

*Enterprise Architecture :  
A Generation for IT  
Transformation Projects*

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# Agenda

- ◇ *Introduction*
- ◇ *Our Approach*
- ◇ *Meet a Generation*
- ◇ *A Case Study*
- ◇ *Conclusion*

# *Introduction*

- ◊ *We will review an approach for idea generation in an enterprise to identify transformational projects*
- ◊ *The approach will highlight*
  - *how business and IT need to be very closely involved in the ideation process, and*
  - *that this process functions best when enabled by well defined and agreed enterprise architecture guiding principles and effective technology roadmaps.*
- ◊ *A case study will also be briefly discussed*

# *Approach and Expected Benefits from Enterprise Architecture*

## Approach

2. *Drive effective change using an Enterprise Architecture approach*
  1. *Business-driven: optimizes the Enterprise's IT Environment (what is managed).*
  2. *Rigorous: standardizes IT Services Delivery (how it is managed)*
  3. *Pragmatic: follows a methodology - repeatable, affordable, explicit*

## Outcomes

4. *Method ensures best return per Rs/Dollar invested in IT*
5. *Steps and direction are regularly reviewed and updated as necessary to maintain business alignment*

# The Generation vis-à-vis EA Methodologies

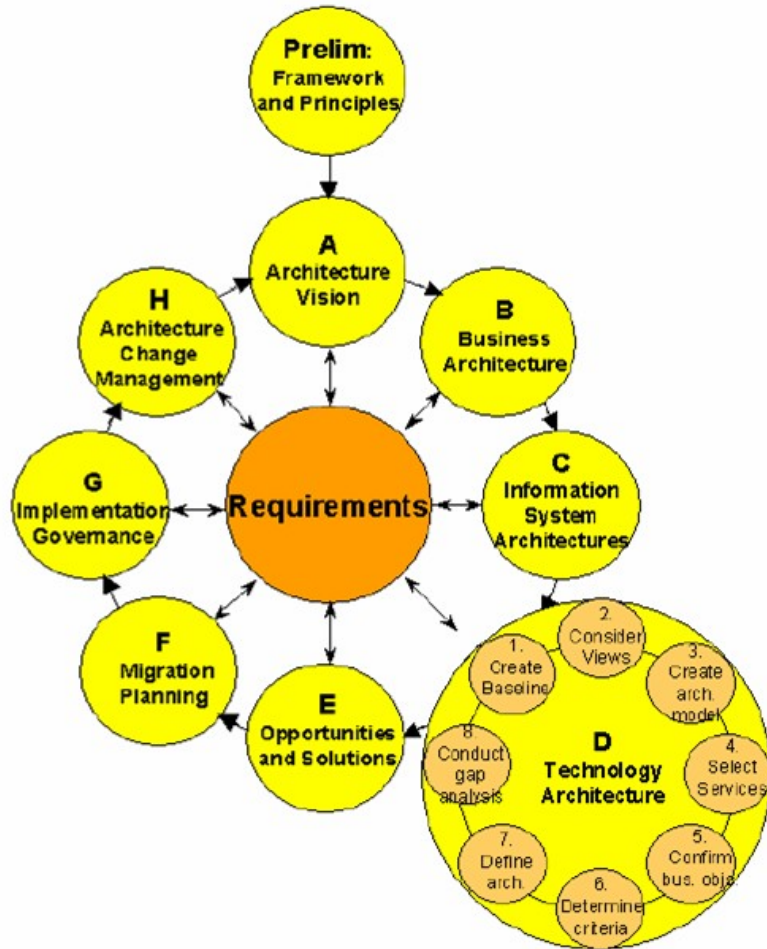


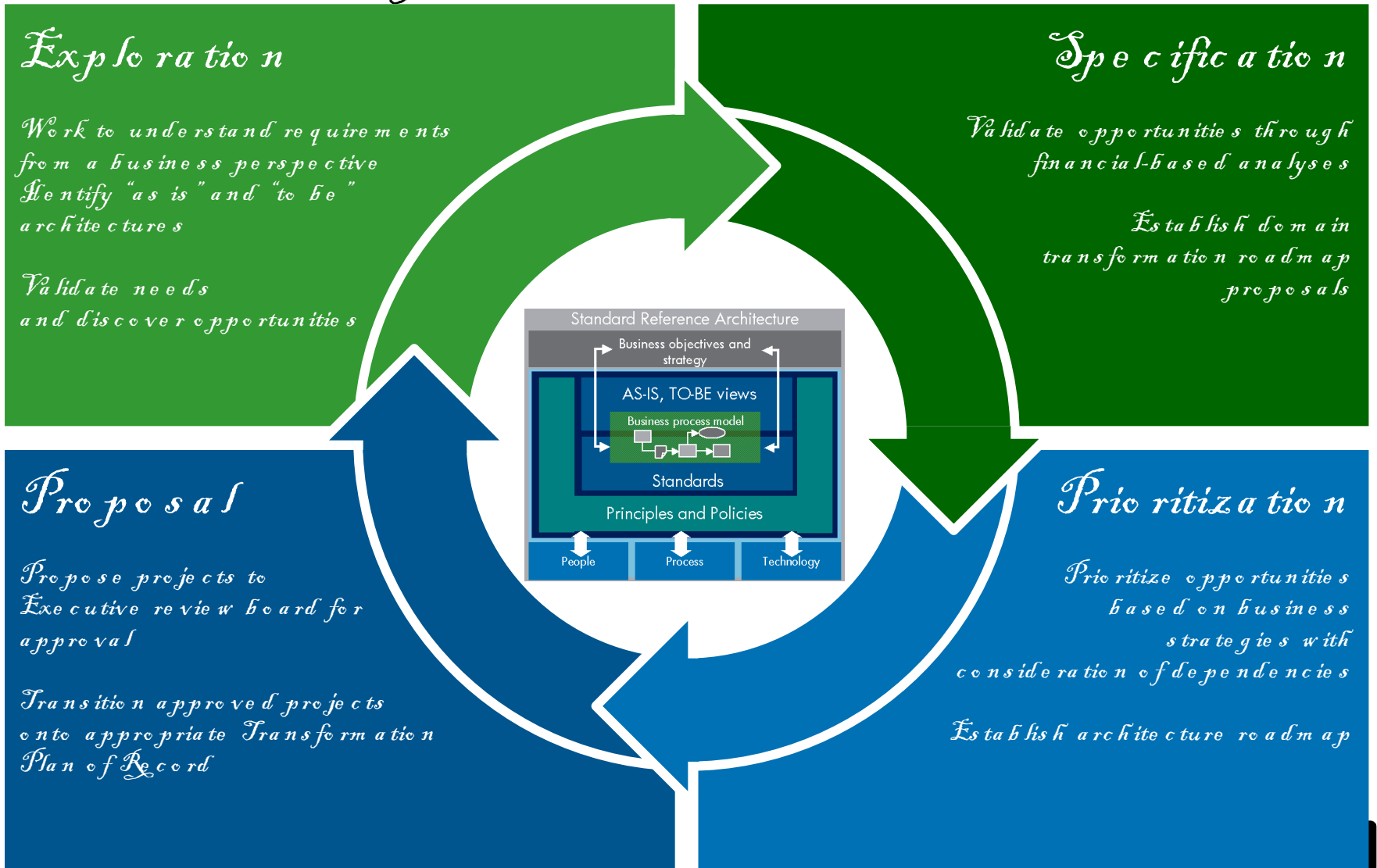
Figure 1: The Zachman Enterprise Architecture Framework

