

Alignment of Business and IT by Enterprise Architecture Management



Literature

This chapter is based on the following literature:

- F. Ahlemann et al. (eds.), *Strategic Enterprise Architecture Management: Challenges, Best Practices, and Future Developments*, Springer-Verlag Berlin Heidelberg 2012

Additional sources:

- Hanschke, Inge. (2010). *Strategic IT Management, Chapter 4*. Berlin Heidelberg: Springer-Verlag.
- Schekkerman, J. (2008). *Enterprise Architecture Good Practices Guide - Chapters 6-8*. Victoria, BC, Canada: Trafford Publishing.

For further details have a look at the referenced sources.



Enterprise Architecture is ***not*** about building models.

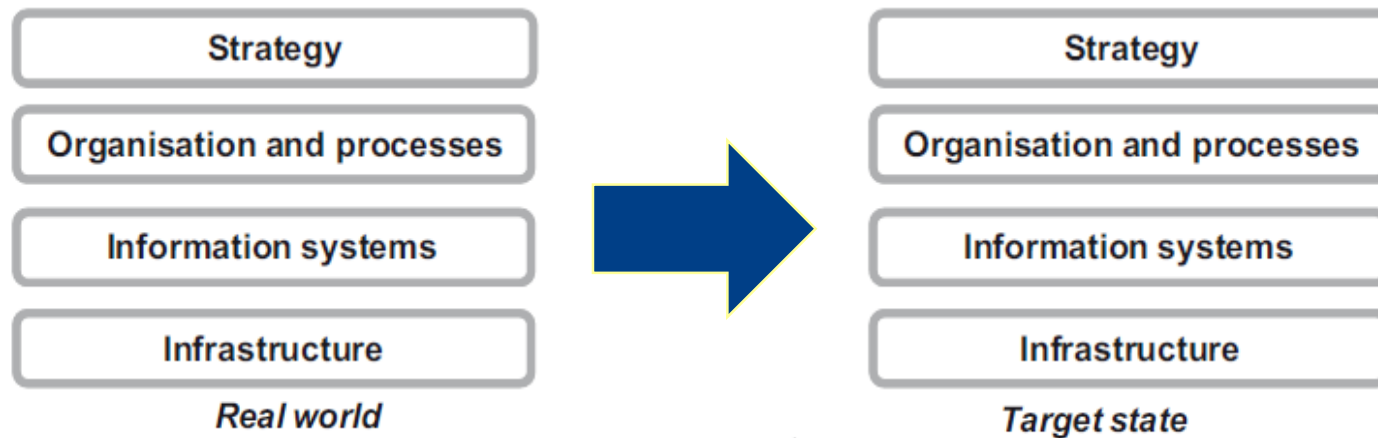
It is about solving enterprise problems while iteratively building models

John Zachman

EAM is about managing change while iteratively building models

Managing Change

- Change requires the alignment of business and IT
- Change is decision making and leading
 - ◆ This is exactly what managers do
- Thus, alignment of business and IT is a management task.



Use of the Enterprise Architecture

- The Enterprise Architecture is managed as a program that facilitates
 - ◆ systematic organization change
 - ◆ continuously aligning technology investments and projects with organisation mission needs.
- Enterprise Architecture is updated continuously to reflect changes
- It is a primary tool for baseline control of complex, interdependent enterprise decisions and communication of these decisions to organization stakeholders.

(Schekkermann 2008, p. 107)



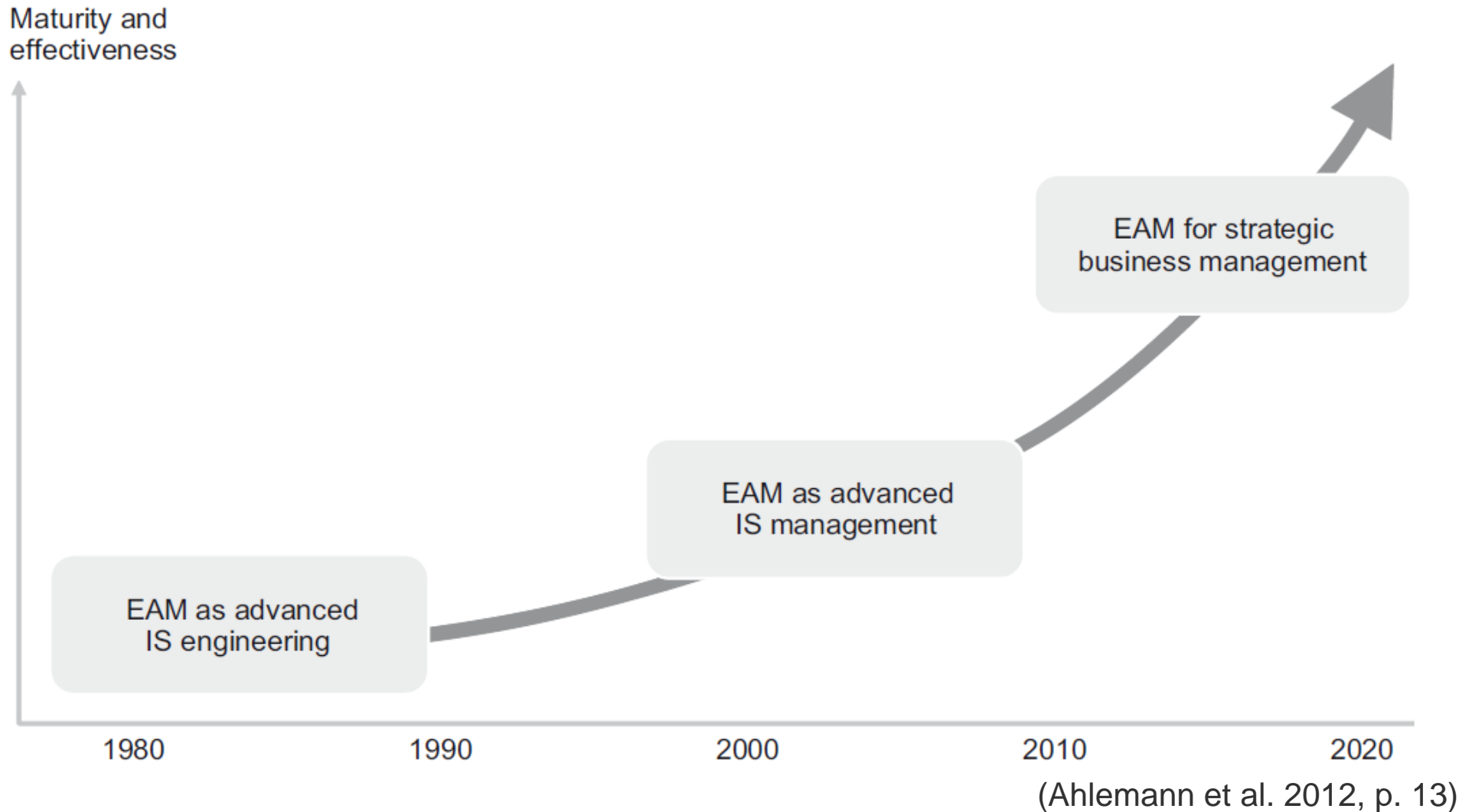
What is Enterprise Architecture Management (EAM)

