

White Paper

Architecture Governance

The Least Understood but Most Important Outcome

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In past papers, I have covered the use of Architecture Levels, Architecture Layers and the value of a Business Capability Model to support delivery of Architecture value but in my opinion one of the most important and often overlooked architecture outcomes is the opportunity to provide effective Architecture Governance of an organization's change program.

Deploying an effective Architecture governance structure is a very public display of architecture guidance and oversight, allowing Architects to come together and articulate and influence current and target state, and how change will impact and improve the way an organization does business.

As Architects, we are all acutely aware of the need to provide a consolidated set of architecture guidance to our stakeholders as it builds credibility, trust and acceptance of the partnership role that Architecture should and can provide. Some definitions are important to ensure we are all talking the same language as follows:

***“EA Governance** is the practice and orientation by which enterprise architectures and other architectures are managed and controlled at an enterprise-wide level”.*

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The Enterprise Architecture and associated efforts are only of value if the EA maintains its relevance, and is used to drive the organization towards the agreed future state. Therefore, Architecture Governance must ensure that:

- The Architecture representation of proposed concepts and strategies matches the future needs of the organization
- The Architecture role is clear in governing the architecture alignment of projects

I will use the term “Architecture” generically to represent both Enterprise and Solution Architecture as both disciplines should be joined at the hip to influence strategic direction and delivery through building collaborative working relationships with stakeholders and project teams.

Where are you on your Architecture Governance Journey?

An understanding of your current maturity and positioning of Architecture in your organization is critical to developing and maturing your Architecture Governance capability. What is also critical is the level of acceptance and understanding of Architecture value from your stakeholders.

I have been involved in environments where Architecture has a poor reputation and Architects are actively disengaged by Project Teams / Business and Technology teams and also seen environments where Architecture has a strong voice and a seat at the strategy table. Both require a different Architecture Governance response and the experience levels and Architecture exposure of your stakeholders and your Architecture Leaders will dictate the strength of Architecture Governance outcomes achieved.

There are a number of Architecture Maturity Models outlining the various levels of Architecture Governance Capability, however I like Figure 1 (following page) as it is a simple model relating time, outcomes and expectations to guide the planning and development of your Architecture Governance capability.