	DATA <i>What</i>	FUNCTION <i>How</i>	NETWORK <i>Where</i>	PEOPLE <i>Who</i>	TIME <i>When</i>	MOTIVATION <i>Why</i>	
Objective/Scope <i>Contextual</i>	List of Things Important in the Business 	List of Core Business Processes 	List of Business Locations 	List of Important Organizations 	List of Significant Events 	List of Business Code 	Objective/Scope <i>Contextual</i>
Role: Planner							Role: Planner
Enterprise Model <i>Conceptual</i>	Conceptual Data/Object Model 	Business Process Model 	Business Logistics System 	Work Flow Model 	Master Schedule 	Business Plan 	Enterprise Model <i>Conceptual</i>
Role: Owner							Role: Owner
System Model <i>Logical</i>	Logical Data/Class Model 	System Architecture Model 	Distributed Systems Architecture 	Human Interface Architecture 	Processing Structure 	Business Role Model 	System Model <i>Logical</i>
Role: Designer							Role: Designer
Technology Model <i>Physical</i>	Physical Data/Class Model 	Technology Design Model 	Technology Architecture 	Presentation Architecture 	Control Structure 	Rule Design 	Technology Model <i>Physical</i>
Role: Builder							Role: Builder
Detailed Representations <i>Out of Context</i>	Data Definitions 	Program 	Network Architecture 	Security Architecture 	Timing Definition 	Rule Specification 	Detailed Representations <i>Out of Context</i>
Role: Programmer							Role: Programmer
Functioning Enterprise <i>Role: User</i>	Usable Data	Working Function	Usable Network	Functioning Organization	Implemented Schedule	Working Strategy	Functioning Enterprise

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# HP's Architecture Governance Methodology



# Agenda

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- ◇ **Hea Generation**
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- ◊ *Introduction*
- ◊ *Our Approach*
- ◊ *Next Generation*

- *The Constituents*

- *The People Dimension*

- *The Fundamentals*

- *The Process*

- *The Tools*

# Key Constituents

Architecture consists of:

◊ *Principles* - the *set of guide lines* governing design (e.g., buy vs. build)

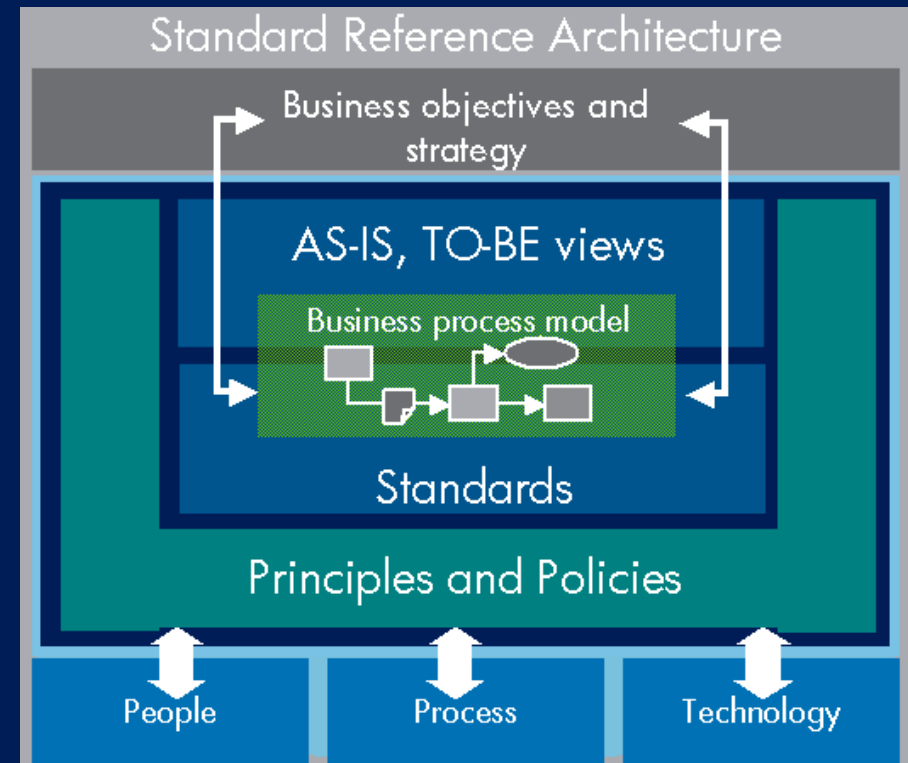
◊ *Policies* - the *set of rules* governing use and implementation (e.g., must adhere to customer security requirements)

