

# Avancier Methods

## Initiate Phase

### Specialising AM for Enterprise Architecture

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## Reasonable contrasts that you can draw

### Solution Architecture

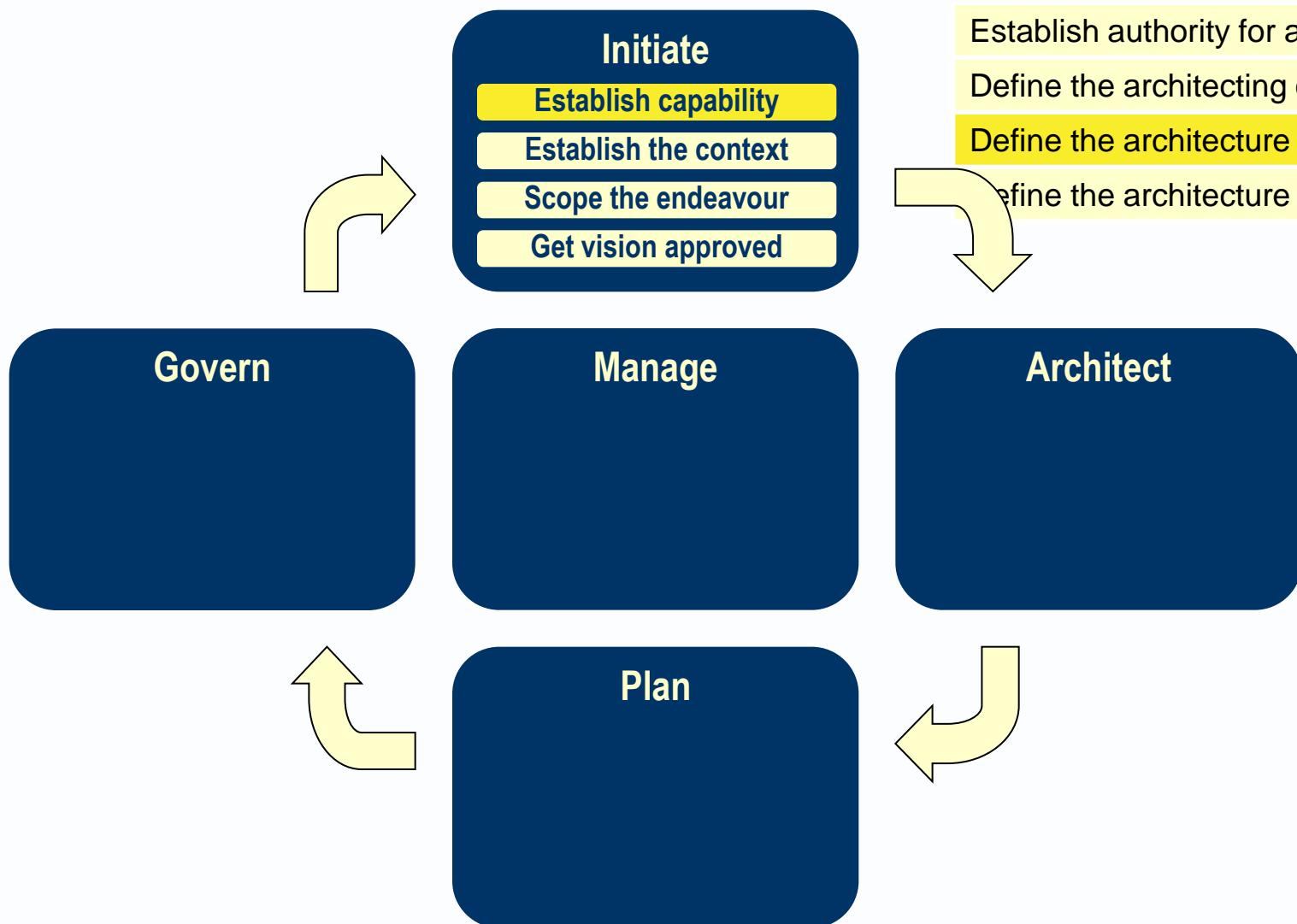
- ▶ Local (function or unit)
- ▶ Narrow (point solution)
- ▶ Tactical (short term)
- ▶ Innovative
- ▶ Concrete
  - Fine-grained
  - Specific
  - Physical

### Enterprise Architecture

- ▶ Global (whole enterprise)
- ▶ Broad (cross-organisation optimisation)
- ▶ Strategic (long-term)
- ▶ Rationalising
- ▶ Abstract
  - Coarse-grained
  - Generic
  - Logical

BCS professional certificates  
cover both, so, Avancier  
Methods include SA and EA  
variations

# Define the ENTERPRISE architecture processes



## Q) What are EA ends and means?

To improve business systems,  
improve business data quality, relevance and use

To optimise business systems and increase agility  
tidy up the mess of duplicated and overlapping  
systems by standardisation and integration.

To help understanding and change impact analysis  
maintain an abstract description of business roles and  
processes and the systems they use

To minimise business risks and maximise  
opportunities  
keep an eye on information system & technology  
evolution, and produce road maps where needed

“Operating model”		
Integrated	Coordinated	Unified
Diversified	Replicated	Standardised

