

Avancier Methods (AM)

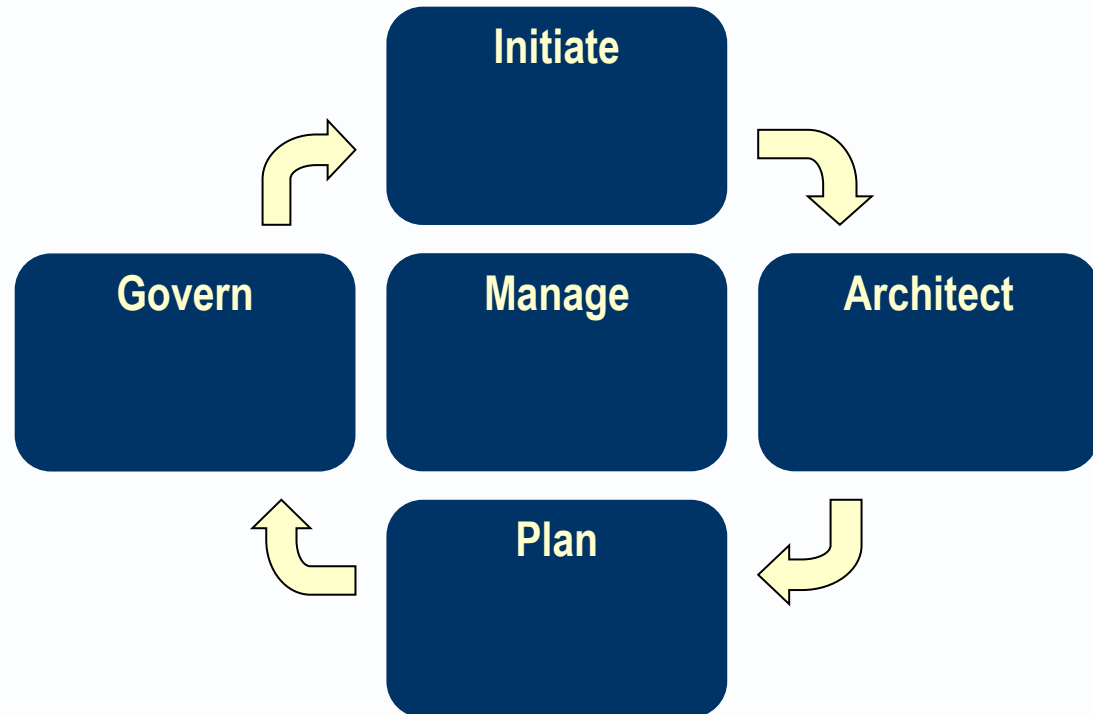
Initiate

Define the architecture processes

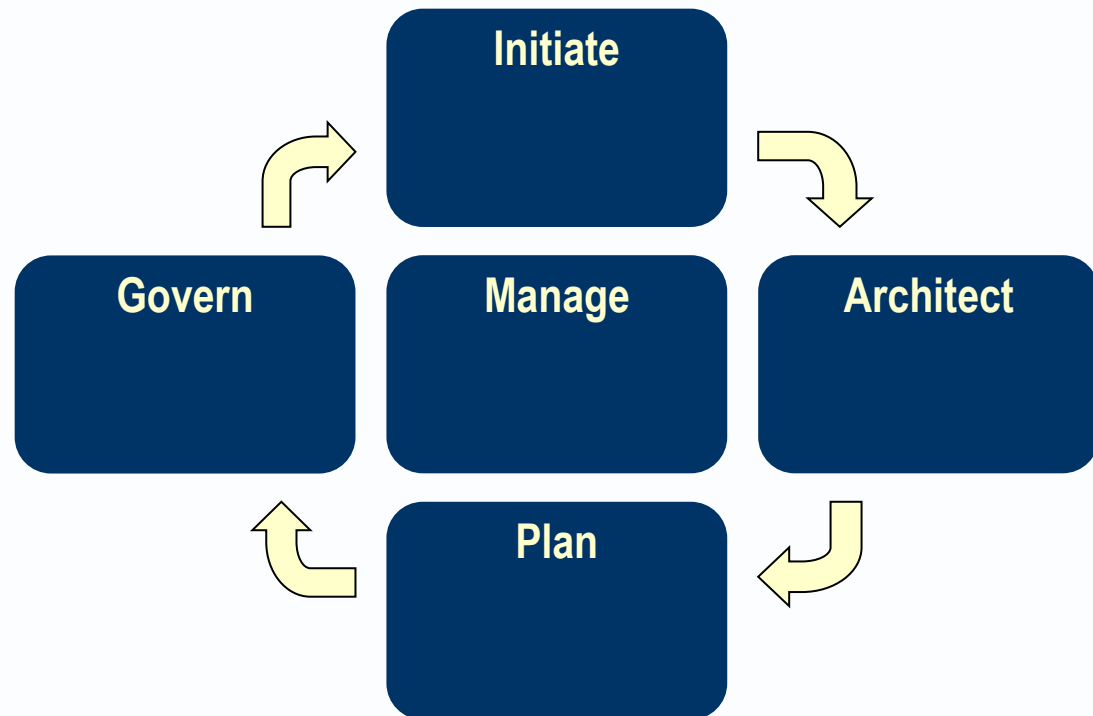
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A comprehensive architecture methodology ought to advise on

- ▶ **Process:** an architecture development process.
- ▶ **Products:** a documentation framework
- ▶ **People:** advice on architect roles and organisation.



- ▶ develops a target architecture to meet some requirements, under some constraints
- ▶ involves planning the move from the baseline state to the target state, and governing that change



TOGAF's Architecture Development Method (ADM)

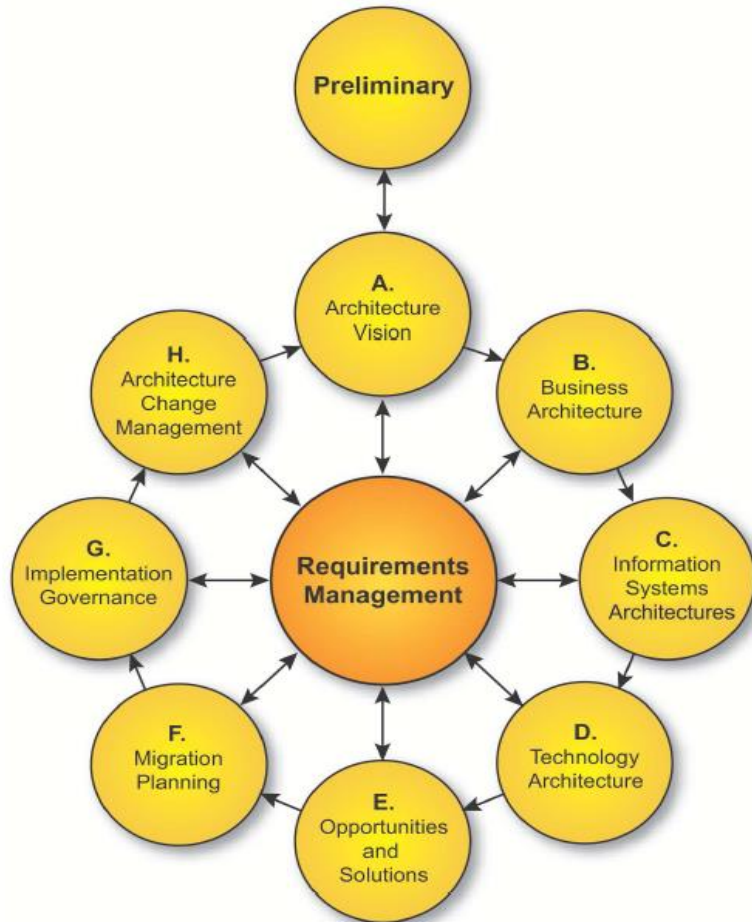


Figure 5-1 Architecture Development Cycle

- ▶ The ADM is a process
- ▶ It is the core of TOGAF
- ▶ And its strength

- ▶ *Elements* of TOGAF are in used
 - ▶ solution architecture
 - ▶ business analysis
 - ▶ even technical architecture.

- ▶ But it does not provide a complete method for any of those

TOGAF is a *management framework* for architects

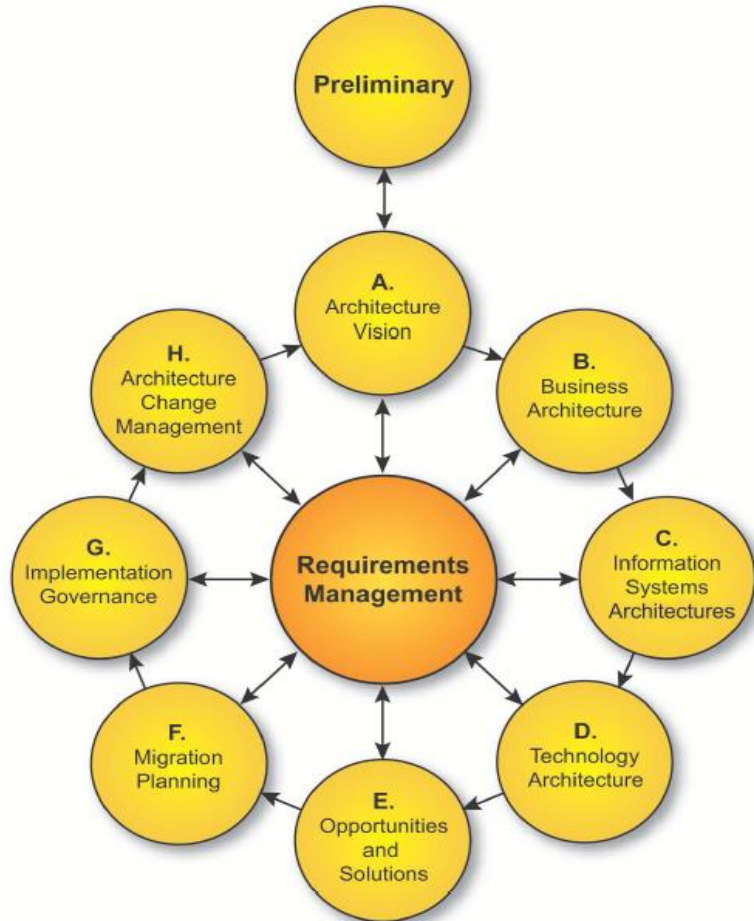


Figure 5-1 Architecture Development Cycle

- ▶ It provides an outline of architecting work
- ▶ But it assumes you mostly know how to do it already!