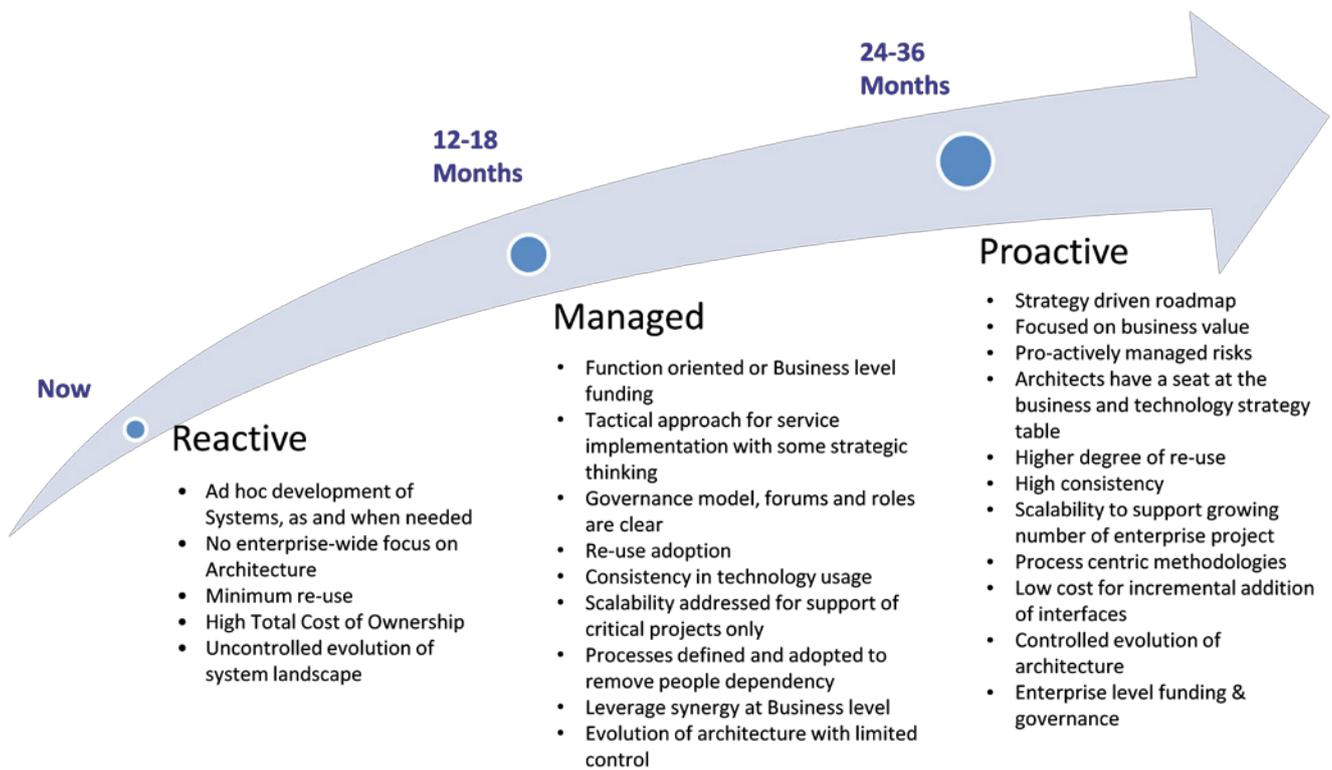


Figure 1: Conceptual Architecture Domains

Undertaking an Architecture Audit of your environment enables a consistent view of Architecture positioning and outcomes and is another opportunity to engage stakeholders in a discussion on your Architecture journey. The ultimate goal for the Architecture function is to proactively support and align business and technology strategy with delivery and execution; however it is fair to say very few organizations have achieved all of the milestones above.

Starting your Architecture Governance journey

A number of critical elements of governance are required to manage and control an organization's Architecture and enable the Architecture Department to improve Governance outcomes from "Reactive" to "Managed" including:

- Establishing the core **Architecture Team** and cross-functional **Architecture Review Board** with the backing of top management to oversee the implementation of the future Architecture vision and roadmap.
- Establishing a comprehensive set of **Architecture Principles, Standards, and Reference Architectures** to guide, inform, and support the way in which your organization sets about fulfilling its strategic objectives and priorities through the use of IT.
- Implementing an **Architecture Review** and **Approval Process** to ensure individual projects and procurement decisions comply with the Architecture.

The Architecture models and modeling standards are one of the first steps to gaining traction in your Architecture Governance journey. In many environments multiple architecture methodologies have been deployed which only serves to confuse your stakeholders and unless you have a baseline agreement within your Architecture community you will forever be seeking clarification and hamstrung in your Governance efforts.

Essentially the choice of Architecture modeling frameworks is more about making one choice and deploying it consistently as most of the Architecture modeling frameworks are evolving and do not address the full gamut of Architecture requirements and opportunities.

Definition of Architecture Roles

Another important contributor to your Architecture Governance outcomes is the clear definition of roles and the matching of experienced Architects to those roles. If you ask Business Analysts or Project Managers to perform the Architect role, expect a time lag in Architecture outcomes and negative impact on your Project timelines. Project Management has PMBOK and Prince2 methodologies to drive consistent project outcomes and it is critical that a consistent Architecture methodology is deployed in your organization to support consistent Architecture outcomes.

A summary of the key Architecture Roles and governance activities to be deployed in your organization is as follows:

Architecture Manager / Head of Architecture

- Own EA Strategy and provides Architecture leadership
- Liaise with IMT Committee regarding strategic direction and priorities

Enterprise Architect

- Establish Architecture framework and methodology
- Initiate/Influence a program of work
- Assign a Program Architect
- Identify projects in collaboration with Program Architects
- Communicate EA Principals, Standards and Architecture Vision
- Communicate program outcomes and business value to Architecture Review Board

Program Architect

- Communicate Application Principals and Standards (Examples: SOA / WOA / BPM / JEE / Dot Net)
- Govern solution outputs
- Identify synergies between projects
- Facilitate and co-ordinate collaboration between projects
- Communicate Program Architecture , including Architecture Decisions to Architecture Review Board

Solution Architect

- Communicate solution options to stakeholders (e.g. Custom build vs COTS)
- Define Conceptual Architecture for business case
- Define Logical Architecture for system design (e.g. Service Model, Rules and Policy Model, Business Intelligence Model, UI Component Model, Canonical Data Model)
- Communicate the Solution Architecture , including Architecture decision to Architecture Review Board

Definition of Architecture Principles

Architecture Principles provide the guiding lights for how Architecture is deployed and how Architects should behave in delivering Architecture Governance outcomes. Apart from your organizational values, they are critical hooks for ensuring that Architects and Architecture Governance decisions are aligned and enable a consistent message to be portrayed with stakeholders.