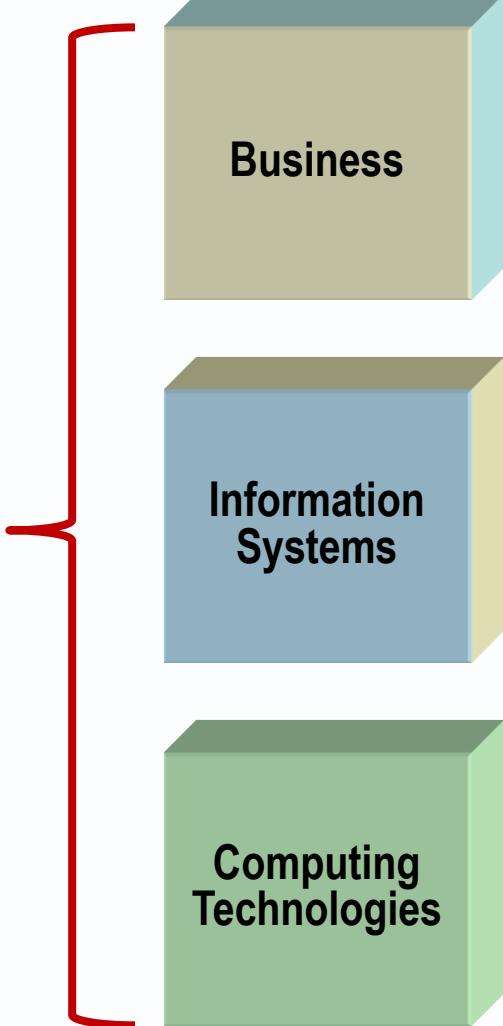
“the EA is permanent and  
manages the *EA artefacts*  
delivered by projects.”  
TOGAF

- ▶ EA is about the efficient & effective use of digital **information systems** by **business roles & processes**

“the effective management & exploitation of information through IT” TOGAF

- ▶ EA maintains an abstract description of **business roles & processes** & the **information systems & technologies** they use.

““the EA is permanent and manages the *EA* artefacts delivered by projects.”  
TOGAF



# Enterprise v. Solution Architecture

What you do for cross-organisational benefit



Avancier

## An architecture process map

Enterprise architecture as strategy

Change management

Governance

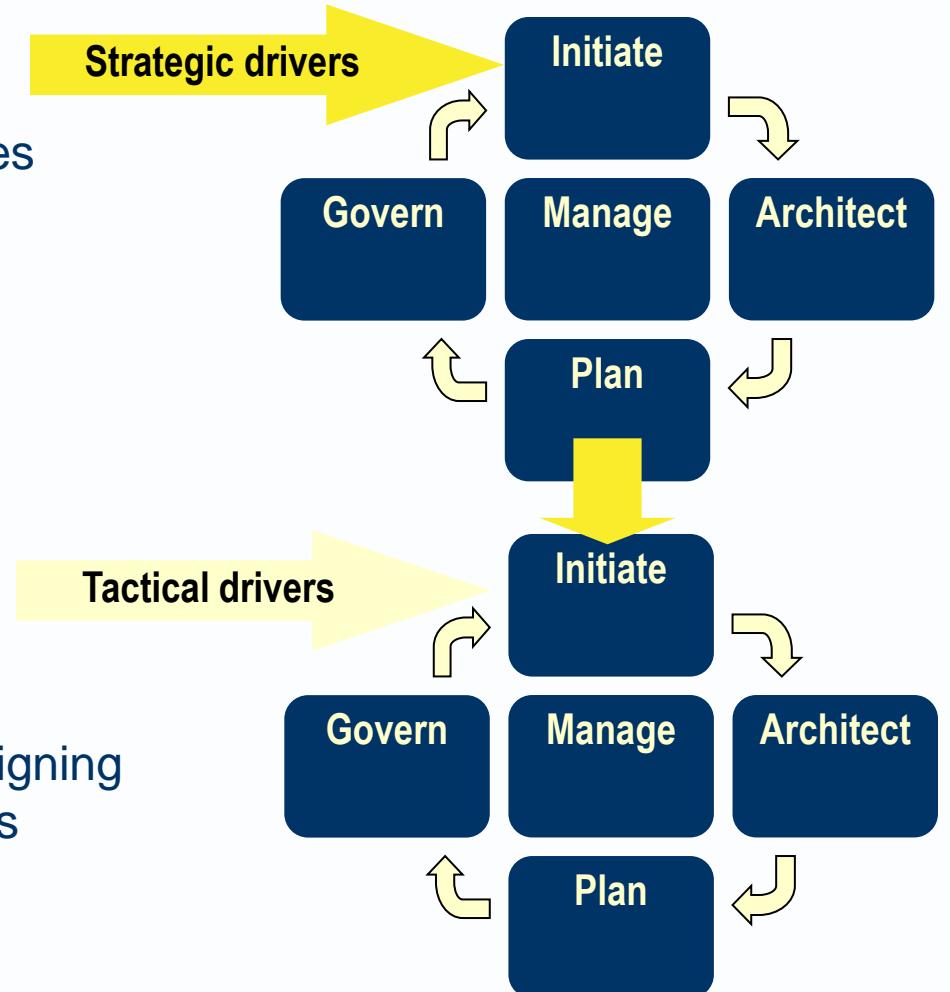
Solution Architecture

What you do to define good solutions

Solution implementation

# EA is the “higher” process variation

- ▶ 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



# There are many things an EA might do as an IS / IT Strategist



- ▶ Investigate emerging technologies
- ▶ Investigate new business models
- ▶ Help PMO
- ▶ Apply management consulting techniques.