TOGAF is a *management framework* for architecture

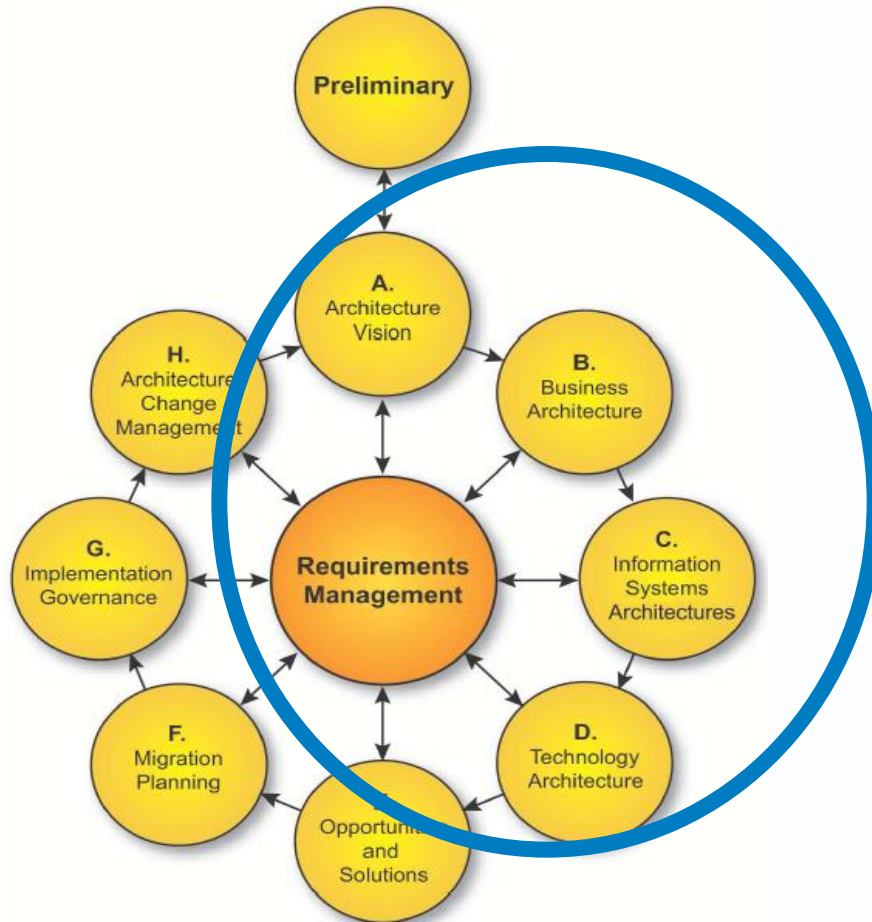


Figure 5-1 Architecture Development Cycle

- ▶ TOGAF tells you simply to
- ▶ “Develop the target architecture to extent necessary to support the Architecture Vision”
- ▶ How do you do that?

TOGAF is a *management framework* for architecture

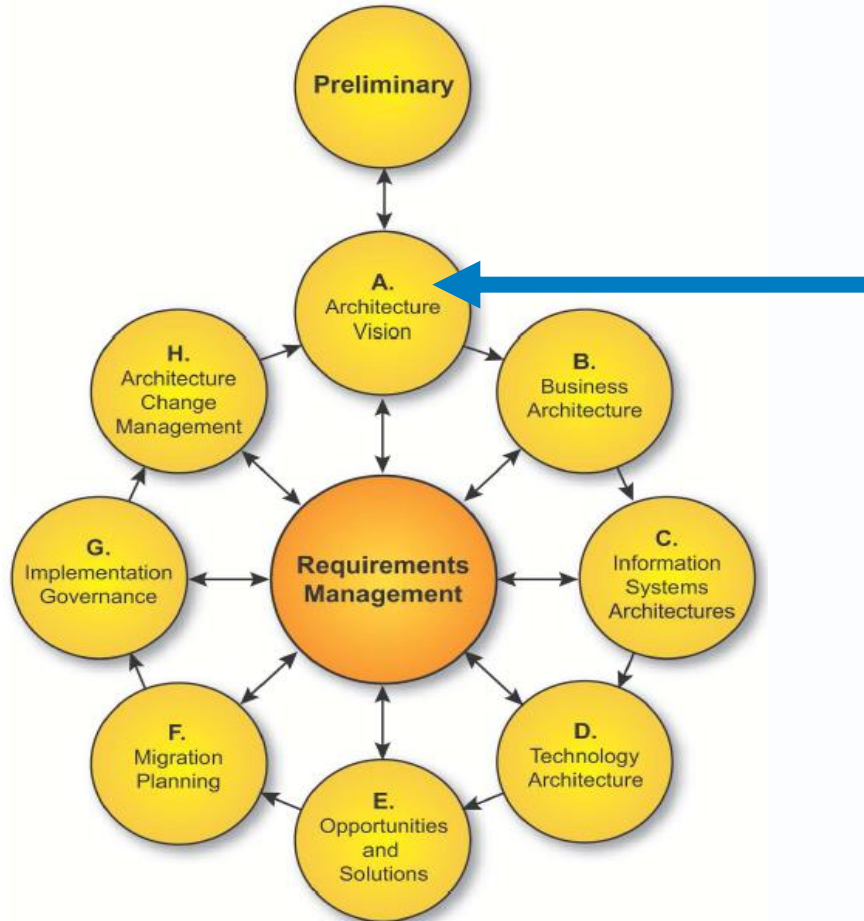


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF suggests you draw a “Value Chain Diagram”
- ▶ How do you do that
- ▶ How do you use it to drive architecture development?

TOGAF is a *management framework* for architecture

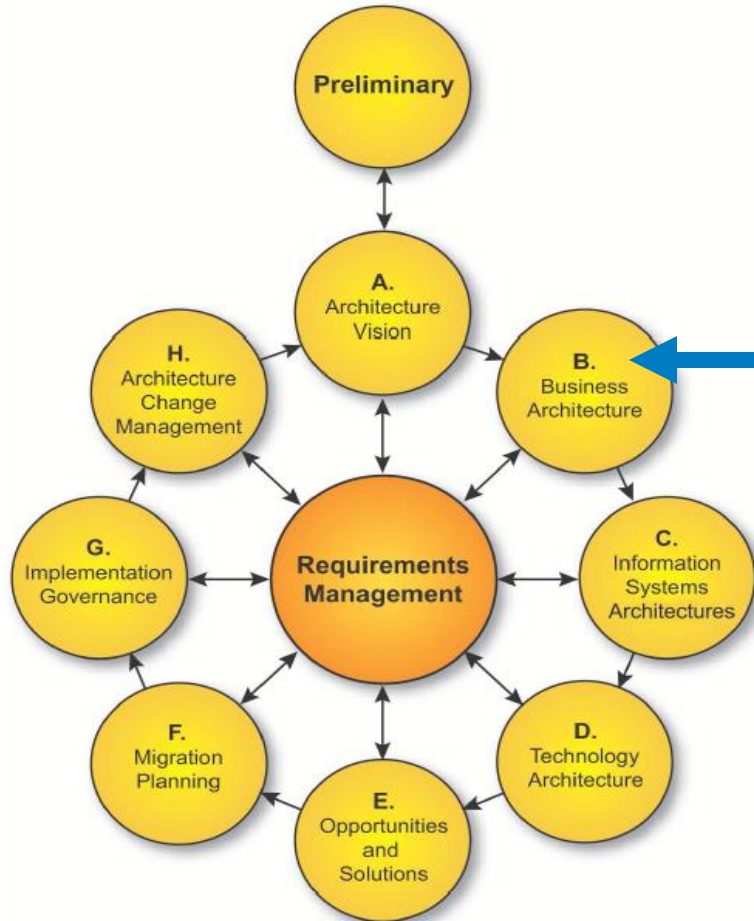


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF suggests you use “Structured Analysis”
- ▶ How do you do that?
- ▶ How do you use it to document a business architecture?

TOGAF is a *management framework* for architecture

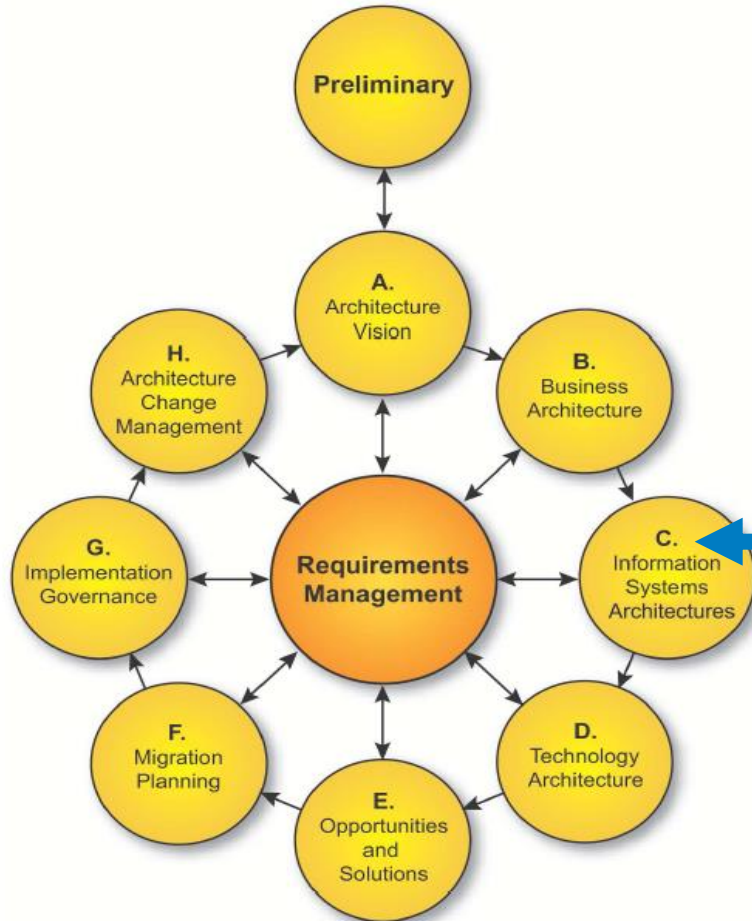


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF suggests you draw a “Data Dissemination” view
- ▶ How do you do that?
- ▶ How do you use it to shape applications architecture?

TOGAF is a *management framework* for architecture

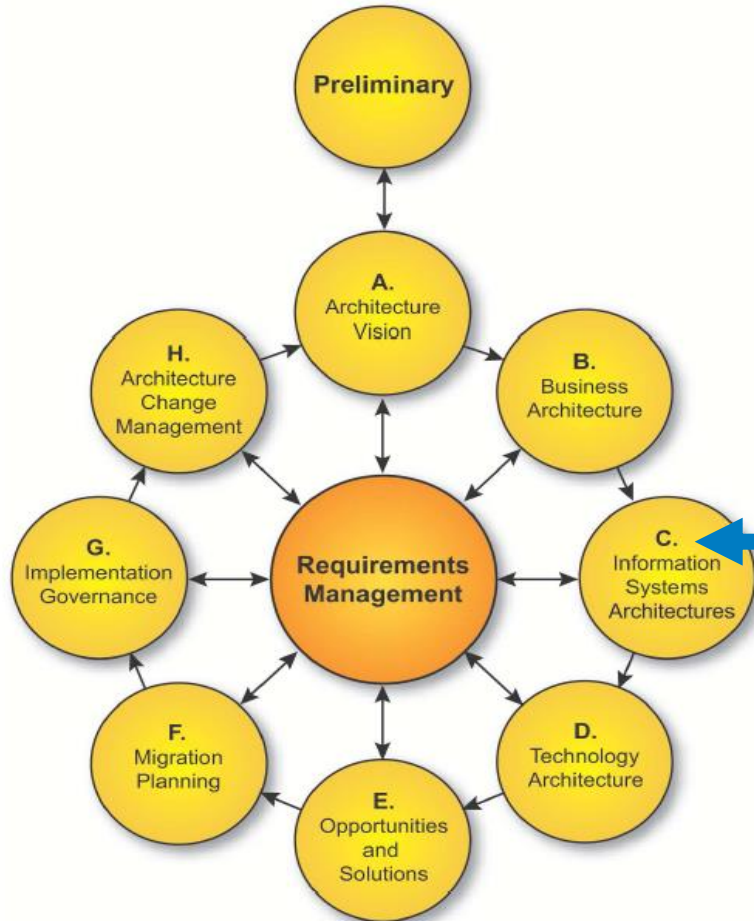


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF suggests you might draw a “Process Application Realisation diagram”
- ▶ How do you do that?
- ▶ How do you use it to develop an applications architecture?