EAM is a *management practice* that establishes, maintains and uses a coherent set of guidelines, architecture principles and governance regimes that provide direction for [...] the development of an enterprise's architecture in order [to align business and IT] and to achieve its vision and strategy.

(Ahlemann et al. 2012, p. 20)



EAM Development Phases (1)



EAM Development Phases (2)

- Phase 1: EAM for engineering of information systems
 - ◆ Conceptual structure of Architecture (e.g. Zachman Framework)

- Phase 2: Advanced Information Systems Management
 - ◆ defining role models,
 - ◆ processes for IT/IS landscape (not only single applications) and ensuring transparent decision-making
 - ◆ defining decision rights and accountabilities
 - ◆ Advanced EAM frameworks provided guidelines for EAM in addition to architectural artefacts and models (e.g. TOGAF with ADM)

EAM Development Phases (3)

- Phase 3: Strategic Business Management
 - ◆ EAM is no longer understood as just an IT department job, but as a strategic function
 - ◆ EAM plays an important role in organisational transformation and development
 - ◆ Reasons include:
 - IS/IT as a means of transformation
 - **Business-IT Alignment**
 - ◆ Strategic decision-making is based on EA information: improved decision making and faster strategic change.
 - ◆ **Adding motivation to Architecture Frameworks and guidelines**

(Ahlemann et al. 2012, p. 14)