- ▶ Futures Studies, Strategic Foresight, Strategy, Planning and Innovation – Future Business Models & Emerging Technologies
- ▶ Next Generation Enterprise (NGE) Target Operating Models (eTOM)
- ▶ Next Generation Network (NGN) Architectures - (WiFi, WiMAX, LTE, IMT)
- ▶ Smart Cities of the Future - Smart Devices, Smart Grid, Cloud Services
- ▶ Digital Oilfields of the Future - GIS Mapping and Spatial Analysis
- ▶ Sub-surface Modelling, Reservoir Analysis and Evaluation
- ▶ Economic Modelling, Long-range Forecasting, Strategic Investment Analysis
- ▶ Business and Technology Planning and Strategy, Financial Analysis,
- ▶ Enterprise Governance, Reporting and Controls, IFRS / GAAP
- ▶ Information Management - Digital Media Strategy,
- ▶ Enterprise Content Management, Enterprise Data Cloud, Data Warehousing
- ▶ Operational & Systemic Risk, Security Frameworks, Contingency Planning
- ▶ Business Continuity, Disaster Planning / Failover / Recovery.
- ▶ Enterprise Risk Management Frameworks - CLAS, COSO, Basle II, Solvency II,
- ▶ Threat Assessment, Risk Strategy, Planning, Control and Management
- ▶ Outsights Scenario Planning, Eltville Model (Pero Micic)
- ▶ Enterprise Architecture Frameworks - Carnegie Mellon SEI, TOGAF, Zachman
- ▶ Enterprise Portfolio Management - Business Service Category Management
- ▶ Software Product Line Planning and Control Enterprise Asset
- ▶ Management – Digital Communications Technology
- ▶ Financial Analysis, Systems Accounting, Enterprise Performance Management
- ▶ Target Setting, Action Planning, Responsibility Accounting, MI, BI, Analytics

Nigel Tebbit contribution to LinkedIn discussion

## But a primary EA goal is

- ▶ to **rationalise** an enterprise's systems:
  - get a handle on the mess
  - make some progress towards tidying it up

▶ “The purpose of enterprise architecture is to optimize across the enterprise the often fragmented legacy of processes (both manual and automated) into an integrated environment...” TOGAF v9

“Operating model”			
Integrated	Coordinated	Unified	
	Diversified	Replicated	
		Standardised	

## The typical EA challenge in a large business

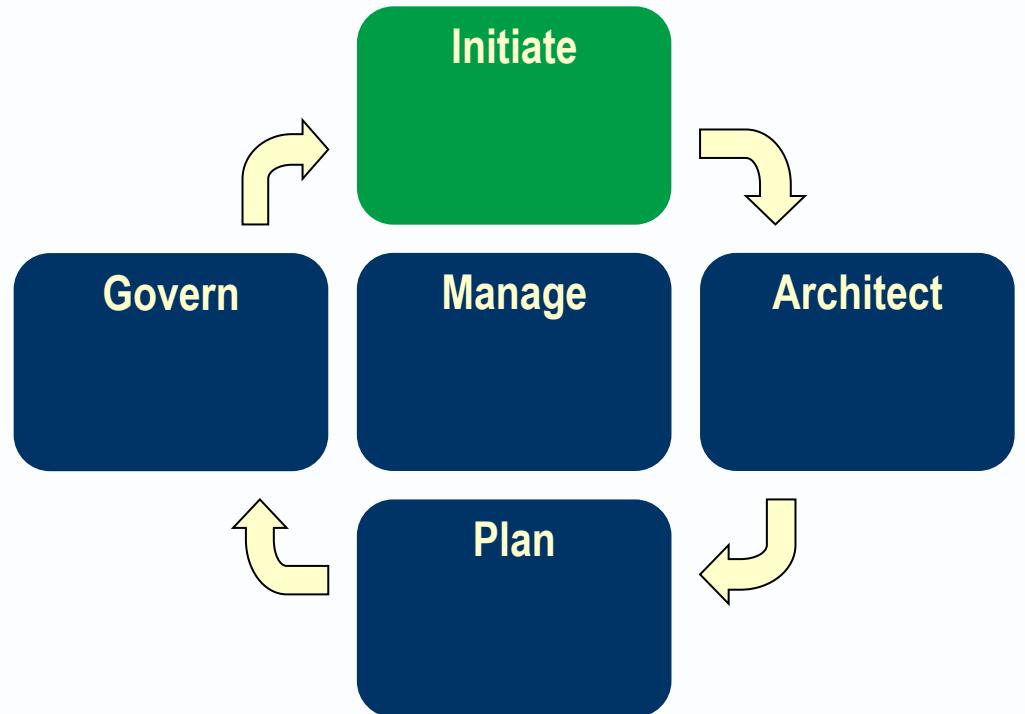
- ▶ Several lines of business do their own thing
- ▶ Fragmented business roles and processes
- ▶ Duplicated resources
- ▶ Low business data quality
- ▶ Business applications are not integrated
- ▶ The application and platform technology estate is in a mess

### The typical EA challenge

- ▶ to get sponsorship to integrate, standardise and tidy up the mess
- ▶ to put in place the authority and governance structures to achieve it.

## Initiate Phase

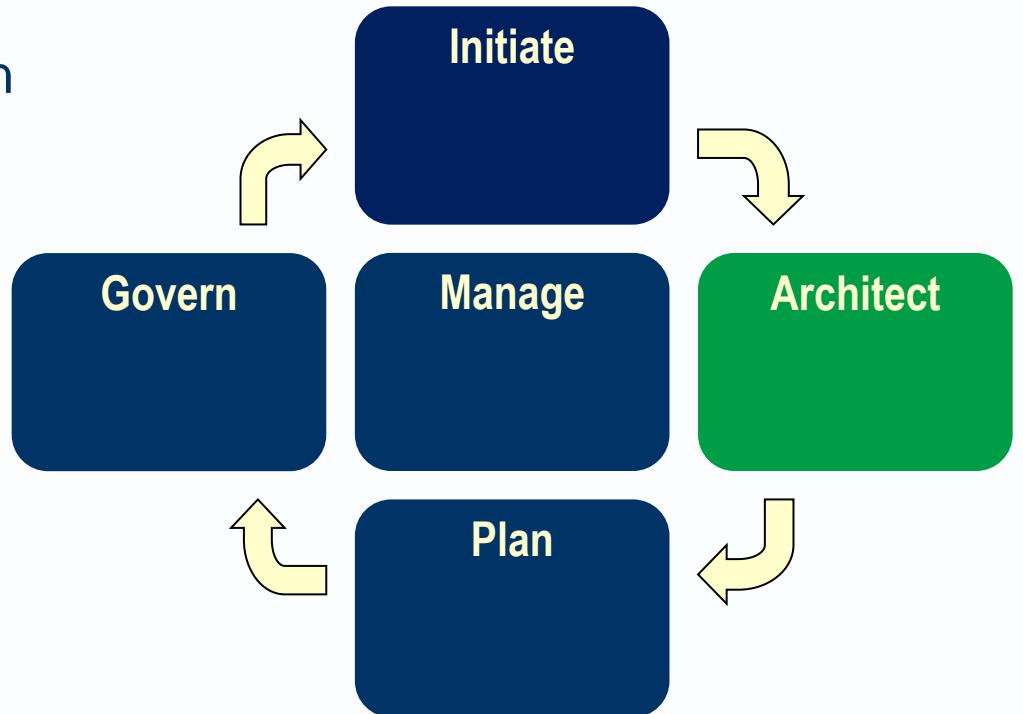
More emphasis than SA on  
Establishing the authority for EA  
Establishing the EA capability  
And studying the strategic context