TOGAF is a *management framework* for architecture

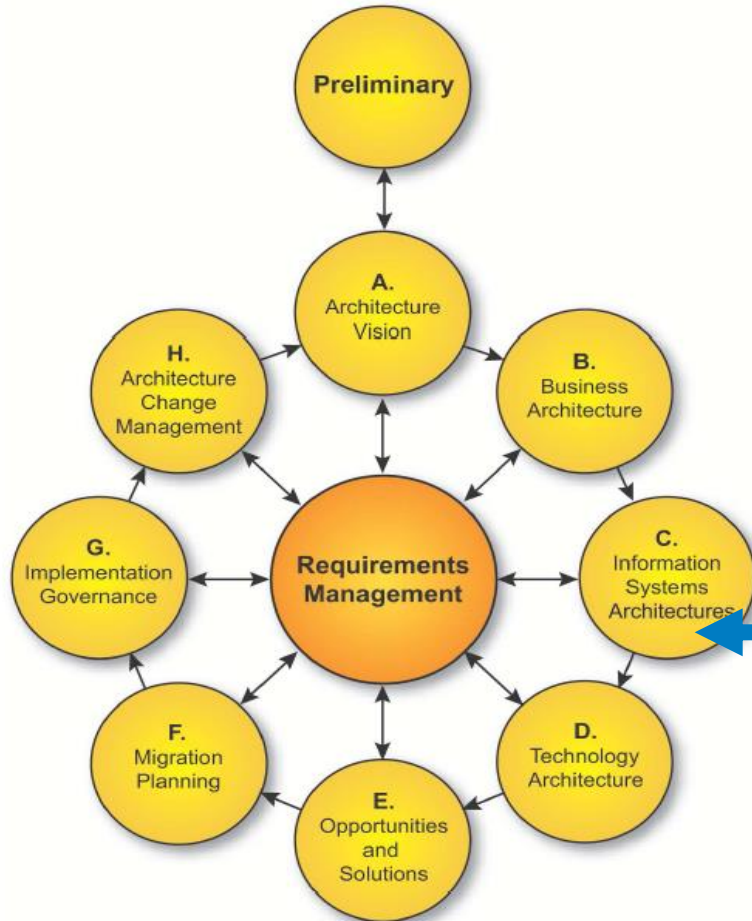


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF doesn't say much about Software Architecture and Application Integration patterns
- ▶ What are they?
- ▶ How do you use them to integrate applications? to maintain a single version of the truth?

TOGAF is a *management framework* for architecture

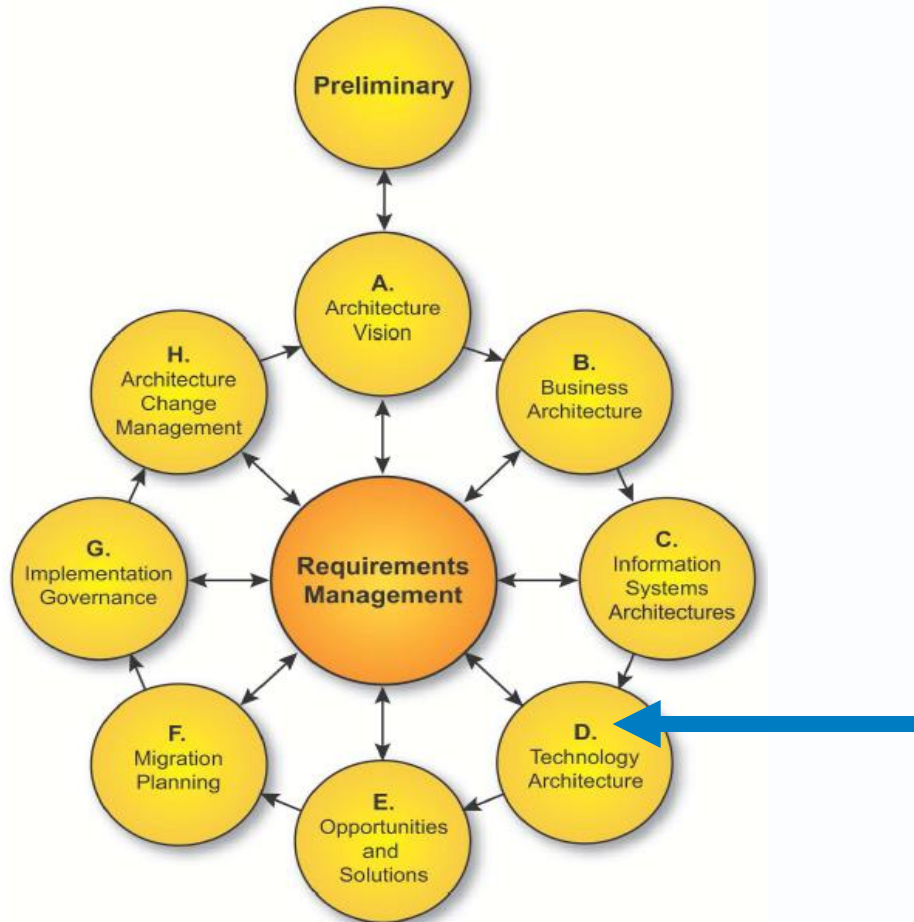


Figure 5-1 Architecture Development Cycle

- ▶ E.g. TOGAF suggests you draw several varieties of infrastructure architecture diagram
- ▶ How do you do that?
- ▶ How do you develop them incrementally from the applications architecture?
- ▶ How do you design to meet required Qualities (non-functional requirements)?

Enhancing TOGAF with Avancier Methods

TOGAF's ADM is a management framework that promotes the role of architects

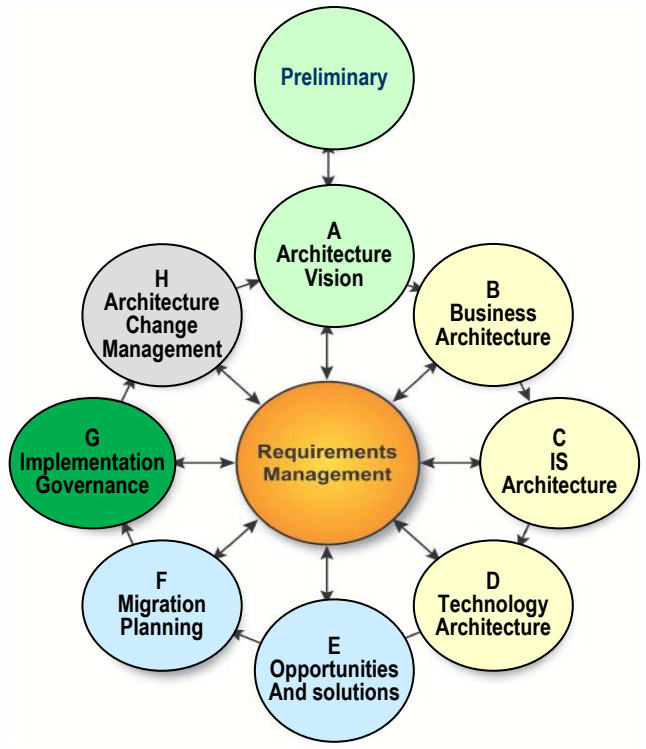
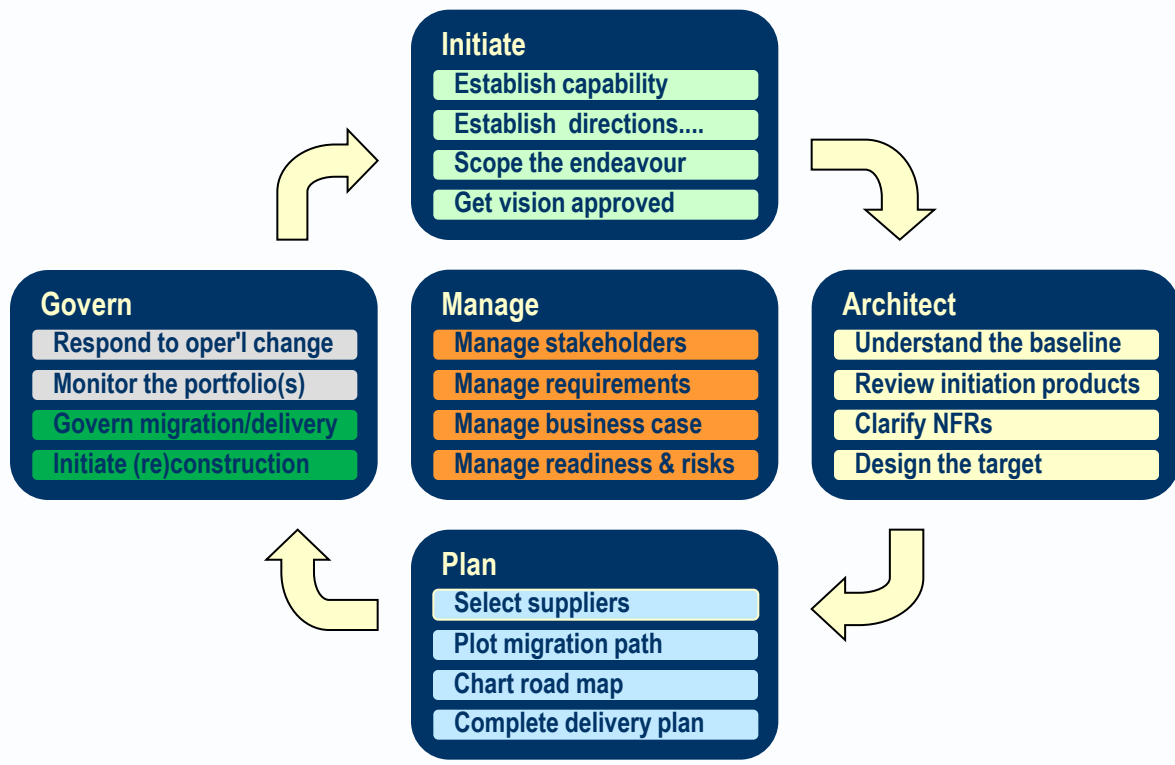