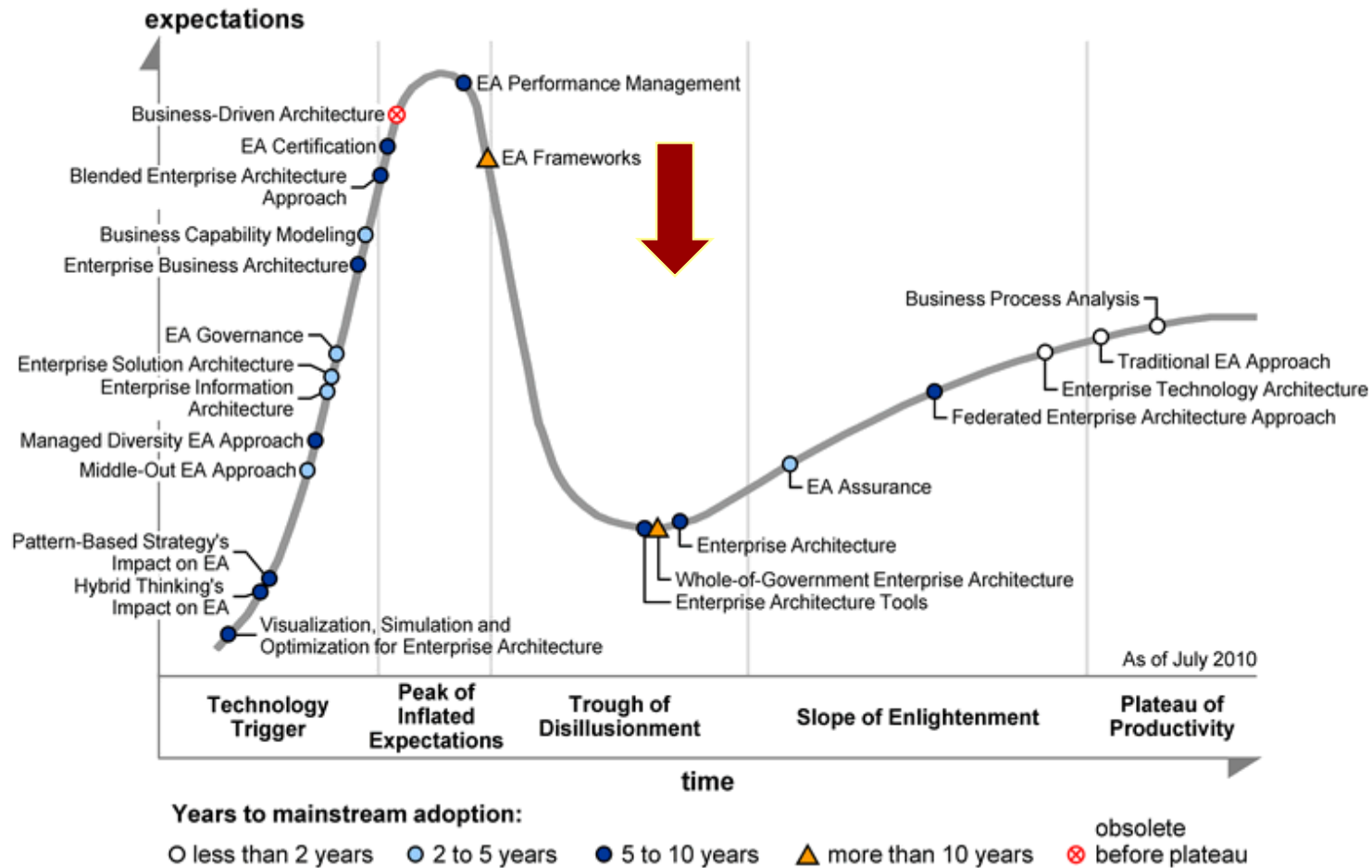
What EAM is NOT

- EAM is not a tool
- EAM is not just modeling of the enterprise architecture
- EAM is not an IT function
- EAM is not a new management process
 - ◆ EA includes a set of new management practices, but it does not produce new processes.
 - ◆ Instead, it merely changes the way existing processes/projects are run
- EAM is not strategy development
 - ◆ EAM is used in strategy management

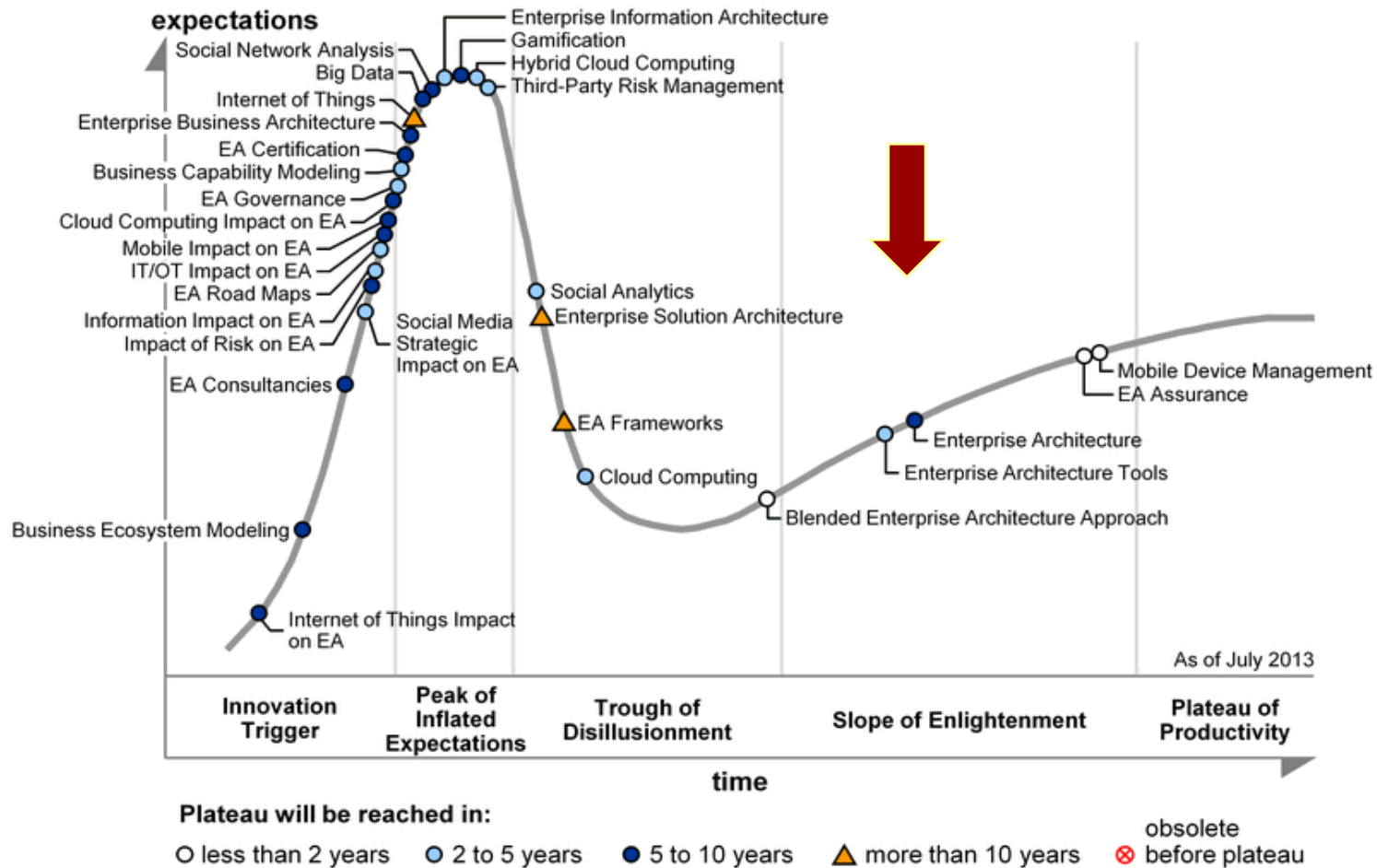
(Ahlemann et al. 2012, p. 20)