# Architect Phase

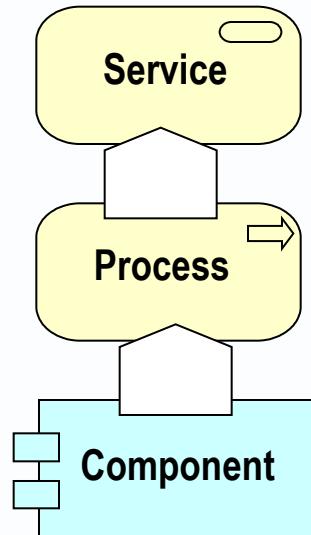
Wider and longer term than SA  
A focus rationalisation at all levels

- ▶ Business rationalisation
- ▶ Data rationalisation
- ▶ Apps rationalisation
- ▶ Infrastructure rationalisation

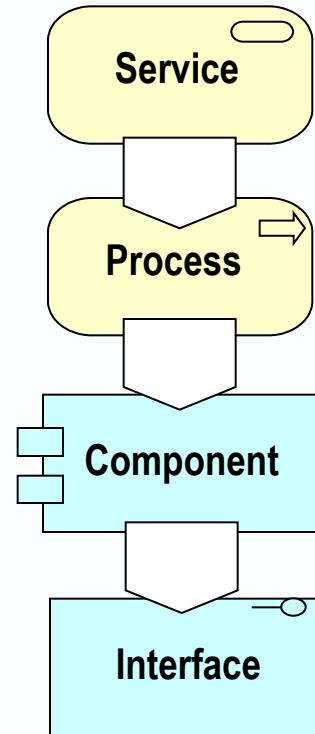


# A generic rationalisation process

► Understand the baseline



► Design the target



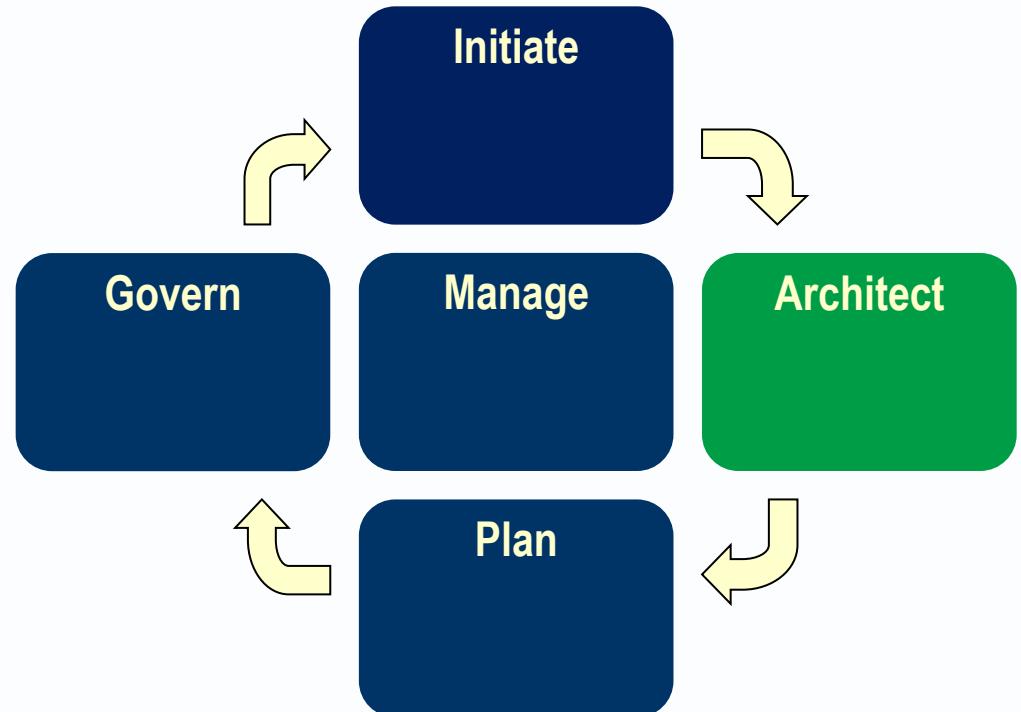
# Interleaving the rationalisation of different domains