Figure 5-1 Architecture Development Cycle

AM gives architects more specific processes and documentation artefacts



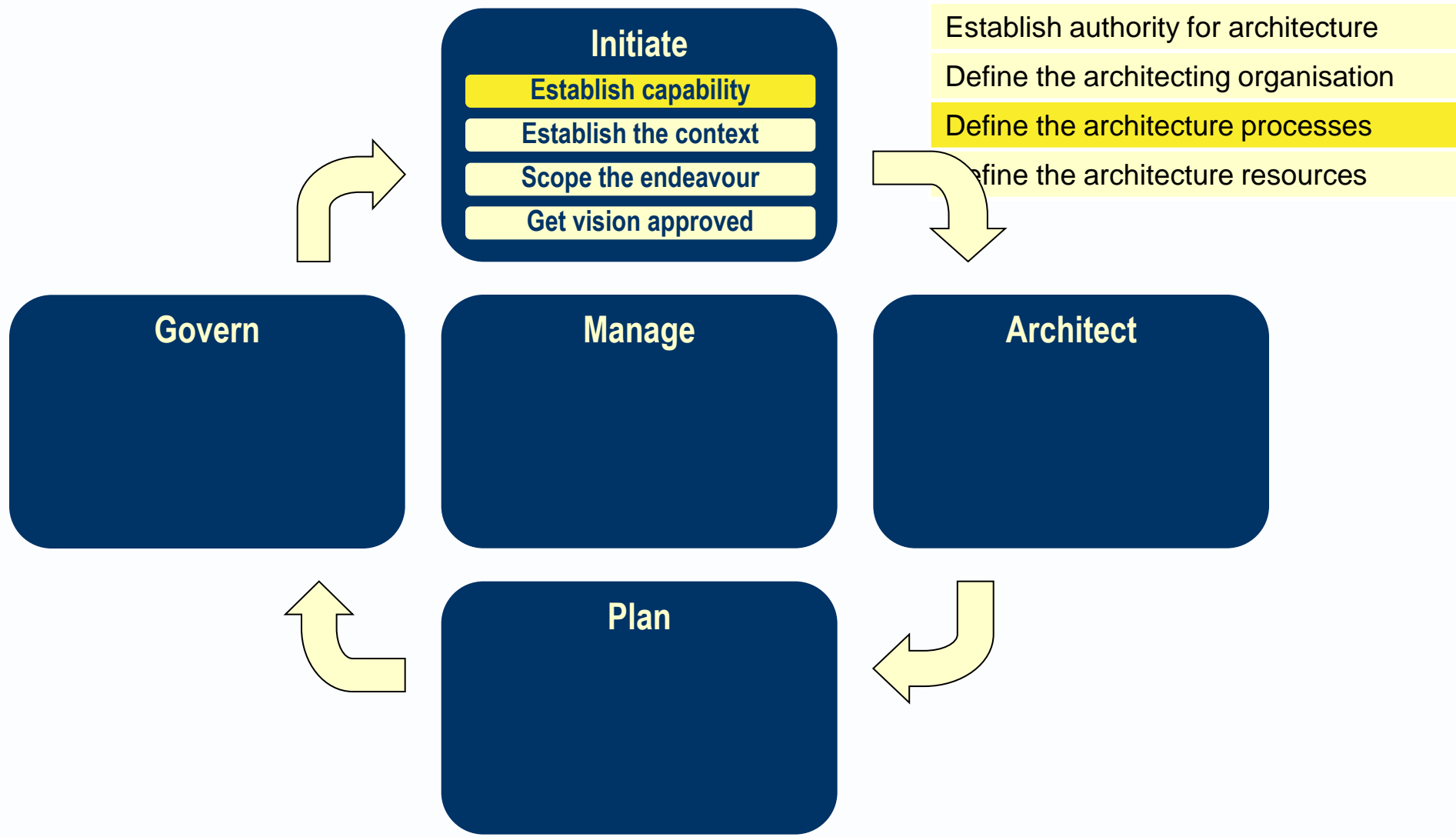
- ▶ complementary to TOGAF.
- ▶ focuses more architecture work itself – while still remaining technology independent.
- ▶ suits people working in the world of software development, systems integration and infrastructure who find TOGAF too abstract or too far removed from their day job
- ▶ helps people to better understand and appreciate what TOGAF has to offer by way of management framework
- ▶ Like TOGAF, it is assumed the people have some experience of business, data, apps or infrastructure architecture before they attend the course, it is not for beginners in IT.

Avancier Methods (AM) Initiate

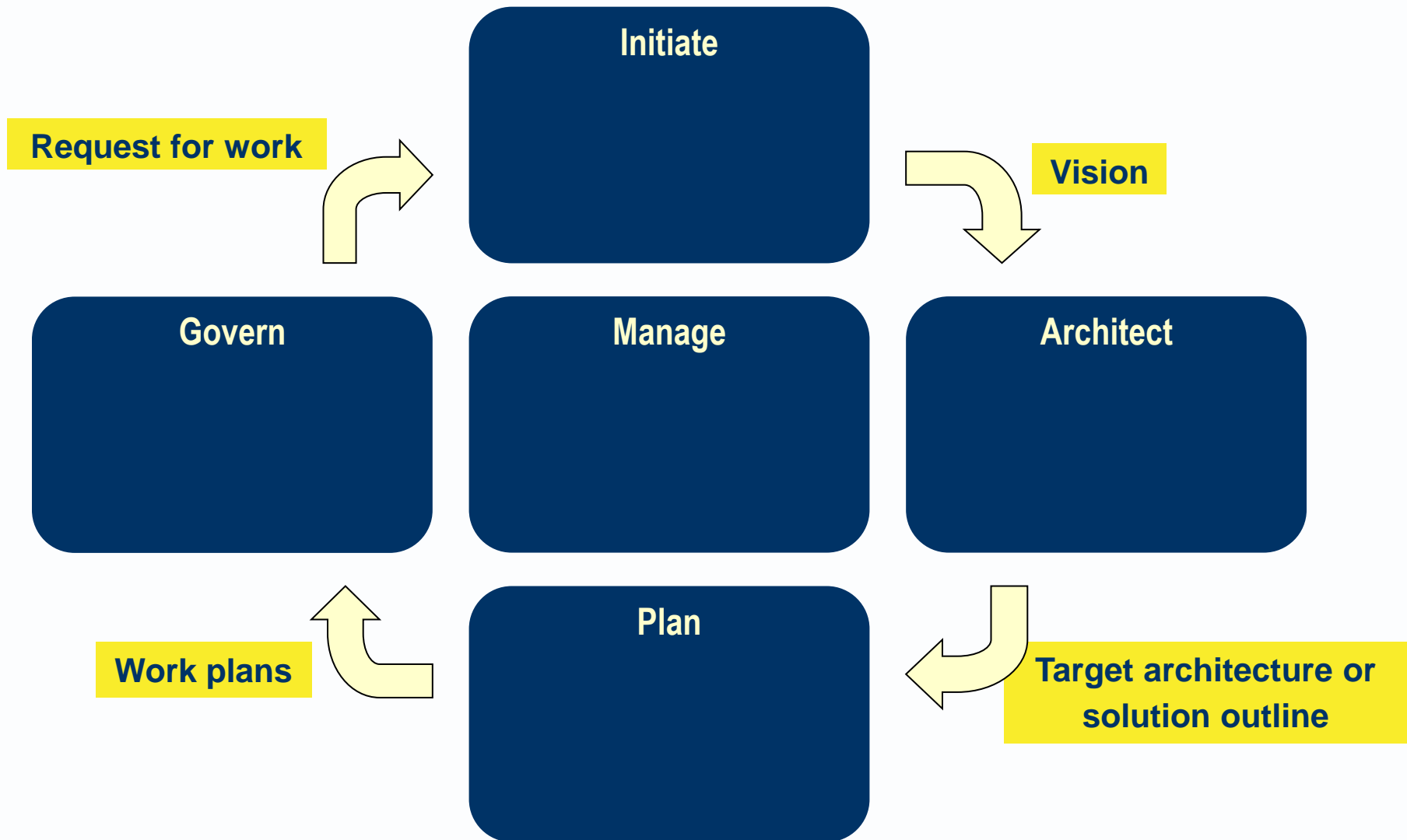
Define the architecture processes

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Define the architecture processes



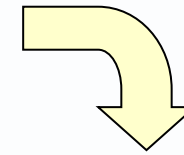
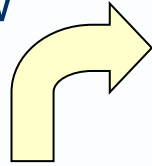
AM follows this general problem solving pattern



Iterate where necessary to correct or improve

- ▶ Be as agile as the business case and deadlines allow

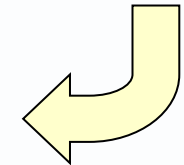
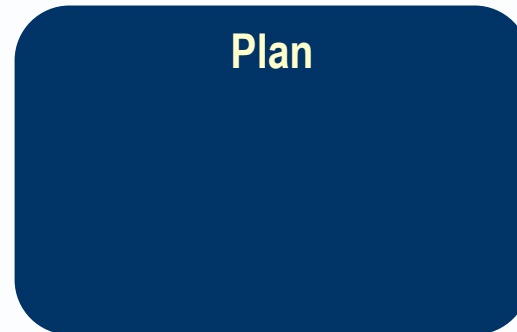
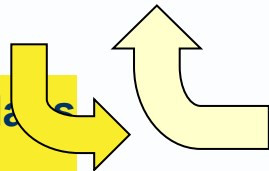
Revise built systems