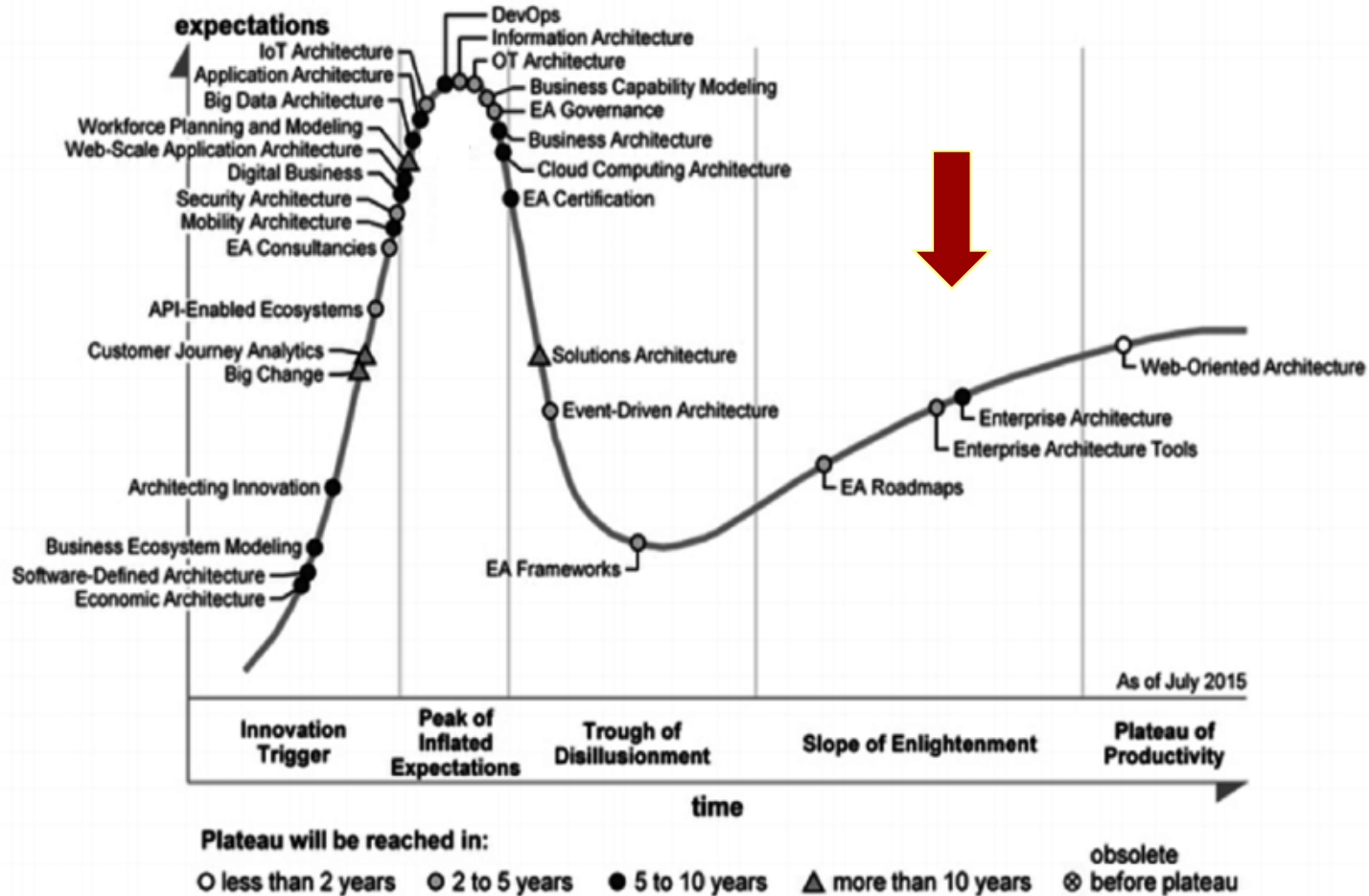
Gartner Hype Cycle 2010



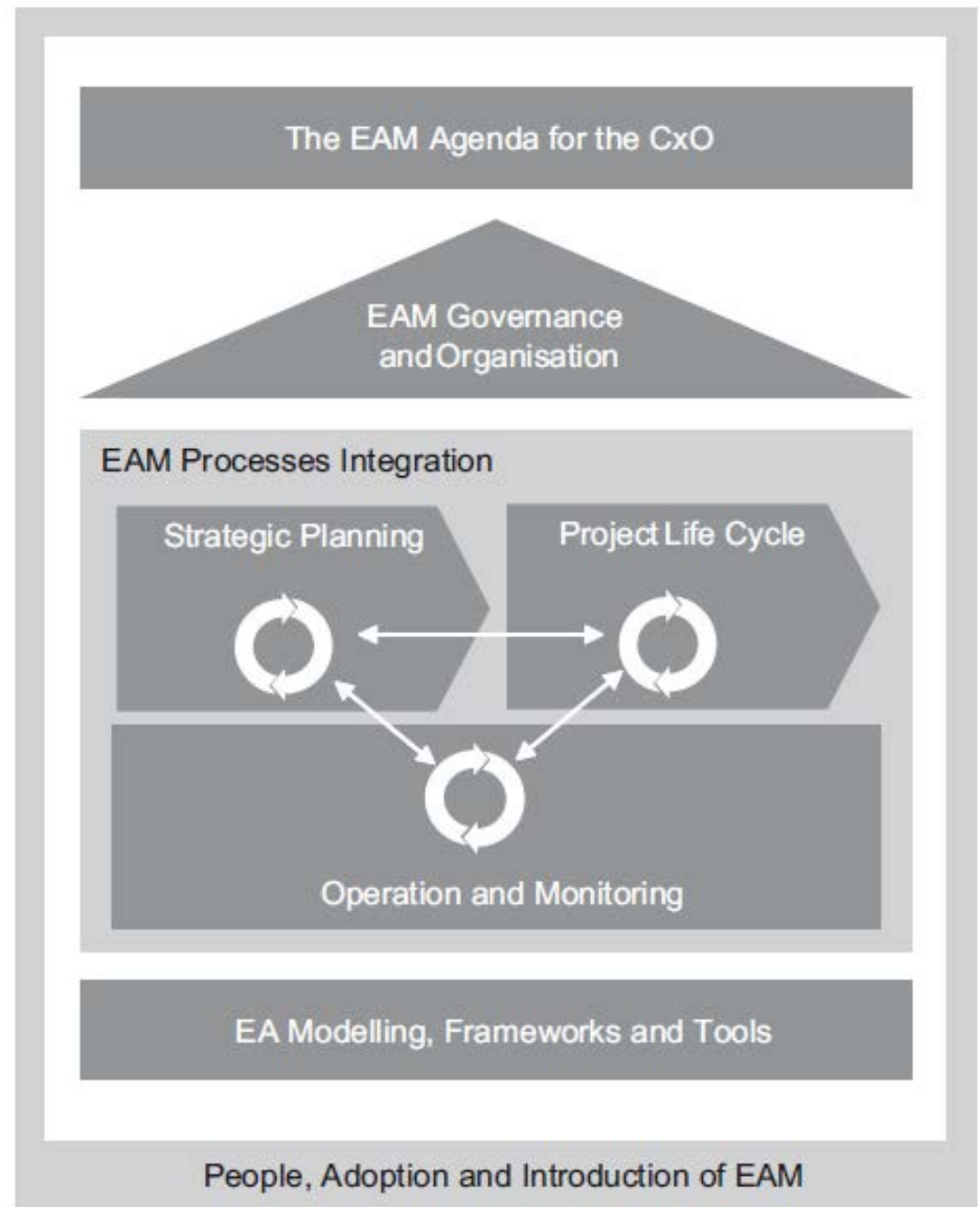
Gartner Hype Cycle 2013



Gartner Hype Cycle 2015