- ▶ In practice, the rationalisation of different domains

- Business
- Data
- Applications
- Infrastructure

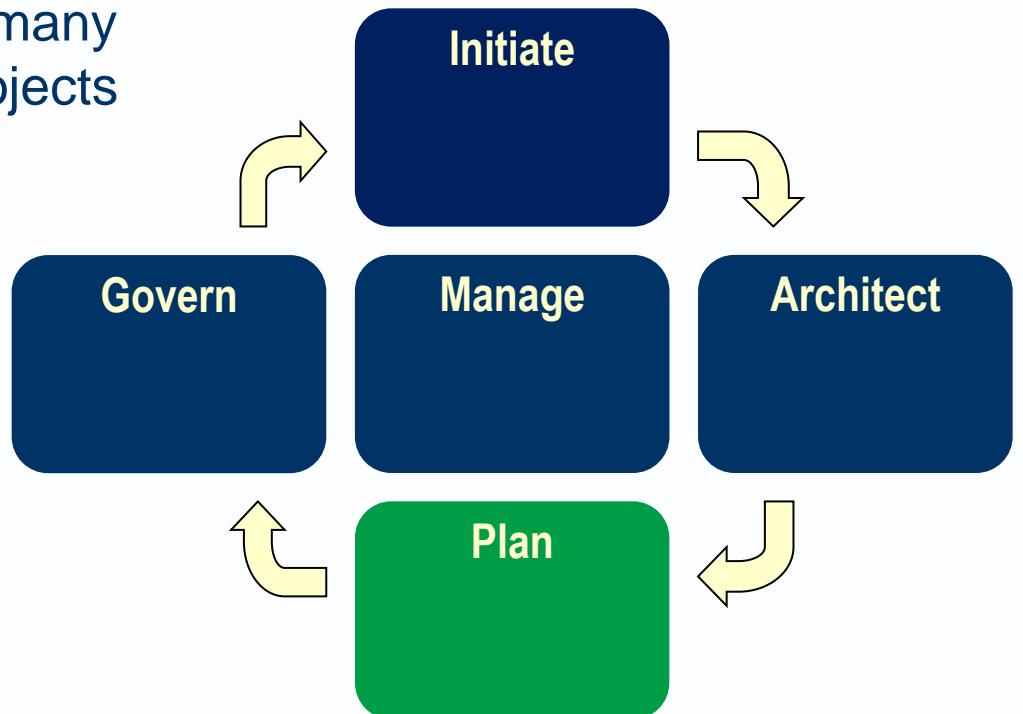
- ▶ are usually interleaved

- ▶ e.g. you cannot rationalise data stores without considering applications at the same time



## Plan Phase

- ▶ Planning the move from Baseline to Target
- ▶ The implementation of business, data, app and infrastructure road maps may be spread over many discrete SA programme/projects



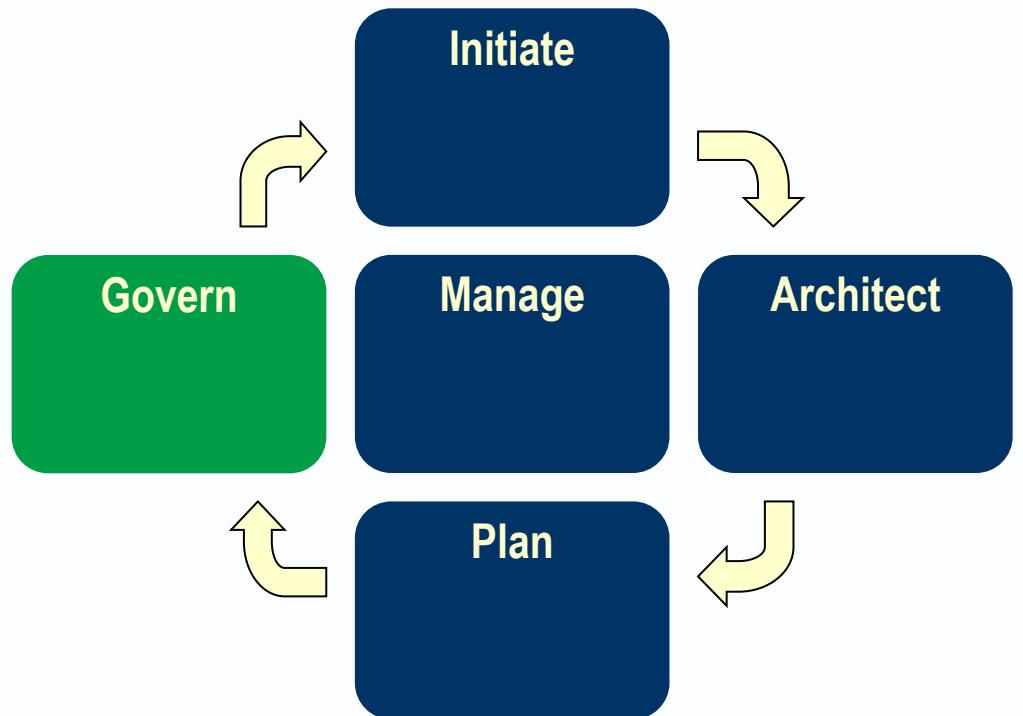
# EA road maps

- ▶ EA produces “road maps” that lead an enterprise through transition states to a better, more rational, future