◊ *Standards* - the *set of fully documented solution designs*, that include process model, technology integration, and implementation blueprints

◊ *As-Is* - the fully-specified detailed description of the *current state*

◊ *To-Be* - the fully-specified detailed description of the *future optimum state*

◊ *Roadmaps* - the fully specified *set of steps* leading from as-is to to-be



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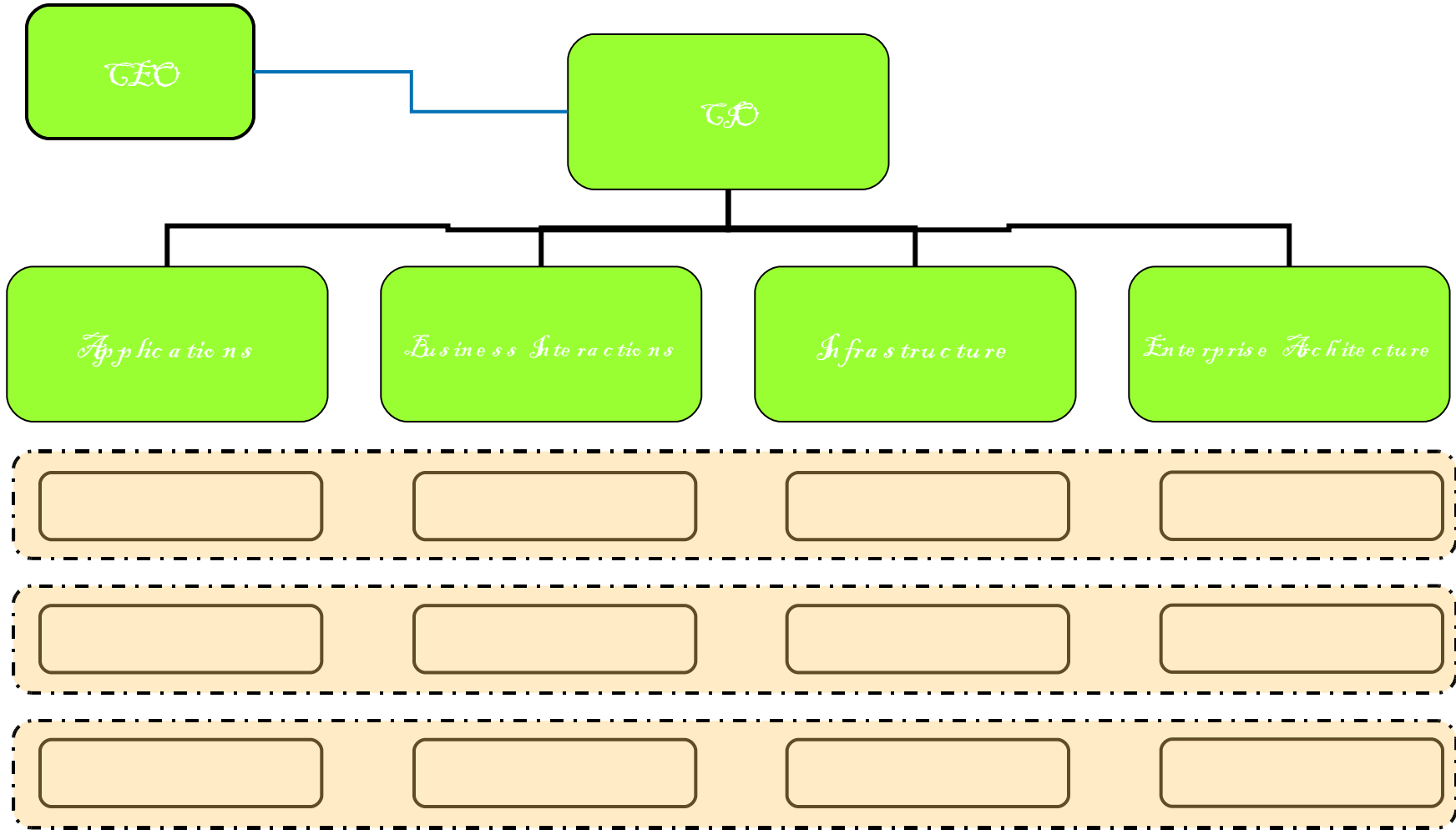
- *The People Dimension*