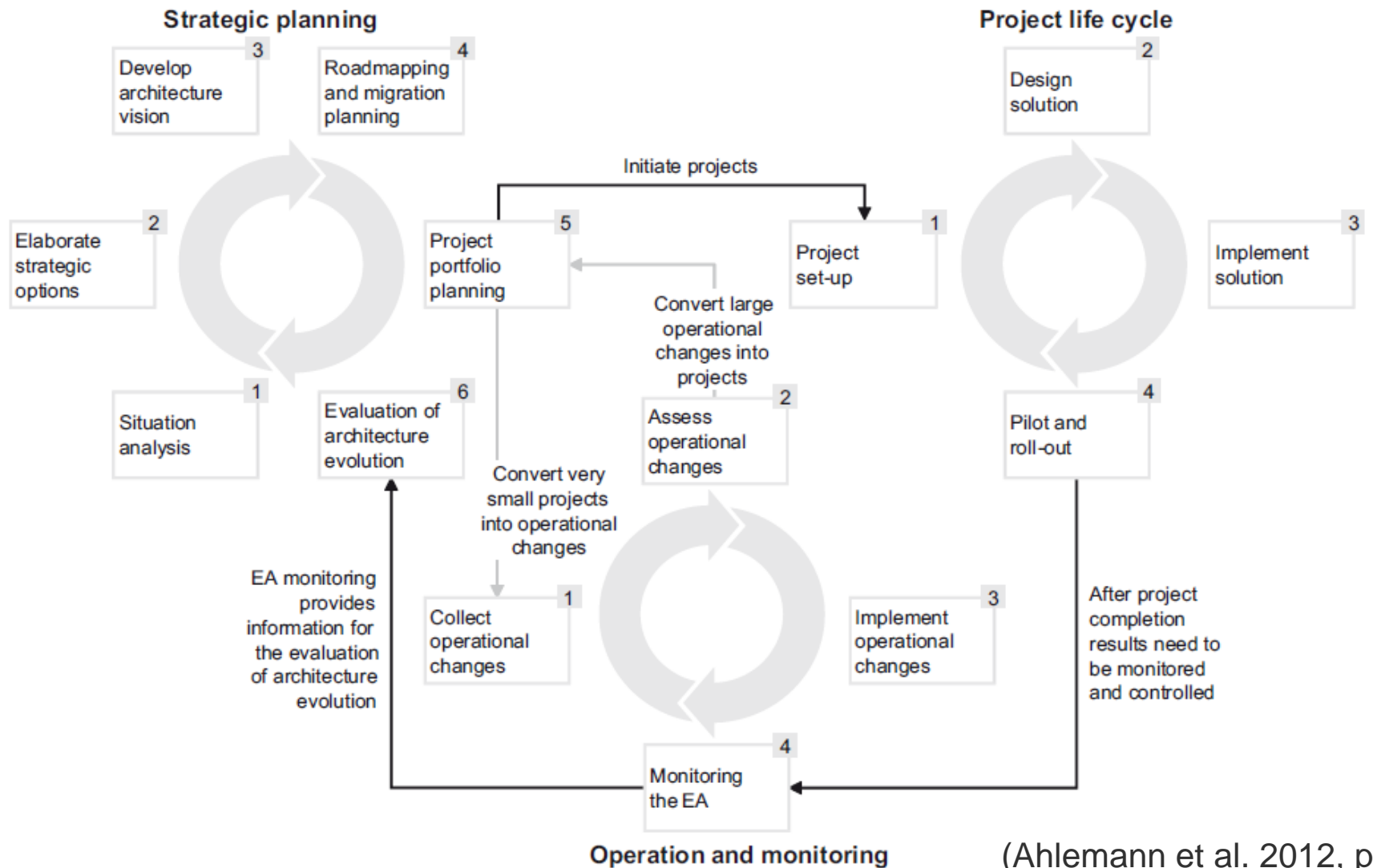


EAM Building Blocks



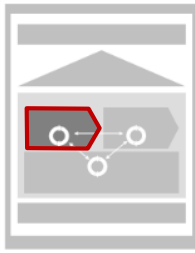
(Ahlemann et al. 2012, p. 42)