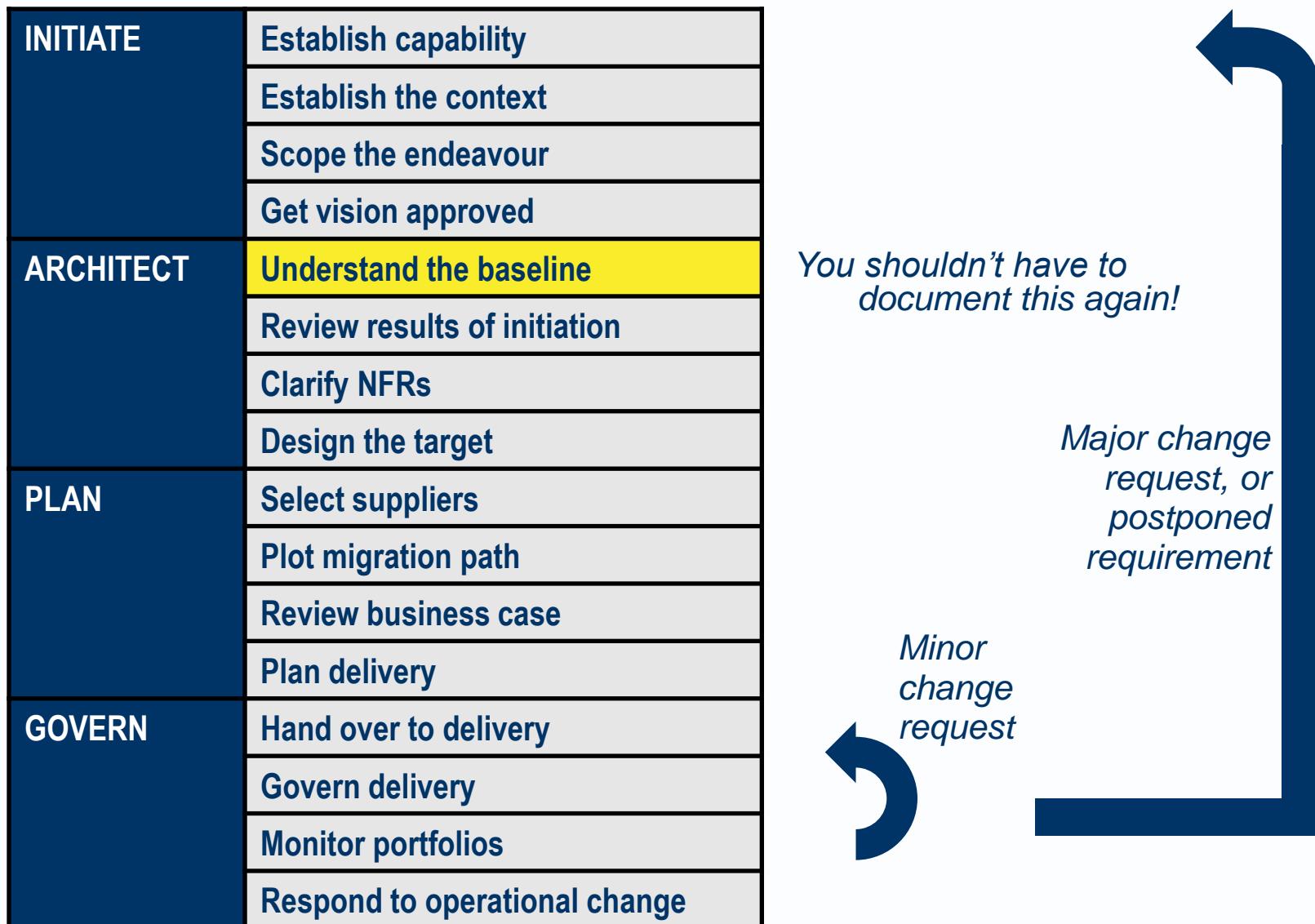
State	Baseline	Transition 1	Transition 2	Target
Domain		<b>Migration</b>		
Business	Process Organisation Locations	Process Organisation Locations	Process Organisation Locations	Process Organisation Locations
Information Systems	Data Applications	Data Applications	Data Applications	Data Applications
Technology	Infrastructure Technologies	Infrastructure Technologies	Infrastructure Technologies	Infrastructure Technologies

## Govern Phase

- ▶ Implementation of a road map may be spread over many discrete SA programmes/projects
- ▶ EA goes on to monitor portfolios and
- ▶ maintain the architecture in response to operational change.



# Minor and major changes



# What constraints makes this ideal process difficult?

INITIATE	Establish capability	<i>Conflicting drivers &amp; strategies</i>
	Establish the context	<i>Constraining regulations</i>
	Scope the endeavour	<i>Size and complexity</i>
	Get vision approved	<i>Baseline you can't ditch</i>
ARCHITECT	Understand the baseline	<i>Incomplete understanding</i>
	Review results of initiation	
	Clarify NFRs	<i>Exceptional NFRs</i>
	Design the target	<i>Time, cost &amp; resources</i>
PLAN	Select suppliers	<i>Suppliers market place</i>
	Plot migration path	
	Review business case	
	Plan delivery	
GOVERN	Hand over to delivery	
	Govern delivery	<i>Time, cost &amp; resources</i>
	Monitor portfolios	
	Respond to operational change	