Revise initiation products



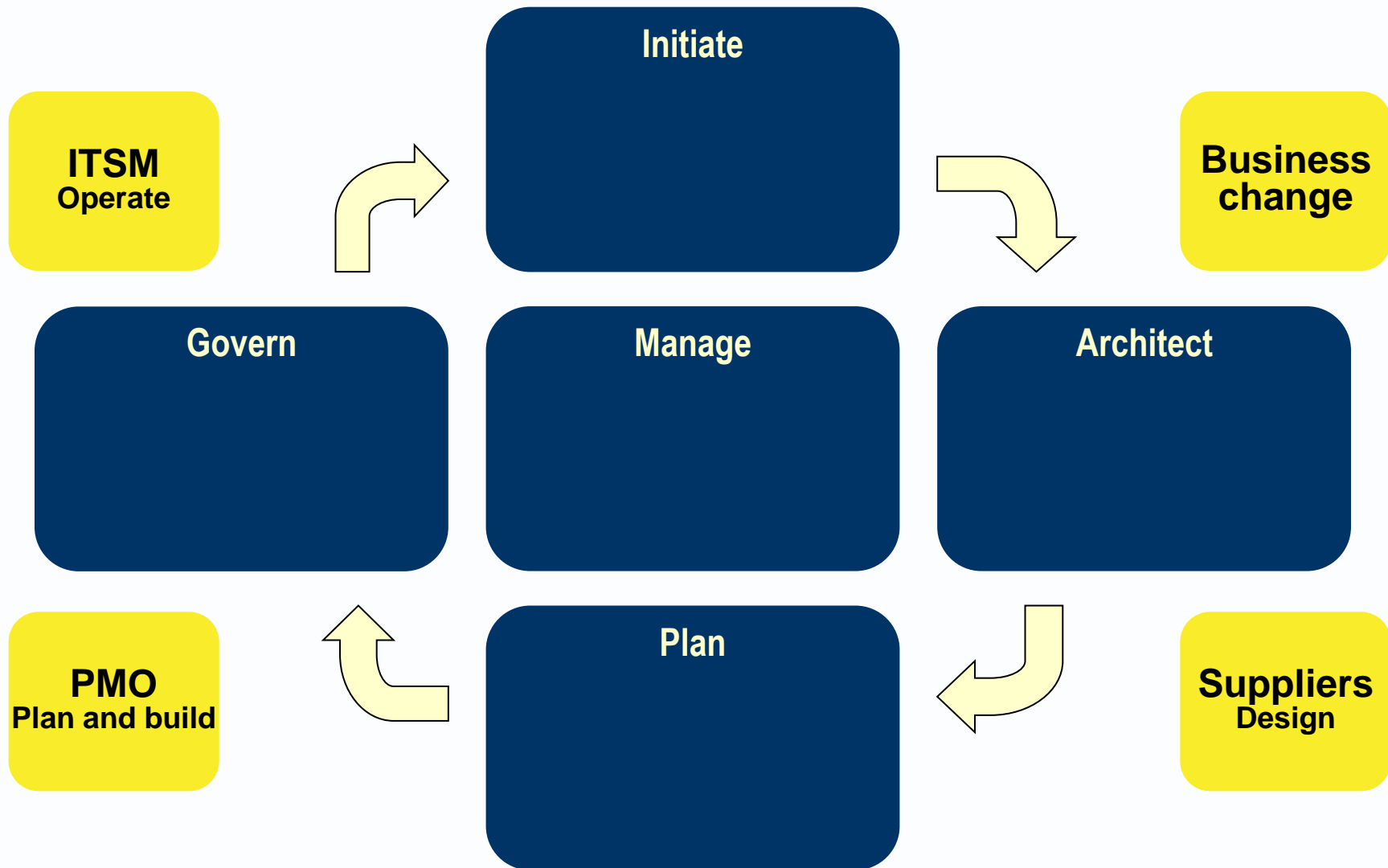
Revise plans



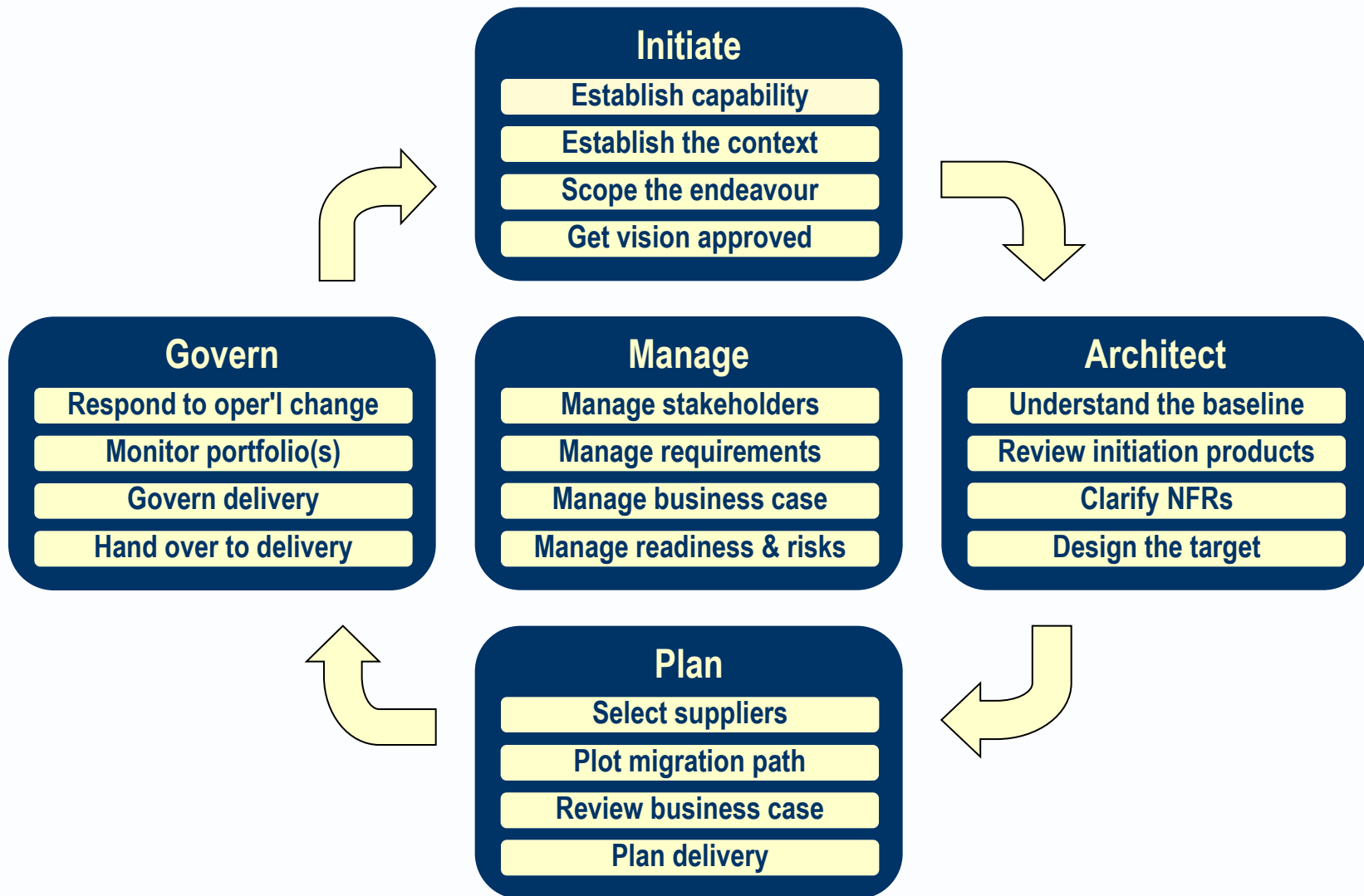
Revise target architecture



Engage with other functions and processes



2nd level processes in generic AM process



Insert milestones to review the business case

INITIATE	Example milestone names
Establish capability Establish the context	Discover
Scope the endeavour Get vision approved	Vision
ARCHITECT	
Understand the baseline Review results of initiation Clarify NFRs Design the target	Outline
PLAN	
Select suppliers Plot migration path Review the business case Plan delivery	Commit
GOVERN	
Hand over to delivery Govern delivery	Deliver
Monitor portfolios Respond to operational change	Monitor

A milestone is a stop/go point at which

1. Progress is tested against defined criteria
2. Impacts from and on other parallel activities are considered
3. Stakeholders are invited to review deliverables and approve further work

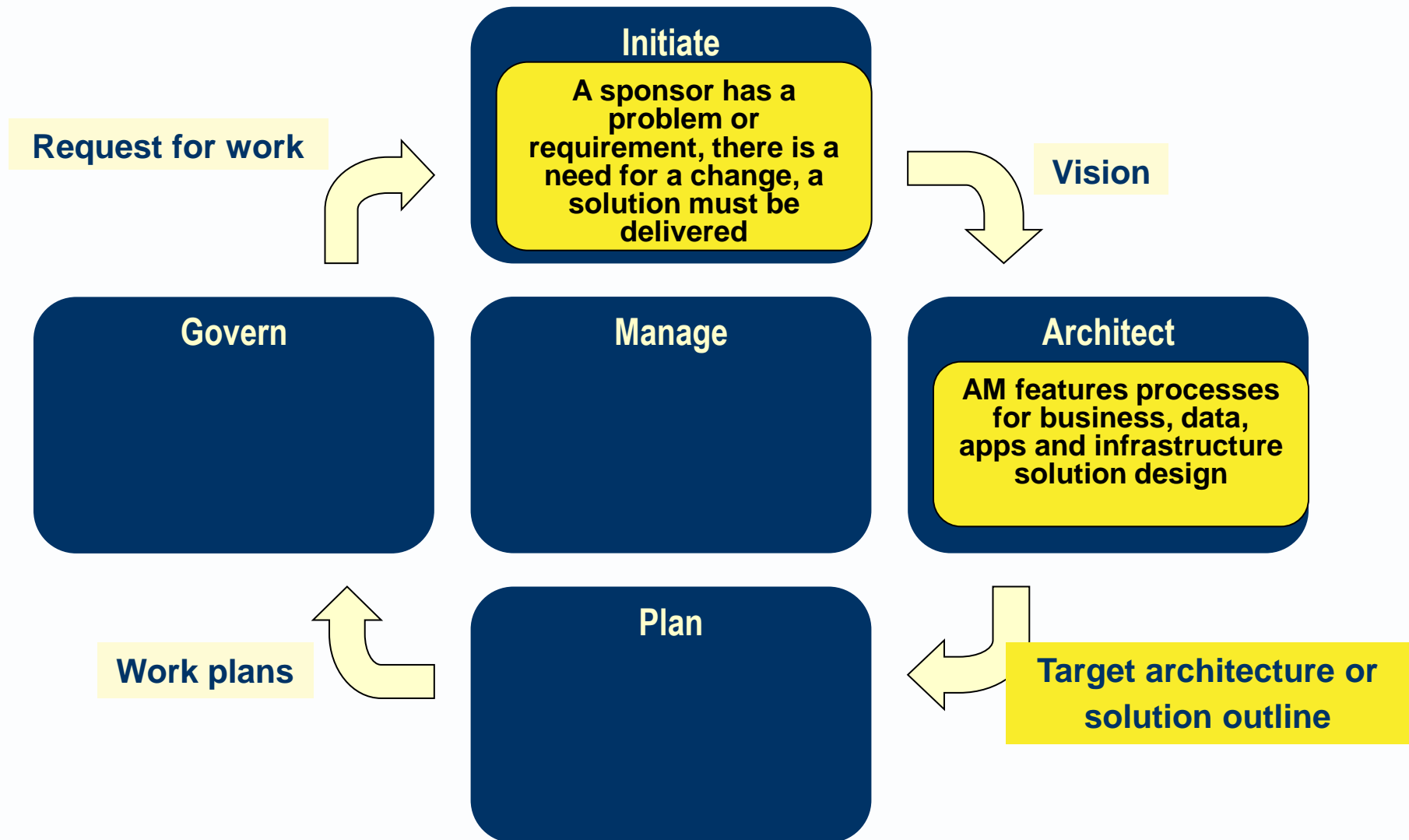
(These milestone names are taken from the process of an IT service provider.)