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# Thoughts on IT Organisations



# CIO / EA Patterns

◊ There are 5 patterns of CIO behaviour:

- *Administrator*: extensive negotiations with outside vendors, helps the org determine accuracy of vendor claims (eg. Govt)
- *Advocate*: Selects and combines technologies for the best user user/partner experience with the company (eg. CIO of Fedex, Retail)
- *Executive*: Guides Strategic discussions and manages the innovation process (eg. CIO HP, IBM etc)
- *Genius*: The CIO, whose genius clearly enhances the products and services of the organisation (eg. Sergei Brin @ Google)
- *Director*: Creates an environment in which others can do technology work. (eg. CIO Intel etc)
- *Void*: Intentionally decide not to have a CIO (eg. Retail chains, CIOs take a part of the load)

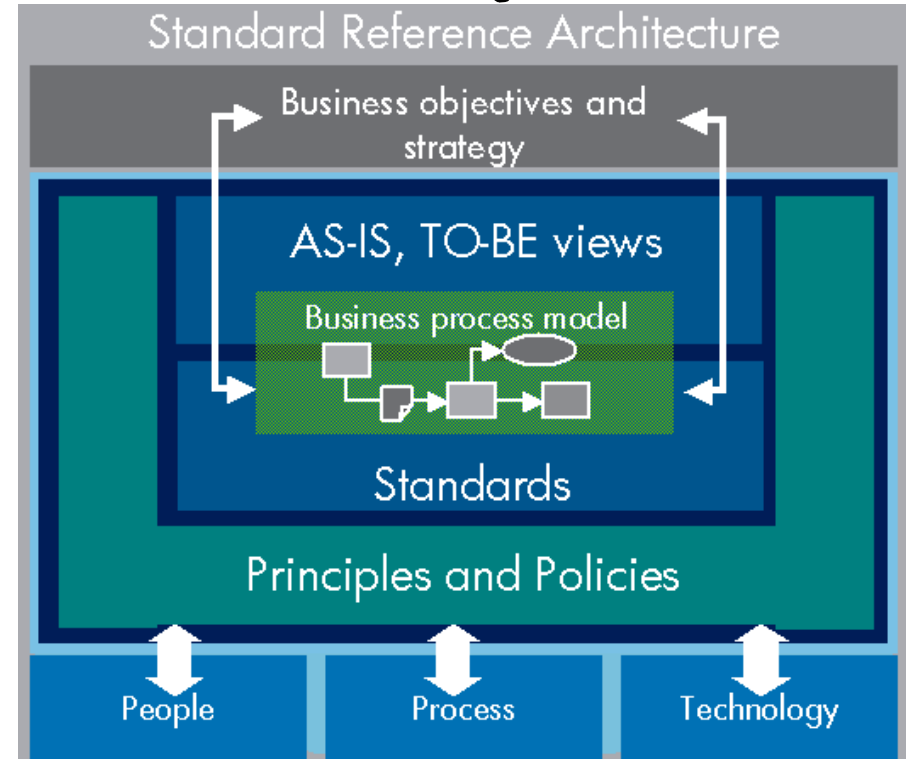
Source: "5 Patterns of the Chief Technology Officer" by Roger Smith