EAM Processes/Projects Integration



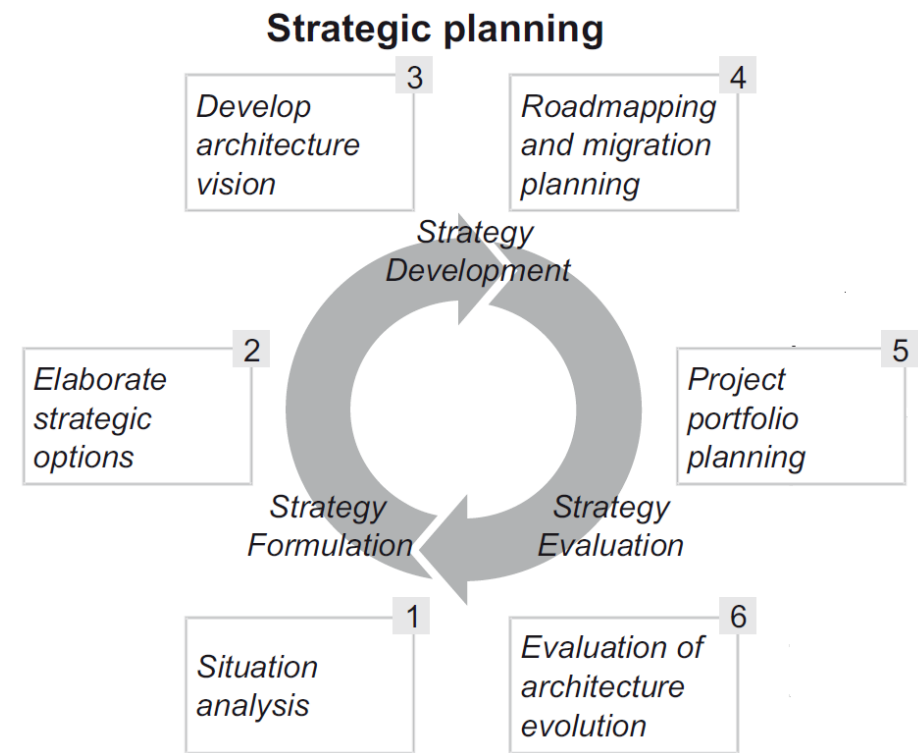
(Ahlemann et al. 2012, p. 45)





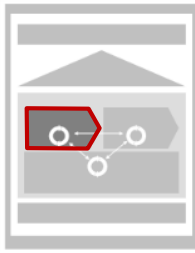
Embedding EAM into Strategic Planning

- Most projects either directly alter or are affected by the enterprise architecture
- Strategic planning can bring about initiatives for the development of EA.
- All other strategic initiatives must be
 - ◆ documented in the EA model and
 - ◆ analysed in terms of their impact on the EA.
- Strategic planning processes therefore need to be complemented by EAM practices, such as EA analysis or EA documentation