Avancier Methods (AM) Initiate

Relating EA and SA processes

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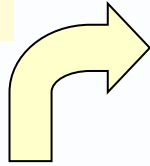
Solution Architecture follows this general pattern



Enterprise Architecture is a higher level version

A special kind of

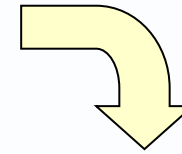
Request for work



Initiate

The need is for strategic and/or cross-organisational standardisation and/or integration

Vision



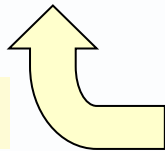
Govern

Manage

Architect

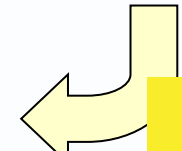
AM features processes for rationalising business, data, apps and infrastructure

Work plans



Plan

EA Road Maps



There should be more solution architects

- ▶ For every enterprise architect with a strategic 5 year plan:

Year	2009	2010	2011	2012
Enterprise architecture road map				
SOA programme				
Build enterprise service catalogue				
Identify integrations needing ESB				
Select ESB				
CRM				
Select CRM				
Implement CRM			Sales	Service

Elaboration

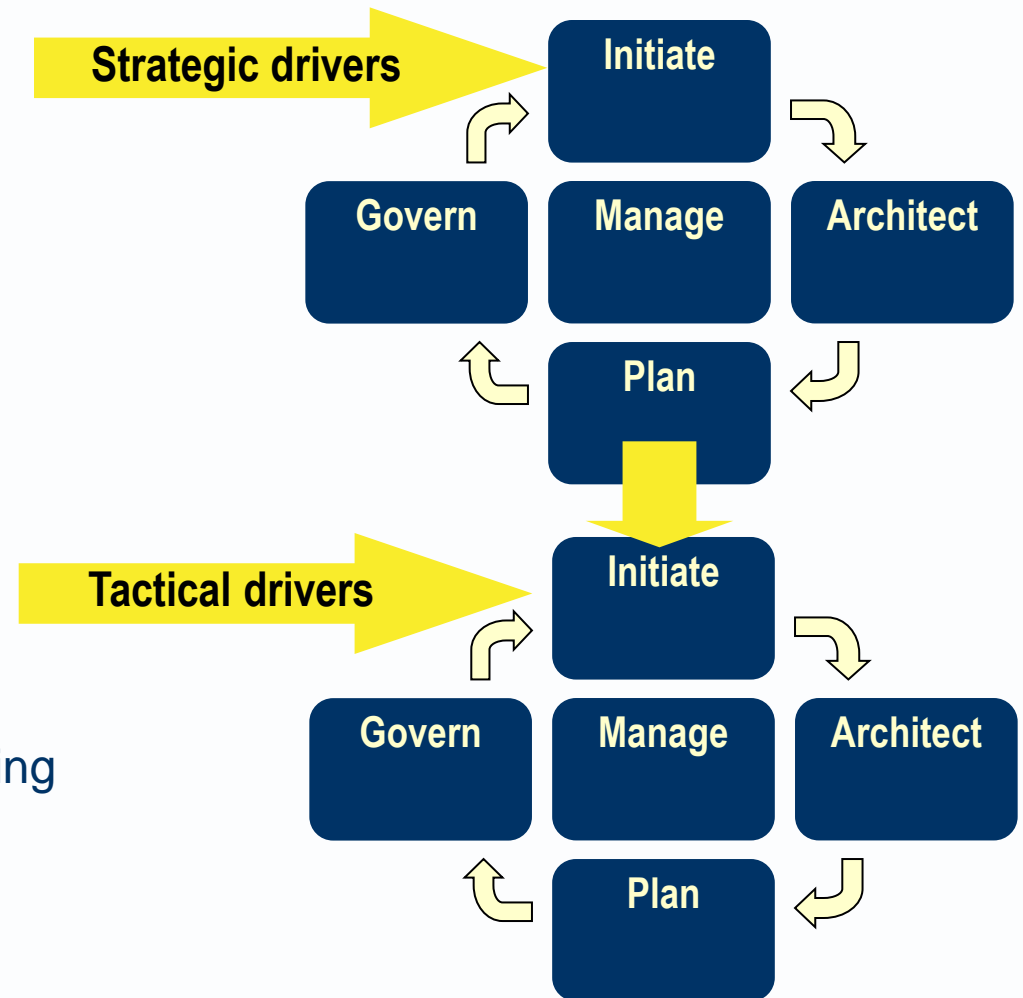
- ▶ Several solution architects are helping to shape and steer more tactical plans:

Quarter	2011 Q1	2011 Q2	2011 Q3	2011 Q4
Implement CRM				

Architecture role and process variations

- ▶ **Enterprise architecture**
 - common standards and principles
 - rationalisation
 - high-level road map(s)
 - governs solution architecture

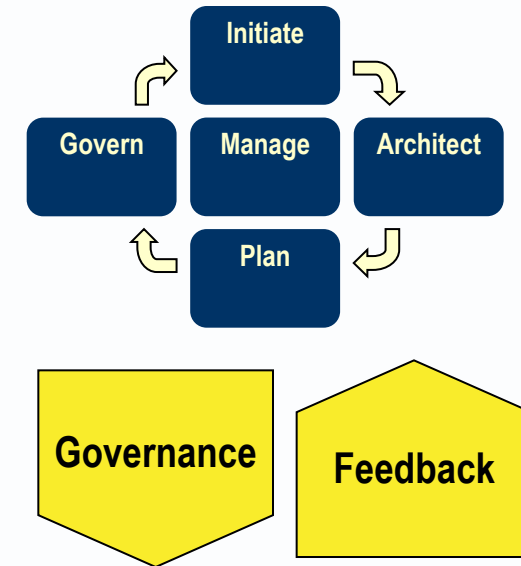
- ▶ **Solution architecture**
 - specific problems
 - solution delivery
 - wrestles with the realities of designing and developing specific solutions



Two levels of goals, sometimes in conflict

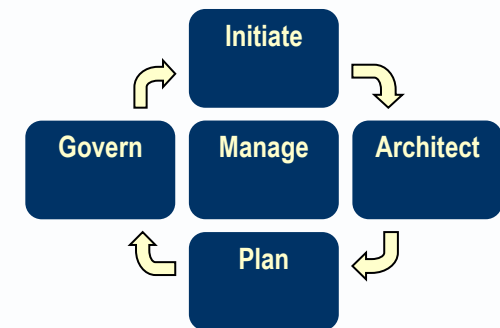
EA

- ▶ Rationalisation and refactoring of the estate
 - Portfolio management - prioritisation of changes
 - Consolidation and integration
- ▶ Business and technical agility
 - ▶ Faster and cheaper change
 - ▶ Imposition of standards and commonality across IS/IT developments.
- ▶ Enterprise-wide transformation
 - ▶ An overarching plan for driving towards a target,
 - ▶ Scoping of specific solutions.



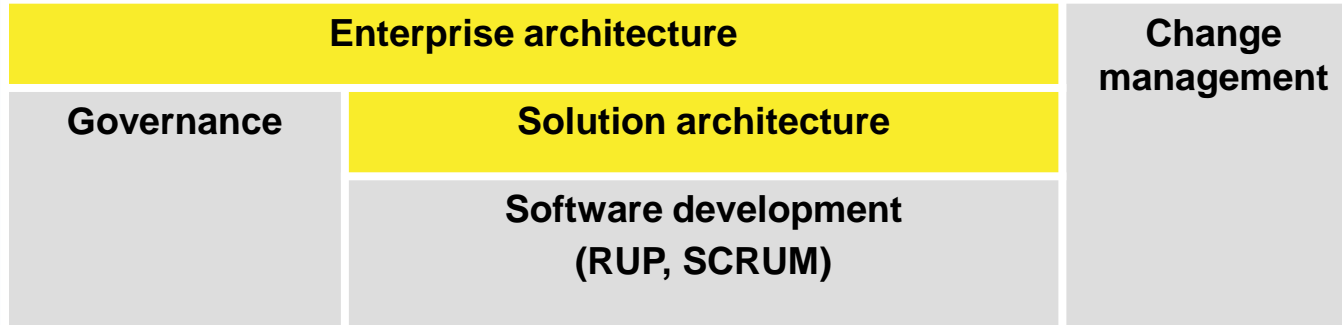
SA

- ▶ Solve a problem – make a project-level change
- ▶ Assurance of functional and non-functional qualities
- ▶ Shape a solution that will work
- ▶ Minimize the overspend and manage the risks typical of IS/IT projects



Potentially, a three-level cascade of architecture processes

- ▶ Enterprise architecture
- ▶ Solution architecture
- ▶ Software architecture (in the SDLC)



- ▶ But it is a mistake to think these are the same

Sometimes, top-down planning is the name of the game

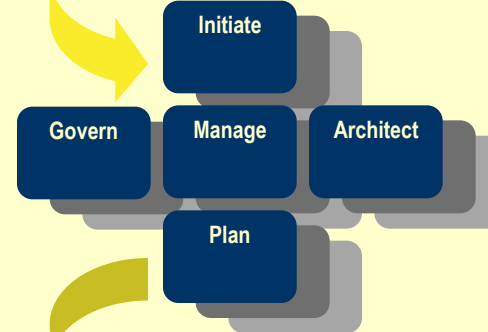
Enterprise architecture



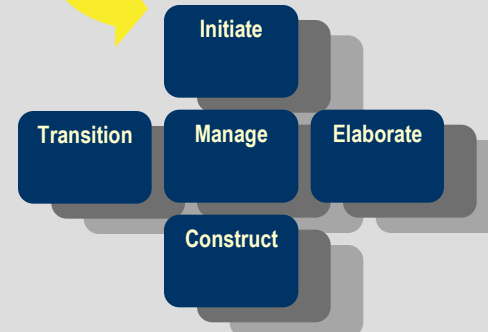
Change management

Governance

Solution architecture



**Software development
(RUP, SCRUM)**



Often, solution architects seek validation of bottom up plans

Enterprise architecture / design authority

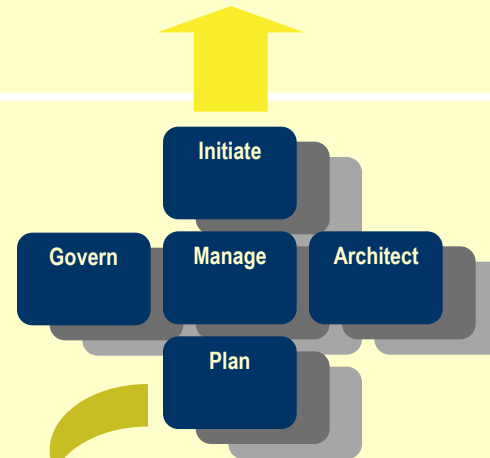
Standards, Principles
Reference models & road maps