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# Fundamentals that should be in place

- ◇ *set of guidelines*
- ◇ *set of rules*
- ◇ *set of fully documented solution designs*
- ◇ *current state*
- ◇ *future optimum state*
- ◇ *set of steps*



*Can be created during the Hea Generation Life cycle*

# Domains - You need to get them right

## ◇ TOGAF Domains

- Business Architecture
- Applications
- Data Architecture
- Infrastructure

## ◇ Other Potential Domains

- Applications Development
- Applications Management
- International
- Business Intelligence
- Knowledge Management
- Network
- Central Compute (Servers)
- End User Compute
- Security

A simple starting  
Domain choice could  
be the TOGAF domains

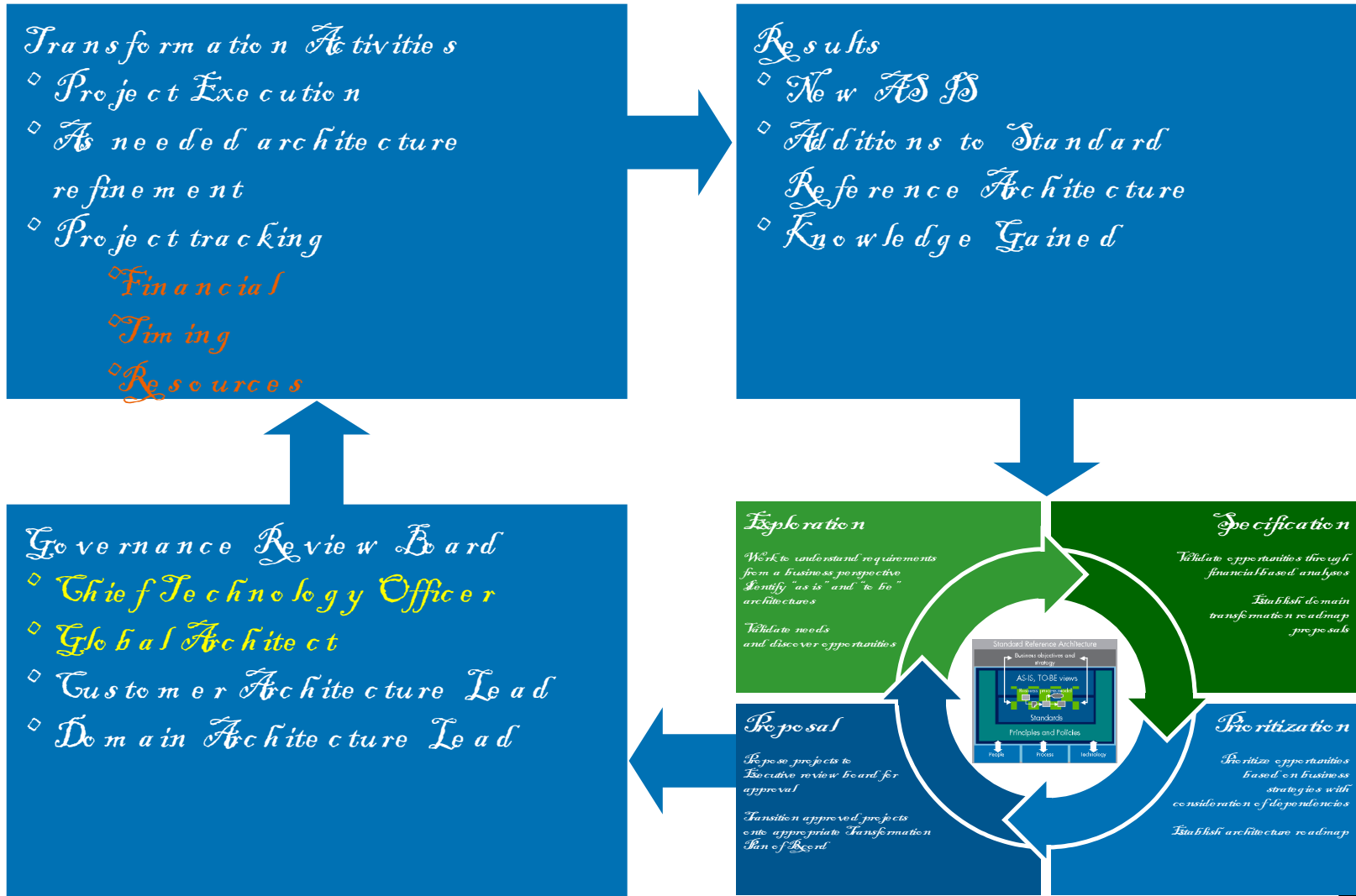


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Global Architecture Governance Process

Global Architecture Governance Process



# Key elements of HP G M for ITSA

The HP Global Method for IT Strategy and Architecture (ITSA) is:

- Based on stakeholder participation
- Organized as a set of four fundamental views



# Stakeholders in the house building analogy



**Business view**

Why do I want a new house?

**Sponsor**



**Functional view**

What features should the new house provide?

**User**



**Technical view**

How will the house be built?