An example of high level Architecture Principles is as follows:

1. All IT changes are subject to Architecture Governance using a common risk based approach.
2. The Architecture Governance profile is dependent on the scope and type of IT change.
3. Architecture Governance will be applied to the following types of changes:
 - Business Unit Roadmaps and Target Architecture;
 - IT Asset Roadmaps and Target Architecture;
 - Projects;
 - Small IT enhancements.
4. An assessment of the Architecture Governance required should be performed:
 - At the point of initiation;
 - In an ongoing manner that supports active assurance.

5. All changes at point of initiation are assessed for impact based on the following criteria:
 - Changes with new development that does not fit with the natural progression of the asset;
 - Changes that affect multiple applications;
 - Changes across multiple platforms;
 - Major version upgrade of vendor software or applications.

6. A re-assessment of Architecture Governance can occur:
 - At any logical time leading into critical milestones in the Project lifecycle;
 - At any time a significant change in scope or nature of the IT change occurs;
 - At any stage significant deviation from agreed Architecture is identified.

Deploying your Architecture Forums

If you have your Architecture methodology defined, a set of Architectural Principles and your Architecture Roles created and resourced then a logical next step is to create a formal review and governance environment to support the deployment of Architecture Governance.

There are a number of critical components for your Architecture Forums including a Terms of Reference (ToR), processes for engaging the Architecture forum, a clear statement of value and intent of the forum and a strong mix and agreement from stakeholders to deliver on those outcomes. The Architecture Chair and Secretary perform the critical functions that ensure the ToR is followed, cross unit issues are addressed, exemptions are managed and the Architecture outcomes are achieved.

Figure 2 below is a summary of some of the key inputs required for your Architecture Forums.

	Purpose	Frequency	Members
Architecture Review Board	<ul style="list-style-type: none"> • Review the project/program solution and architecture decisions • Approve or reject program/project exceptions to the DSE EA 	Meets Monthly or when required by Programs and Projects	<ul style="list-style-type: none"> • Architecture Manager (Chairperson) • CIO (Portfolio and Program level participation) • Business Owner / Sponsor (dynamic role) • System Owner (dynamic role) • Enterprise Architect • Business Engagement Manager (optional) • Program and/or Project Manager (dynamic roles) • Program Architect and/or Solution Architects (dynamic roles)
Enterprise Architecture Forum	<ul style="list-style-type: none"> • Develop, update and manage EA principles, standards, framework and reference architectures 	Meets fortnightly, initially weekly	<ul style="list-style-type: none"> • Architecture Manager (Organizer) • Enterprise Architect • Applications Architect (Initially not required) • Integration Architect (Initially not required) • Data Architect • Program Architects (dynamic roles) • Solutions Architects (dynamic roles)

Figure 2

An example model for using Architecture Governance forums that has been successfully deployed is based on *Figure 3* below.