Governance

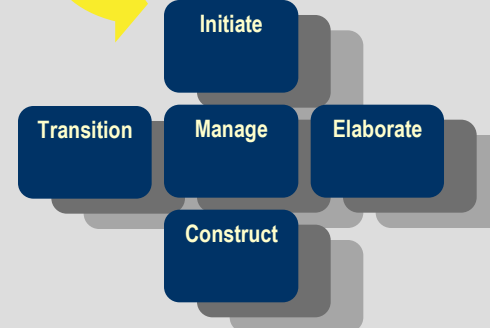
Change management

Governance

Solution architecture

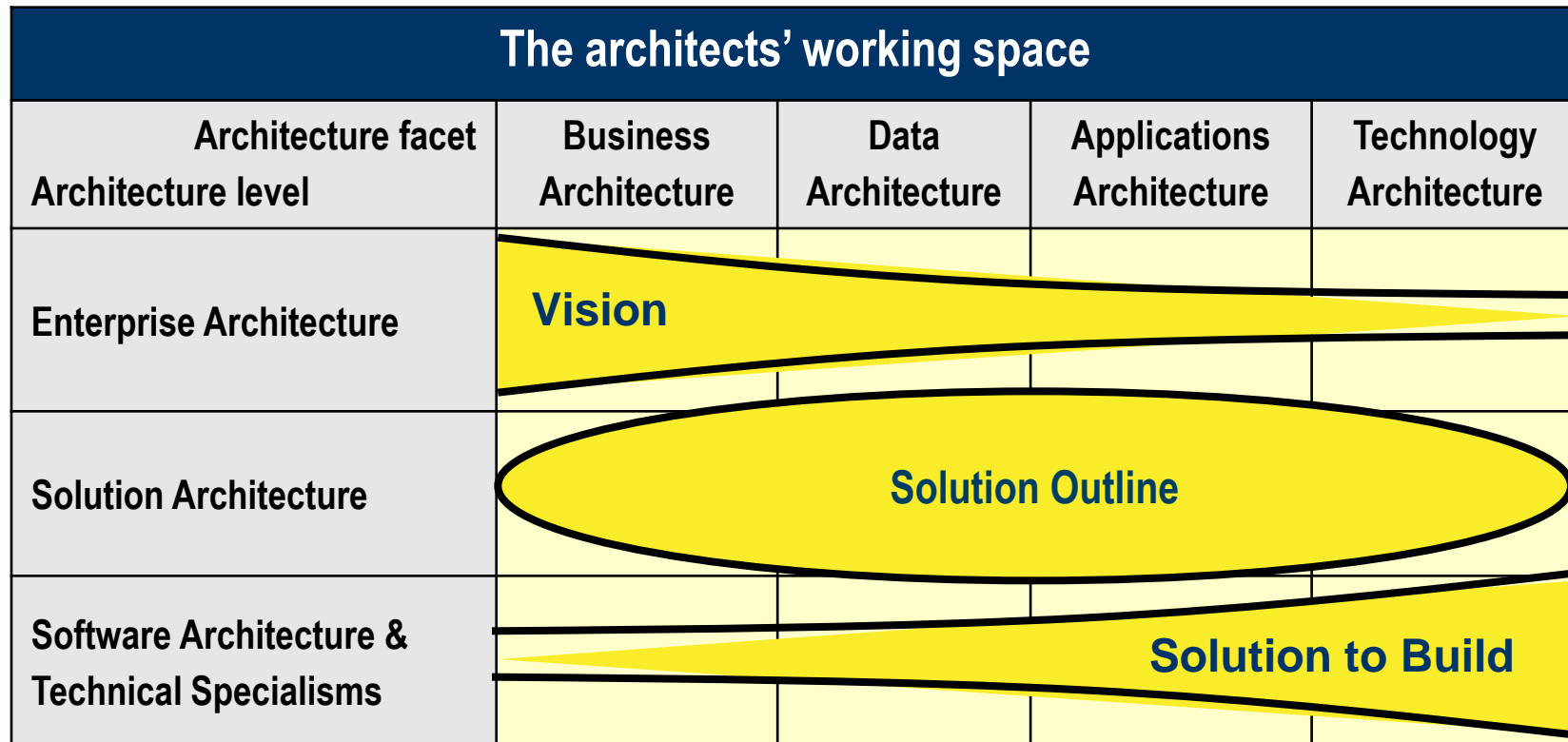


**Software development
(UP, SCRUM)**

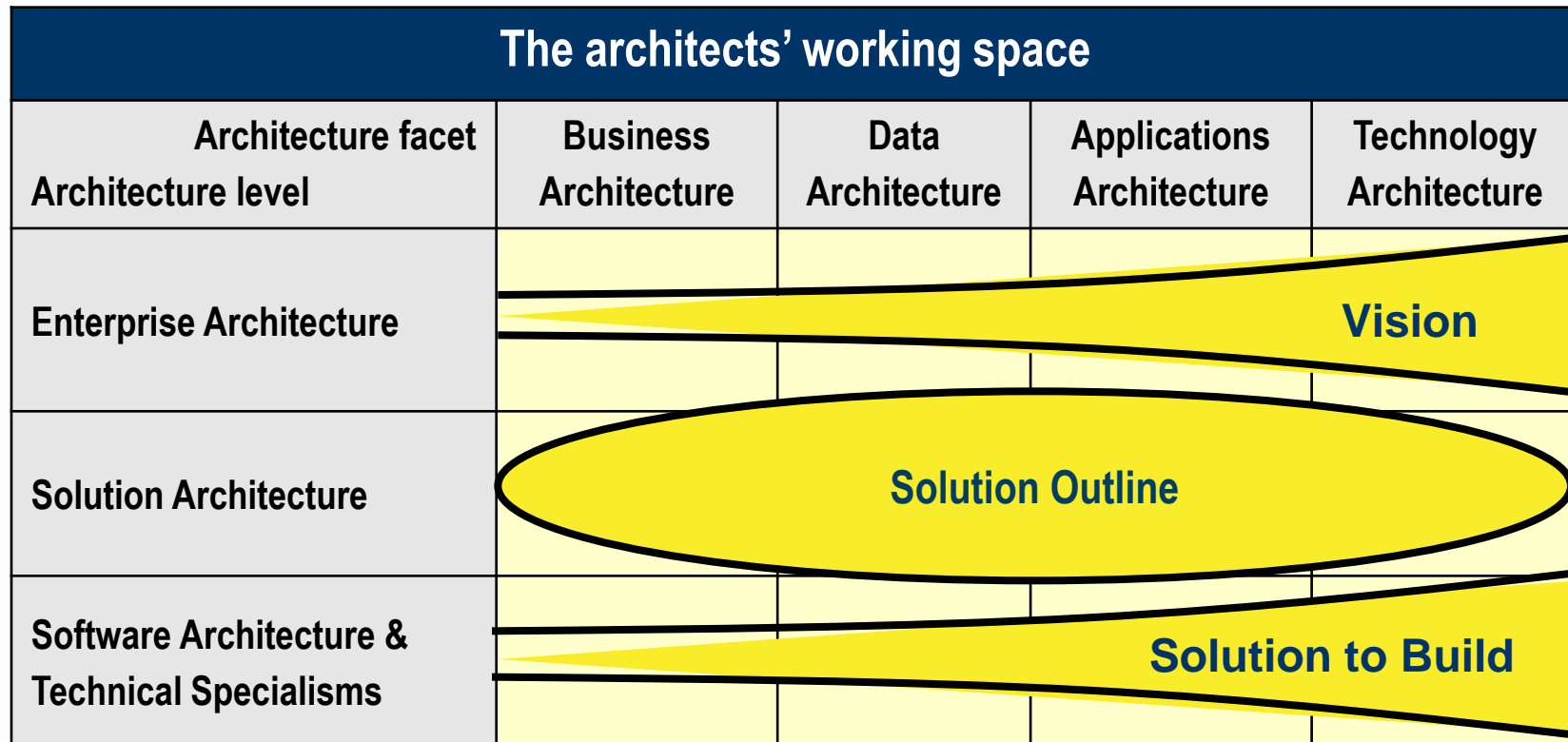


Is there a definitive process sequence?

- ▶ Common assumption: the process is top to bottom, left to right



- ▶ But some EA visions are centred on technology innovation or change



- ▶ And some solutions develop incrementally with no vision

The architects' working space				
Architecture facet Architecture level	Business Architecture	Data Architecture	Applications Architecture	Technology Architecture
Enterprise Architecture				
Solution Architecture	Solution Outline			
Software Architecture & Technical Specialisms	Solution to Build			

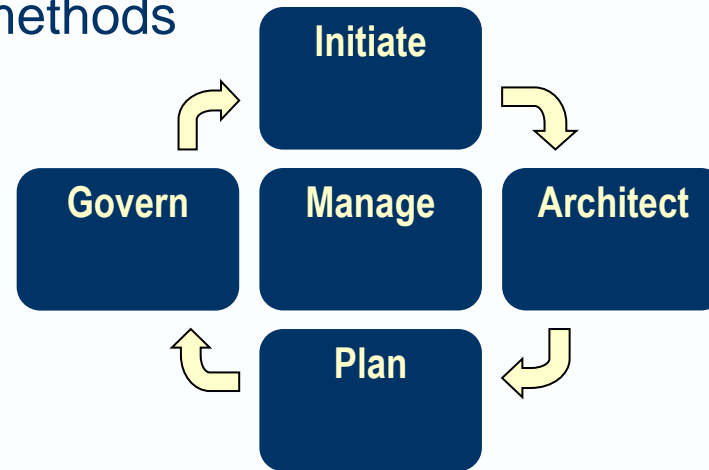
Avancier Methods (AM) Initiate

Other processes

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Architecture-related processes you need

Not only architecture methods



- Establish authority for architecture
- Define the architecting organisation
- Define the architecture processes
- Define the architecture resources

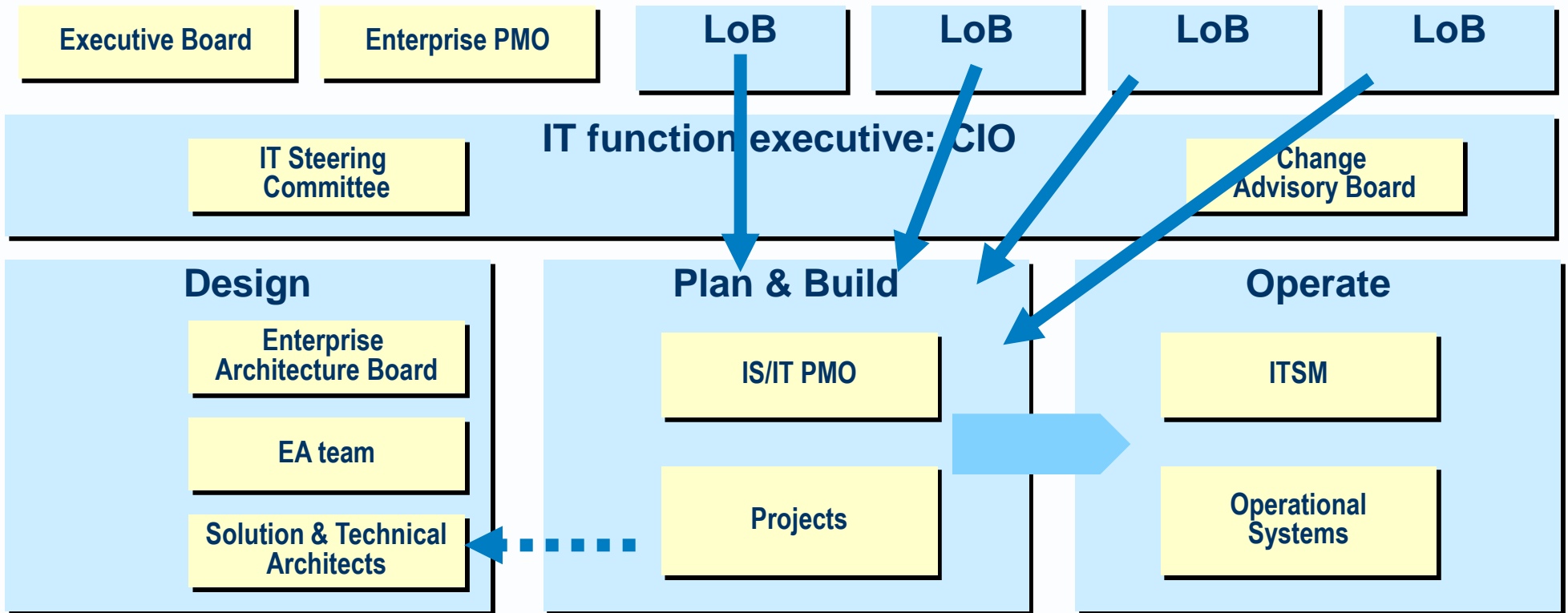
Also

- ▶ Solution classification and prioritisation process
- ▶ Architect resourcing process
- ▶ Architecture governance/approval process