## An architecture process map

Enterprise architecture as strategy

Change management

Governance

Solution architecture

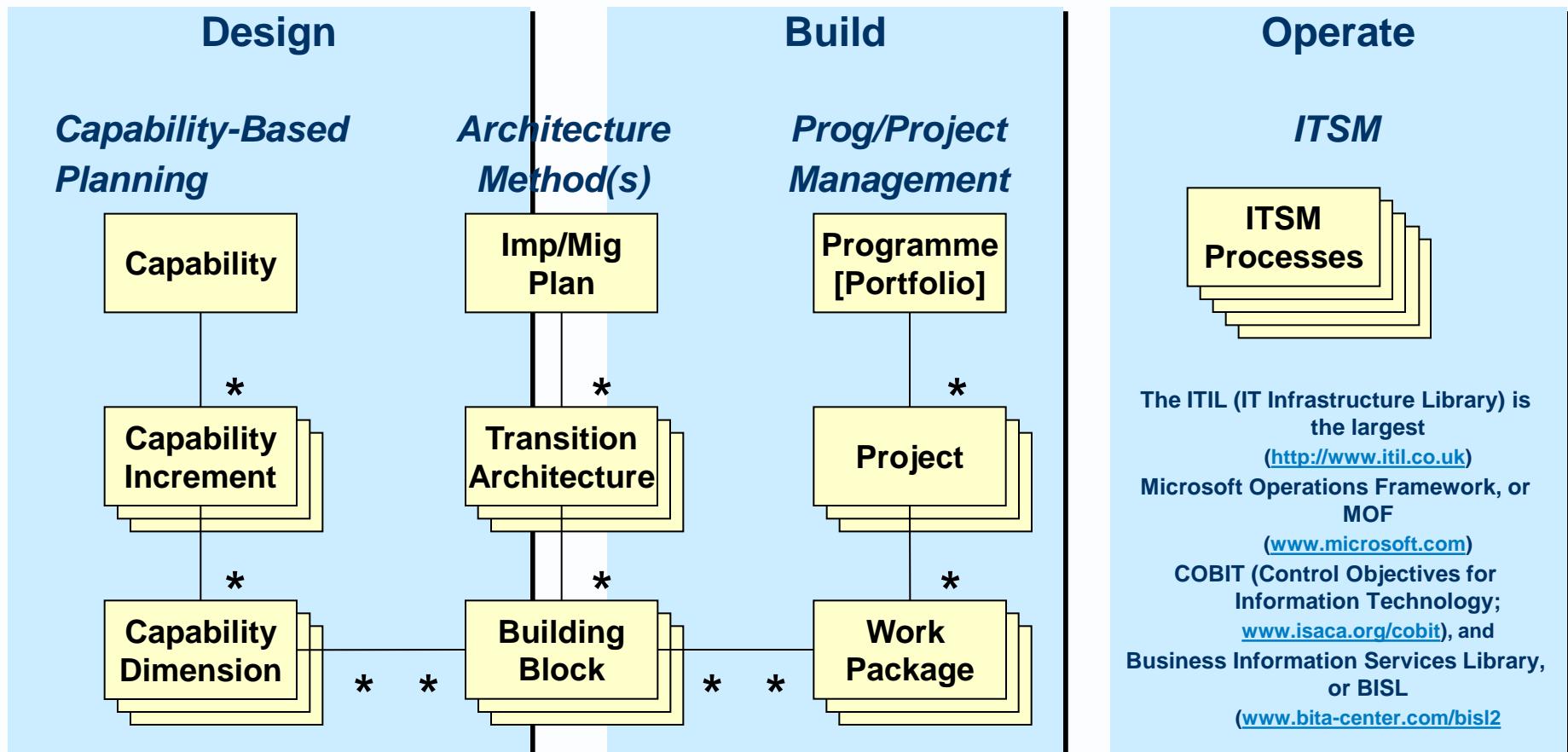
Solution implementation

The likes of RUP and SCRUM

Monitor  
compliance

React  
to change

# YOU have to stitch methods together e.g.

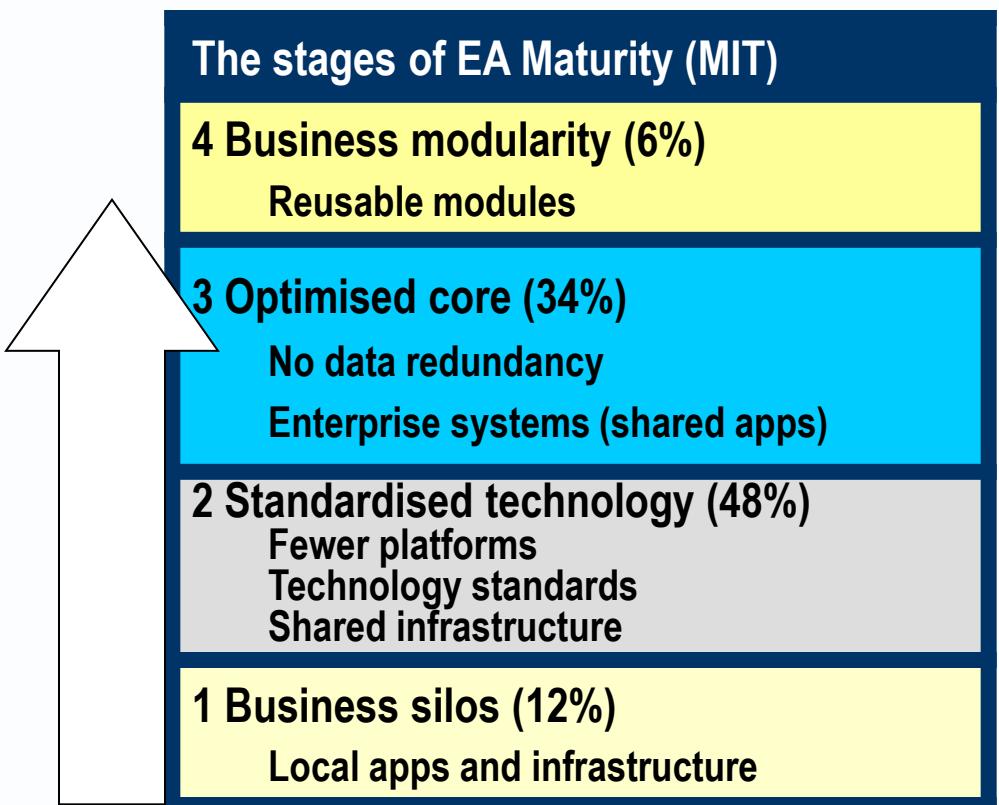


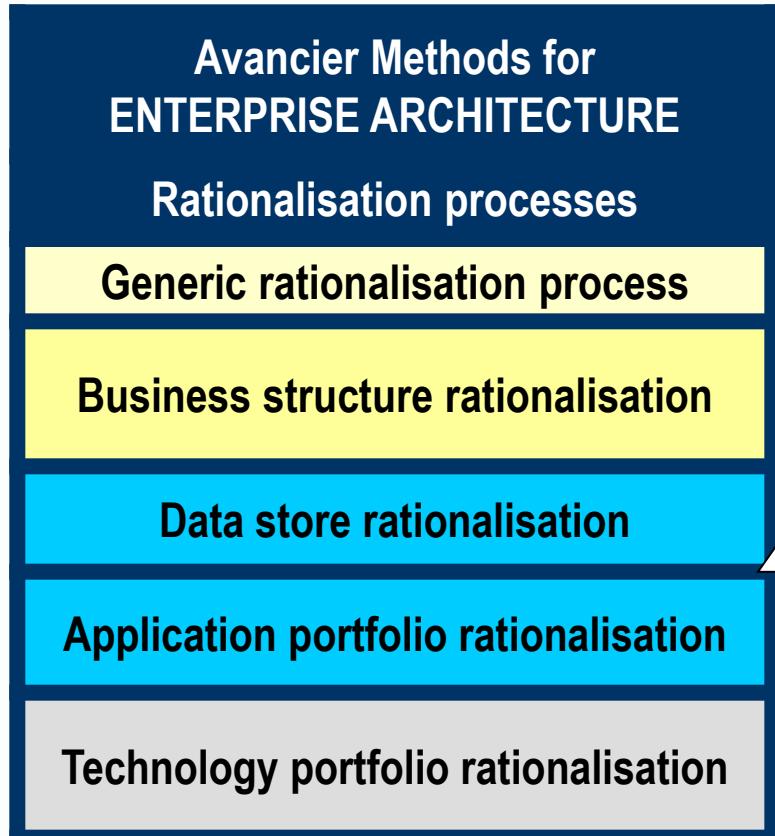
# Using AM to support EA frameworks



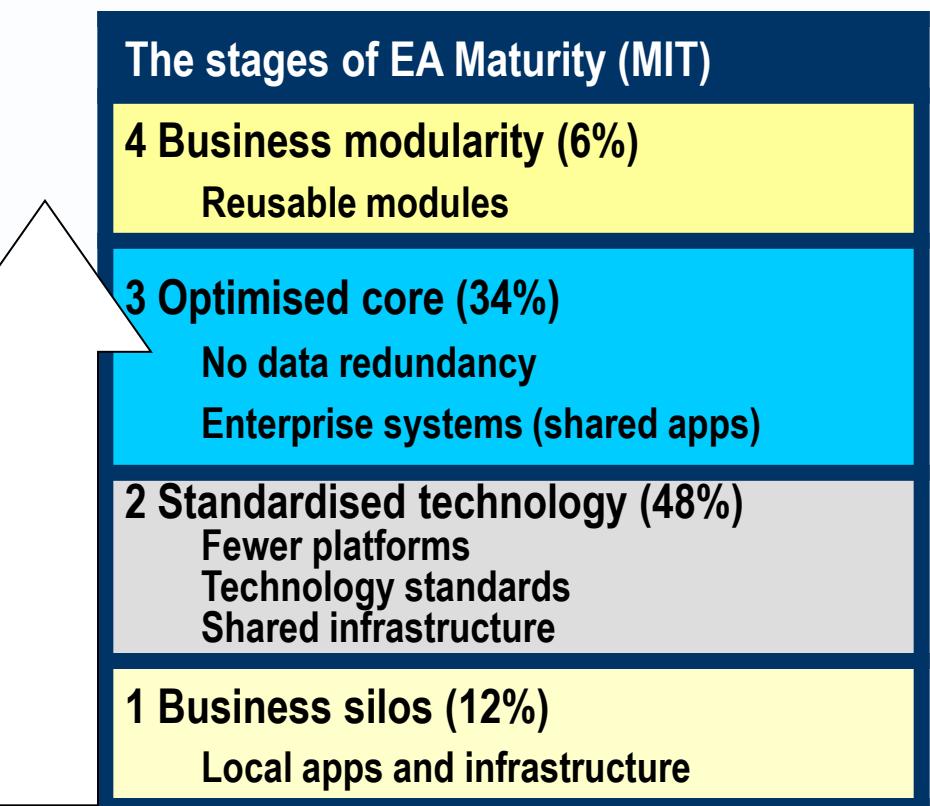
- ▶ Supporting MIT's "EA as Strategy"
- ▶ Supporting TOGAF's ADM

► “navigate the stages of EA maturity”





► “navigate the stages of EA maturity”



- ▶ “TOGAF is intended to be a framework for
  - “conducting enterprise architecture.”
