"> ■ Deliver business value; assess, mitigate, manage all risks ■ Produce deliverables that are realistic, linked, actionable ■ Produce deliverables that are clear, consistent, re-usable ■ Comply to OPS enterprise architecture standards (e.g. production of requirements, PIA and TRA, principles such as traceability, maintainability, integration are maintained) ■ Adhere to corporate strategies technical standards, security standards, privacy standards, web standards... ■ Link to enterprise infrastructure visions; link to other projects ■ Consult with appropriate partners (e.g. business, CSB, OCIPO, PMA, ITSC) 	<ul style="list-style-type: none"> ■ Solutions that don't leverage or align with the enterprise ■ High costs inefficient solutions ■ Solutions that don't meet business needs ■ Projects issues that are past the "point of no return" ■ Solutions that expose the business to security or privacy risks

Understanding the EA Process



What are they “really” looking for at ACT and ARB...

Checkpoint	Key Deliverables	Key Items that ACT and ARB are looking for
✓ Checkpoint 2	<ul style="list-style-type: none"> Information and application architecture sufficient to document a developed application and/or an acquired solution Logical PIA and TRA 	<ul style="list-style-type: none"> Traceability of the artifacts to meet the conceptually designed business needs
✓ Checkpoint 3	<ul style="list-style-type: none"> Information, application and technology architecture documentation sufficient to build and/or maintain an application or acquired solution Physical PIA and TRA 	<ul style="list-style-type: none"> Ensures that the architecture is reflective of the enterprise (as defined) Ensure that all existing standards, applications and components are leveraged and integrated within the design Traceability to the business design
✓ Checkpoint 4	<ul style="list-style-type: none"> Post implementation assessment Lessons learned 	<ul style="list-style-type: none"> Traceability to the business design

Understanding Everyone's Roles and Responsibilities

Checkpoint	Role & Responsibility				
	Project Manager	Business	IT	Cluster / Corporate ITS	ACT/ARB
✓ Checkpoint 0	<ul style="list-style-type: none"> Coordinate development of contextual document 	<ul style="list-style-type: none"> Communicate the business and its needs 	<ul style="list-style-type: none"> Contribute to design 	<ul style="list-style-type: none"> Provide insight on corporate enterprise initiatives 	<ul style="list-style-type: none"> Endorse / Approve
✓ Checkpoint 1	<ul style="list-style-type: none"> Coordinate development of conceptual document 	<ul style="list-style-type: none"> Communicate the business and its needs 	<ul style="list-style-type: none"> Translate business needs into system needs 	<ul style="list-style-type: none"> Provide guidance in articulation of artifacts 	<ul style="list-style-type: none"> Endorse / Approve
✓ Checkpoint 2	<ul style="list-style-type: none"> Coordinate development of Logical document 	<ul style="list-style-type: none"> Validate that business needs are reflected Ensure traceability 	<ul style="list-style-type: none"> Translate business needs into system needs 	<ul style="list-style-type: none"> Provide guidance in articulation of artifacts 	<ul style="list-style-type: none"> Endorse / Approve
✓ Checkpoint 3	<ul style="list-style-type: none"> Coordinate development of Physical document 	<ul style="list-style-type: none"> Validate that business needs are reflected Ensure traceability 	<ul style="list-style-type: none"> Integrate system needs into enterprise infrastructure 	<ul style="list-style-type: none"> Identify and integrate architecture with the enterprise 	<ul style="list-style-type: none"> Endorse / Approve
✓ Checkpoint 4					

Scenario: “Its Almost Done!”

The Scenario:

You’ve just completed Checkpoint 1. Its been a long detailed process with the business stakeholders to get you this far. Now you must translate business requirements into technical design

- Clip 2a: What possibly could go wrong?

Clip 2b: “Its Almost Done!”

Summary of Key Tips

- Don't go it alone. Know & understand the resources available & involve them early and often throughout process
- Make sure everyone knows “what's involved” with EA
- Cluster architecture teams know the process & requirements & is a valuable resource
- Business SMEs are critical but also the infrastructure domain (e.g. ITS), Corporate Security (TRAs) and OCIPO (PIAs)
- Plan for architecture review & approval timelines
- Risks increase if all parties aren't fully engaged
- Need to consider the enterprise viewpoint (not always the project perspective); architecture proves value

- Summary

What Did We Learn?

Key Insights and Take Aways

- Involve people EARLY and OFTEN
- Everyone has a role at all stages of the process
- Plan for the timelines early in the process
- It's **NOT** a check mark exercise, the “process” is part of the solution
- The value in an architected approach is in its ability to:
 - Articulate a solution based on the business needs
 - Identify business, policy, service delivery, resource and organizational gaps within a business area
 - Ensure consistency in the development of a solution across all stakeholders
- Step back and look at it from the “enterprise view”
- You're not alone... there are many resources at your disposal

Who to Ask

Any of these teams are here to help!

- Your IT Cluster Architecture team
- Office of the Corporate Chief Technology Officer
- Office of the Corporate Information and Privacy Officer
- Corporate Security Branch
- Infrastructure Technology Services (ITS)
- Architecture Core Team representatives

Additional Tools and Resources

Tools & Guidance – There are many resources available to you

- Enterprise Architecture Self Service Tool
- GO-ITS Standards
- Enterprise Architecture Process & Methodologies Handbook
- Enterprise Architecture Checklists & Guidebooks
- Enterprise Architecture Repository of Artifacts
- Enterprise Architecture Templates & Examples
- Privacy Impact Self Assessment Tool
- Threat Risk Assessment Template & Guidance Material

Planning for Architecture!

Thank you!

About the Facilitators

Your Facilitators for Today:

Lead Facilitator: John Ing, PSTG Consulting

John is a Partner with PSTG Consulting and supports the International Consulting Services and Canadian Public Sector Practices. John brings over 12 years of industry and consulting experience both in the private and public sectors and has worked with clients throughout Canada and internationally around the world. Through his many engagements, he has developed a wealth of experience leading clients through complex design and transformation initiatives in the areas Government Service Delivery, e-Government, enterprise and business architecture and customer relationship management.

John has been fortunate to be involved in many major transformation initiatives in the OPS and Internationally and has developed his own unique approach to applying an enterprise view to architected solutions with his clients. His work includes:

- Working at the Municipal Level assisting local government redefine service delivery through EA
- At the provincial level assisting Ministries such as MOE, MAG, MGCS, OMAF, ORG, MTO and MOHLTC
- At the International Level implementing large scale government wide e-Government initiatives in Trinidad and Tobago and Botswana

Facilitator: Linda Jarvis, Office of the Corporate Chief Technology Officer

Linda Jarvis is presently the Manager, Business and Information Architecture in the Office of the Corporate Chief Technology Officer. Linda has 20+ years in the OPS holding a range of positions in several Ministries. Her focus over the last 8 years has been in the architecture domain and demonstrating the value of architecture to business sponsors.

Facilitator: Dave Bourgeois, Central Agencies I&IT Cluster

Dave Bourgeois has over 25 years experience in systems development, project management, strategic planning, business process improvement and leadership development. For the past five years Dave has provided leadership to the Project Management Office (PMO) in the Central Agencies I&IT Cluster. He is also currently the Co-lead of the PMO Working Group whose mandate is to introduce a common set of best practices and standards for project practitioners across the OPS I&IT community.