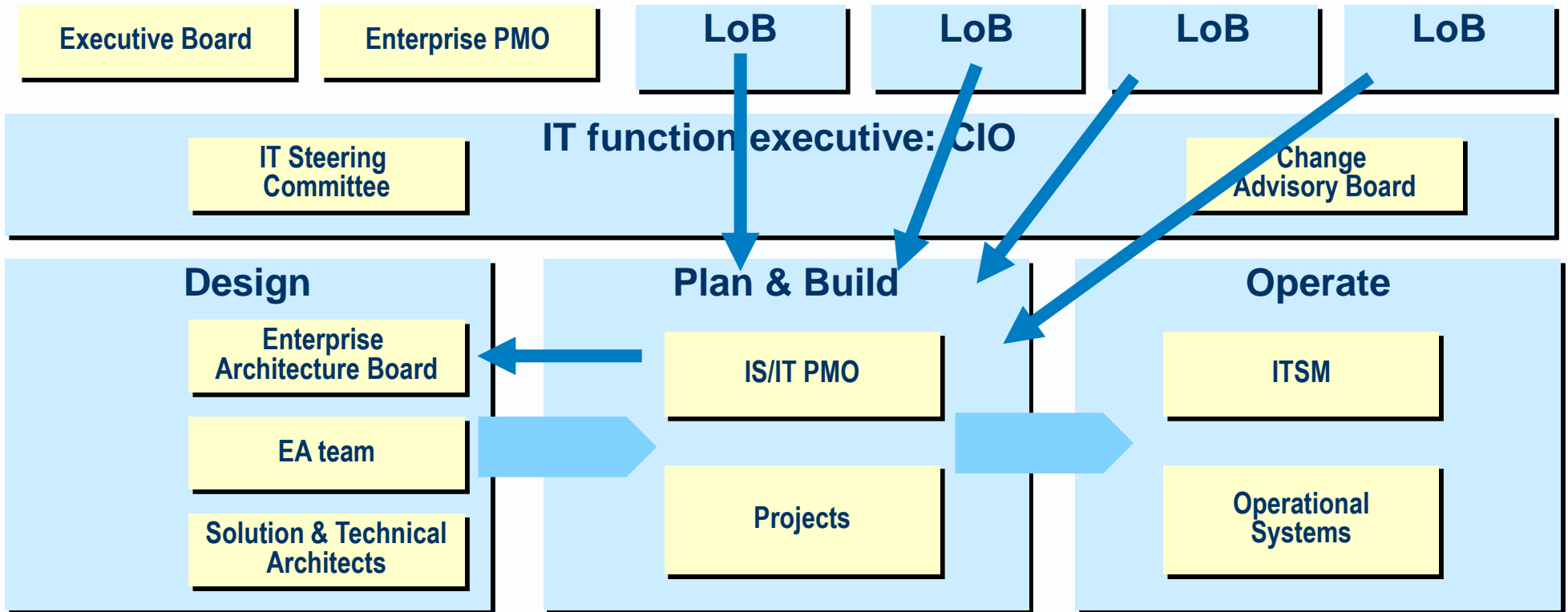
- ▶ All integrated with your PMO processes

Problem - a common reality

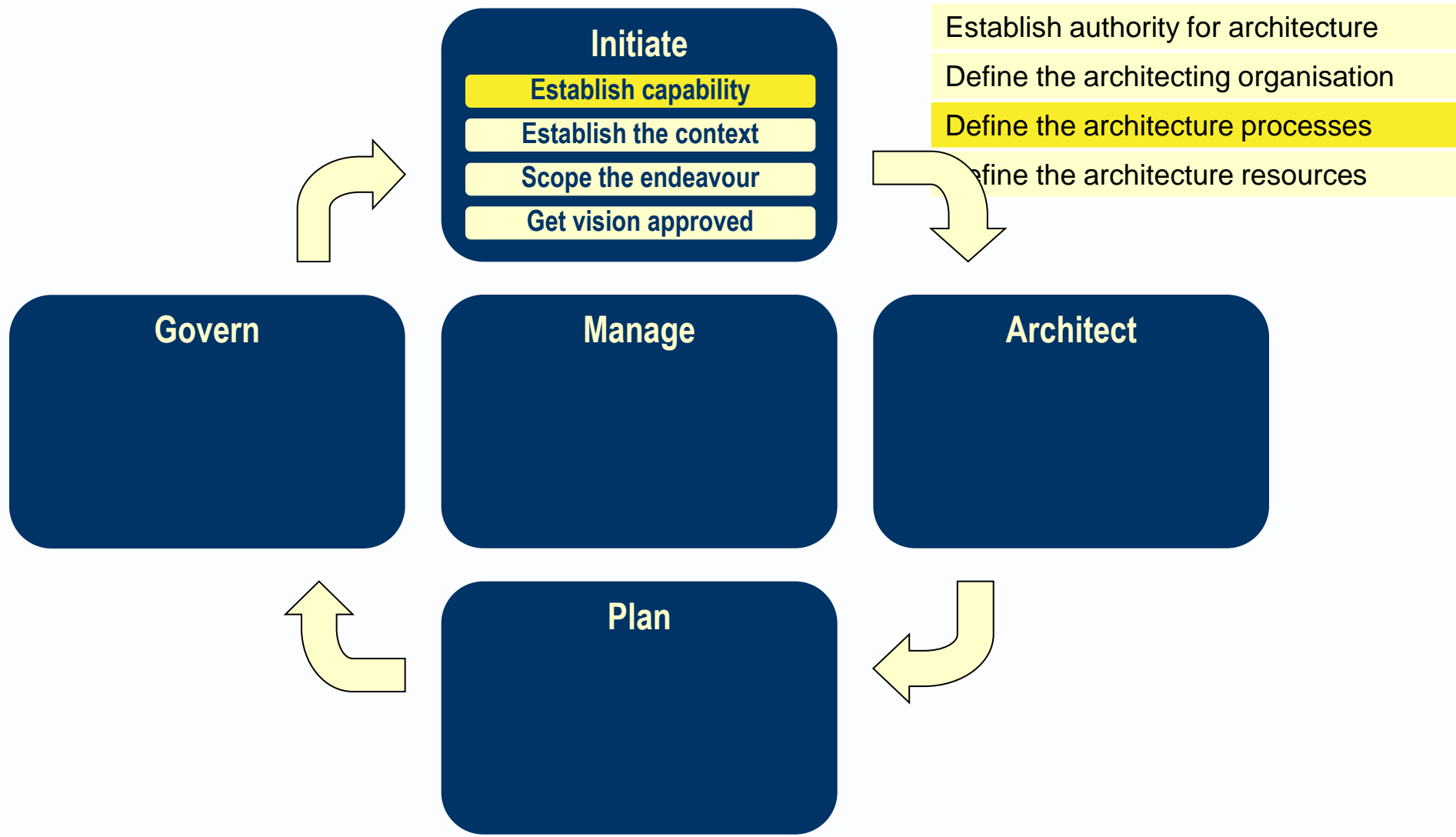
- ▶ PMO calls for a solution/technical architect – belatedly



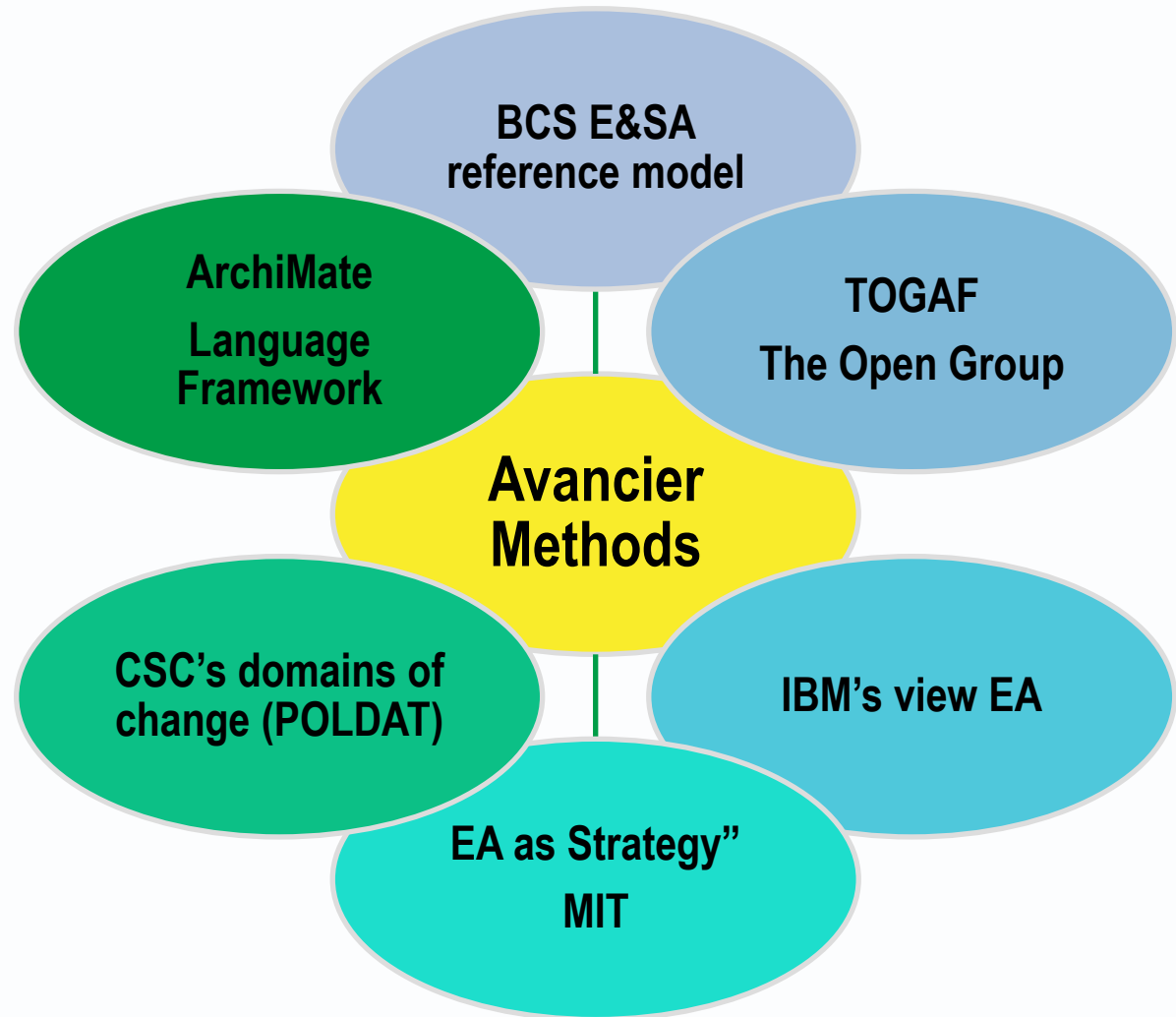
- ▶ Enterprise processes force PMO to call EA immediately



Define the architecture processes



- ▶ **Avancier Methods** are useful with all architecture frameworks that share similar ends and means
- ▶ <http://avancier.co.uk>



- ▶ **Hi Graham,**
- ▶ **I'm Chief Architect at XXX. I've just spent a couple of happy hours discovering your material at Avancier ...**
- ▶ **I have to say that I am very impressed with your work - In fact I'm stunned.**
- ▶ **I'm 24 years in IT, the last 12 or so in architecture and I have never seen such a thorough, all encompassing, accessible and SENSIBLE statement of what it's about and how to do it.**
- ▶ **Also really like your boiling down of TOGAF and the apparent refusal to kowtow to any particular framework, silver bullet, "method du jour" thanks again!**