  - “**managing the spectrum of change required to transform an enterprise towards a target operating model**”
  - [defined by] the necessary level of
    - **business process integration and**
    - **business process standardization.**”
- ▶ “The purpose of enterprise architecture is
  - ▶ **to optimize across the enterprise the often fragmented legacy of processes (both manual and automated) into an integrated environment...**”

# Enhancing TOGAF with Avancier Methods

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

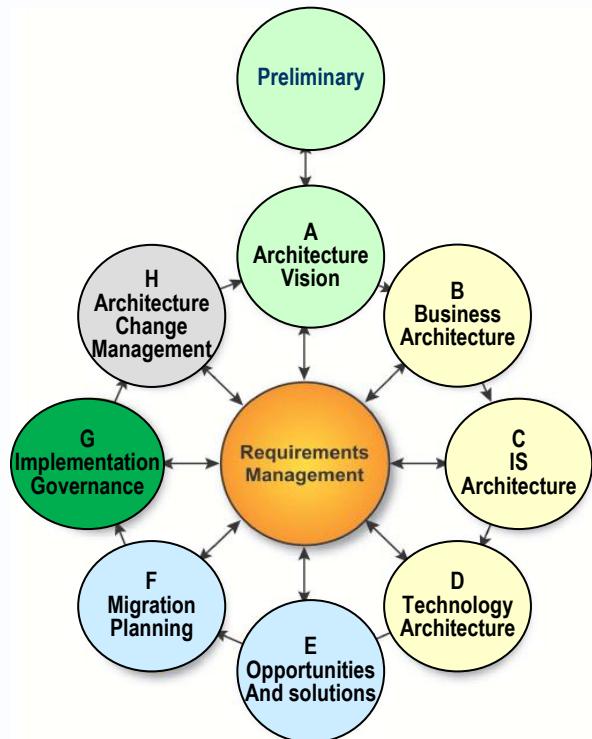


Figure 5-1 Architecture Development Cycle

AM gives architects more specific processes and documentation artefacts

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

# Define the ENTERPRISE architecture processes