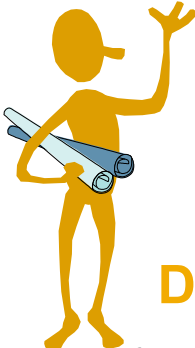
**Builder**



**Implementation view**

With what will the house be built?

**Deployer**



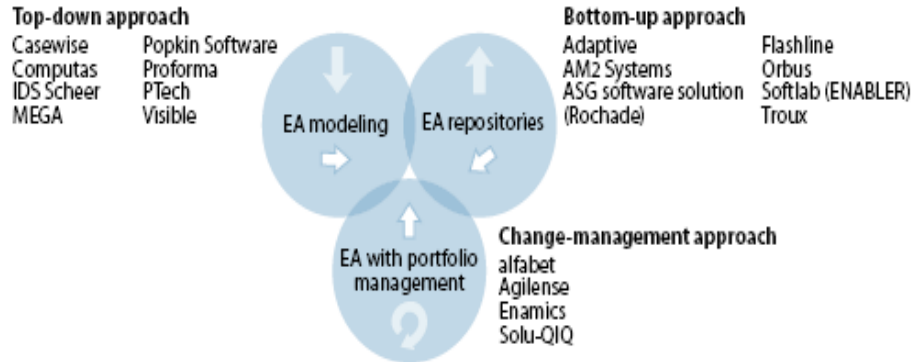
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# EA Tools

Figure 2 EA Tools Fall Into Three Categories

The three EA tools categories are clearly established today, but the boundaries will blur in the next three years.



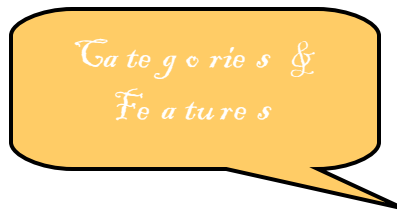
Source: Forrester Research, Inc.

Figure 3 EA Tools' Required And Optional Features

	EA modeling	EA repository	EA change management
Modeling features	✓		✓
Collaborative features	✓	✓	✓
Simulation	✓		✓
Frameworks and methodology	✓		✓
Import/export of data repository	✓	✓	✓
Metamodel customization	✓	✓	
Impact and risk analysis	✓	✓	✓
Balanced scorecard models	✓		✓
Budget planning	✓		✓
Prebuilt models	✓		✓

✓ = required    ✓ = optional

Source: Forrester Research, Inc.



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## *Conclusions ...*

- ◇ *Initiating an EA Program in an existing enterprise is a challenge*
- ◇ *The domain focused entry is a proven way of productively initiating the program*
- ◇ *Key Challenges include*
  - *identifying appropriate Domains*
  - *Ensuring the right skills and focus in the teams*

*Questions?*



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