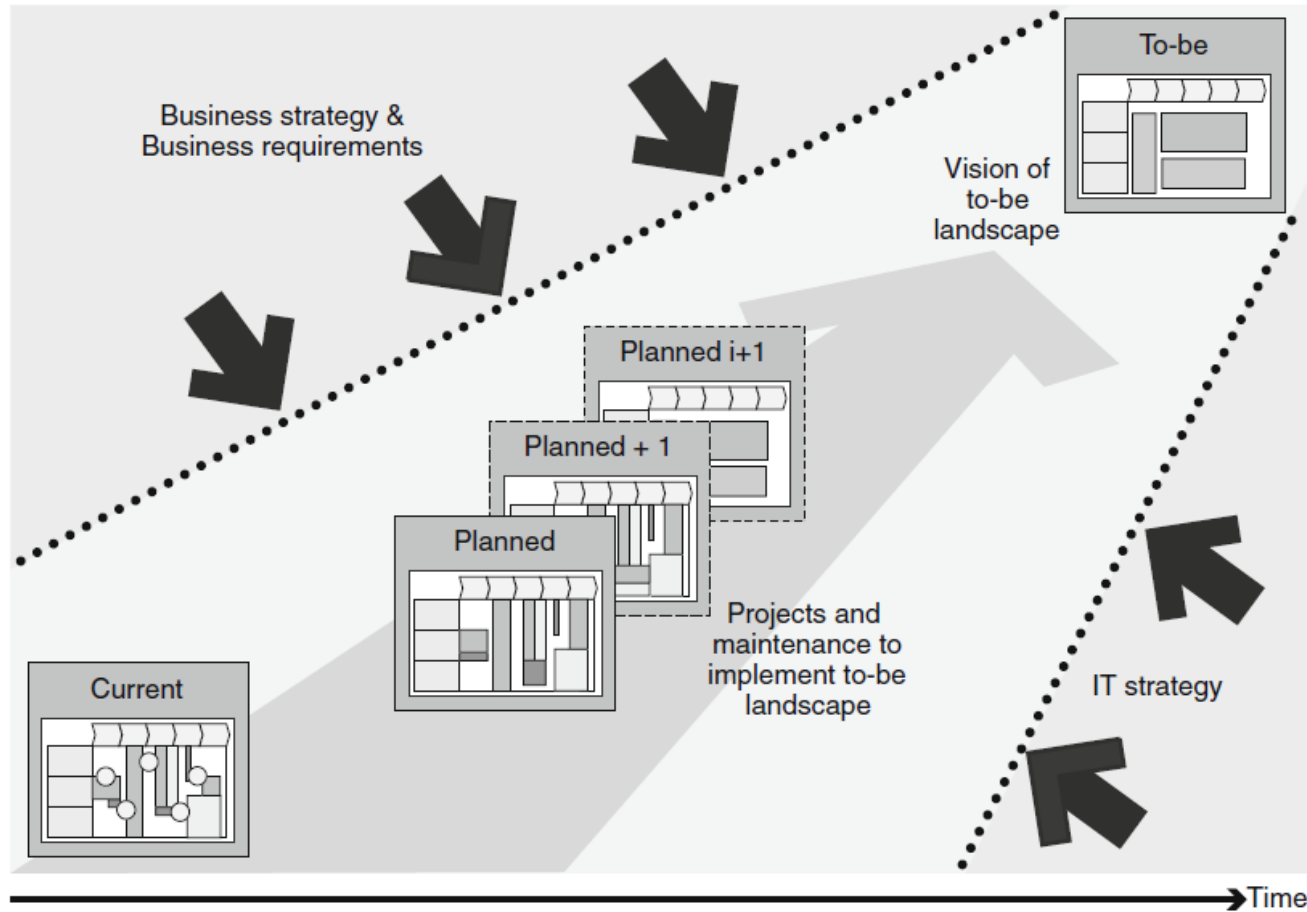


(Ahlemann et al. 2012, p. 44f)



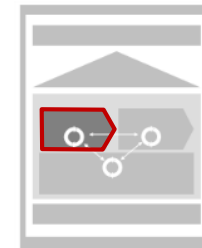


Projects Change the Enterprise Architecture

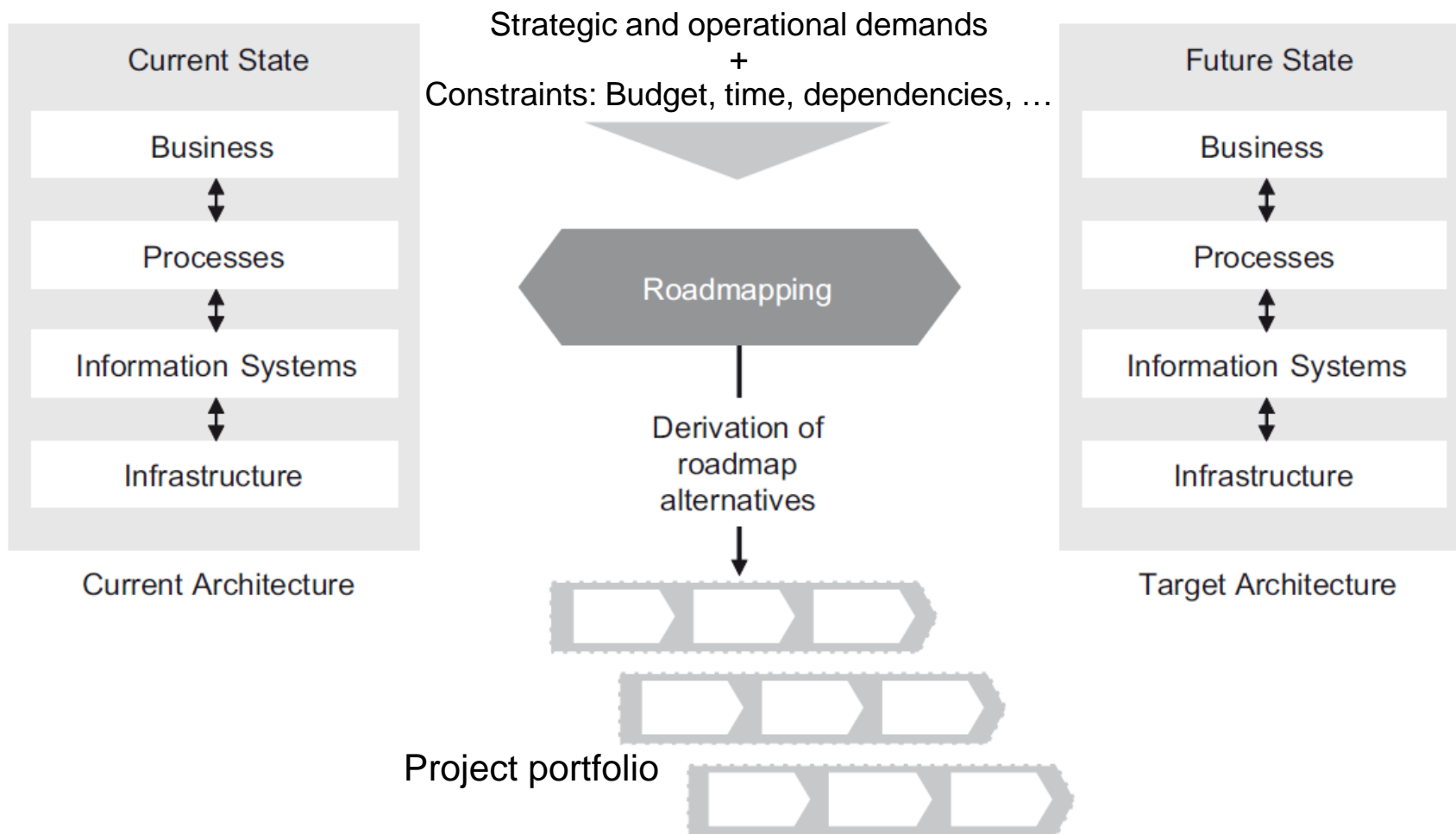


(Hanschke 2010, p. 165)