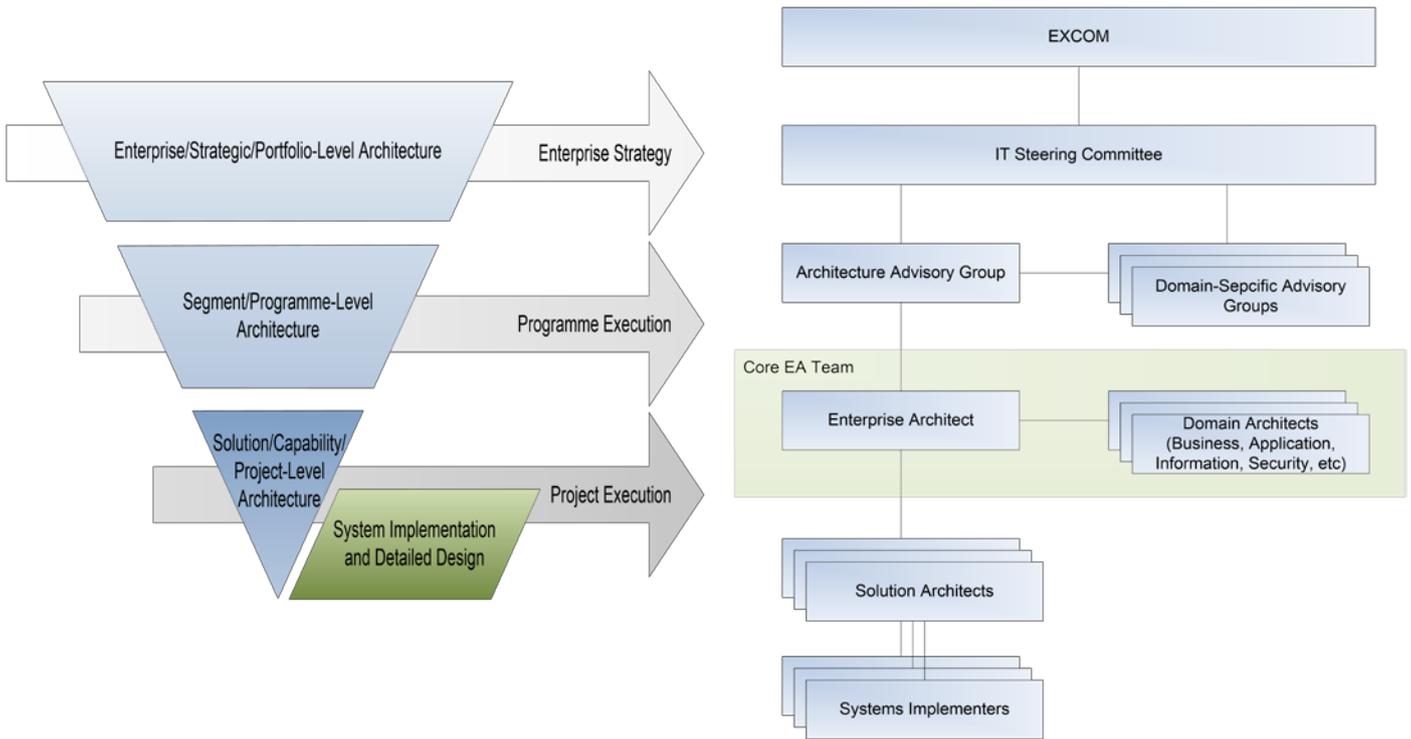


Figure 3

Here the key Architecture value and governance is delivered by the Architecture Advisory Group to senior stakeholders and the Design / Domain specific Authorities provide oversight on the Solution Architectures being produced by each project.

Another model supporting Architecture Governance below enables a holistic assessment of what domains Architecture should govern and influence and at what level of detail.

In *Figure 4* the Architecture Governance requirements can be plotted on the model and the appropriate Governance structures and response can

be established to address the organizations greatest challenges. If business or technology strategy is unclear or not aligned then an Architecture Advisory Group will bring stakeholders together to discuss strategy and govern the portfolio. If projects are out of control or Program scope is unclear then an Architecture governance forum focusing on Projects / Solution Architecture would be more appropriate.

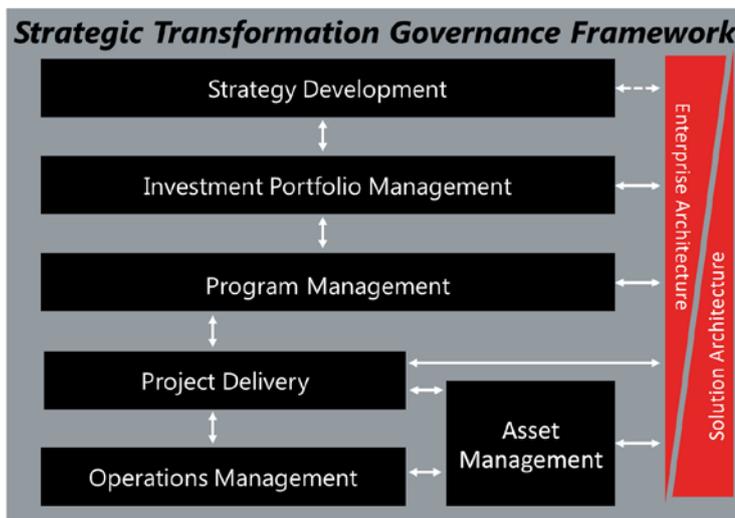


Figure 4

Architecture Governance Processes

Strong Architecture Governance processes support communication and understanding of the value provided by Architects and the Architecture function and consistent messages to be portrayed with your stakeholders. Some critical governance activities include clearly defined processes, roles, regular training and communication newsletters, communication of governance minutes and outcomes, clarification of Architecture principles and a chase for opportunities to highlight Architecture value to your stakeholders.

Final say on Architecture Governance

Architecture Governance and oversight can claim Executive careers, enhance Executive careers, realize CEO strategies and align Portfolio, Program, Projects and Business and Technology teams. But whatever governance outcomes you are chasing the value of Architecture Governance is a critical input to delivering Architecture value to your stakeholders.

In my next white paper, I will describe a personal experience where the use of Architecture enabled a CEO to deliver on his Mergers and Acquisition strategy and caught the attention of the Board and Executive group.

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