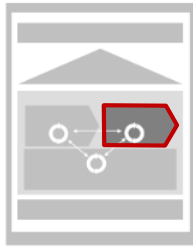


Roadmapping: Migration Path from As-is to Target State



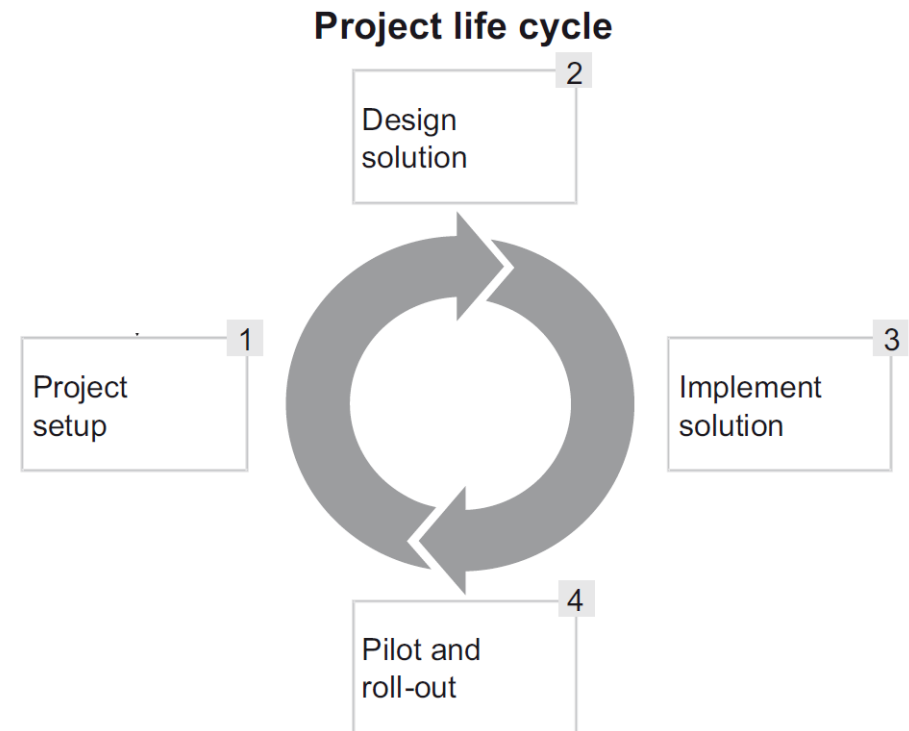
(Ahlemann et al. 2012, p. 130)





Embedding EAM in the Project Live Cycle

- Strategic objectives are mostly realised in the form of projects.
- If there is no constant monitoring of projects and EA-relevant decision-making during project execution, the project's outcome might not align with the intended target architecture.

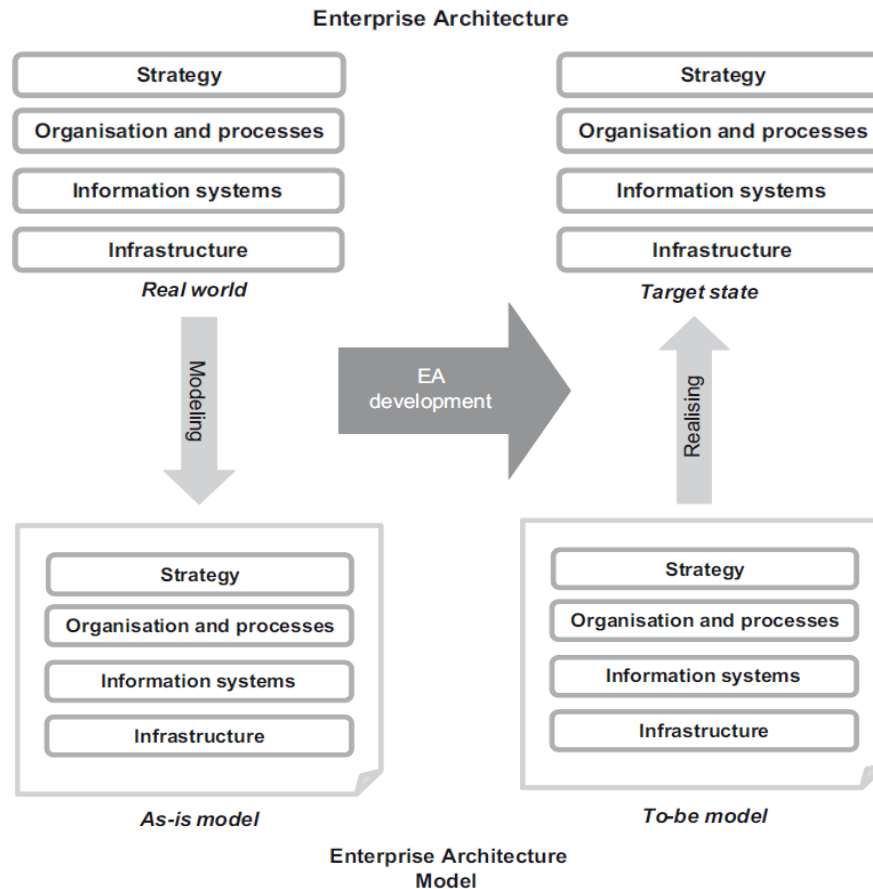


(Ahlemann et al. 2012, p. 46f)

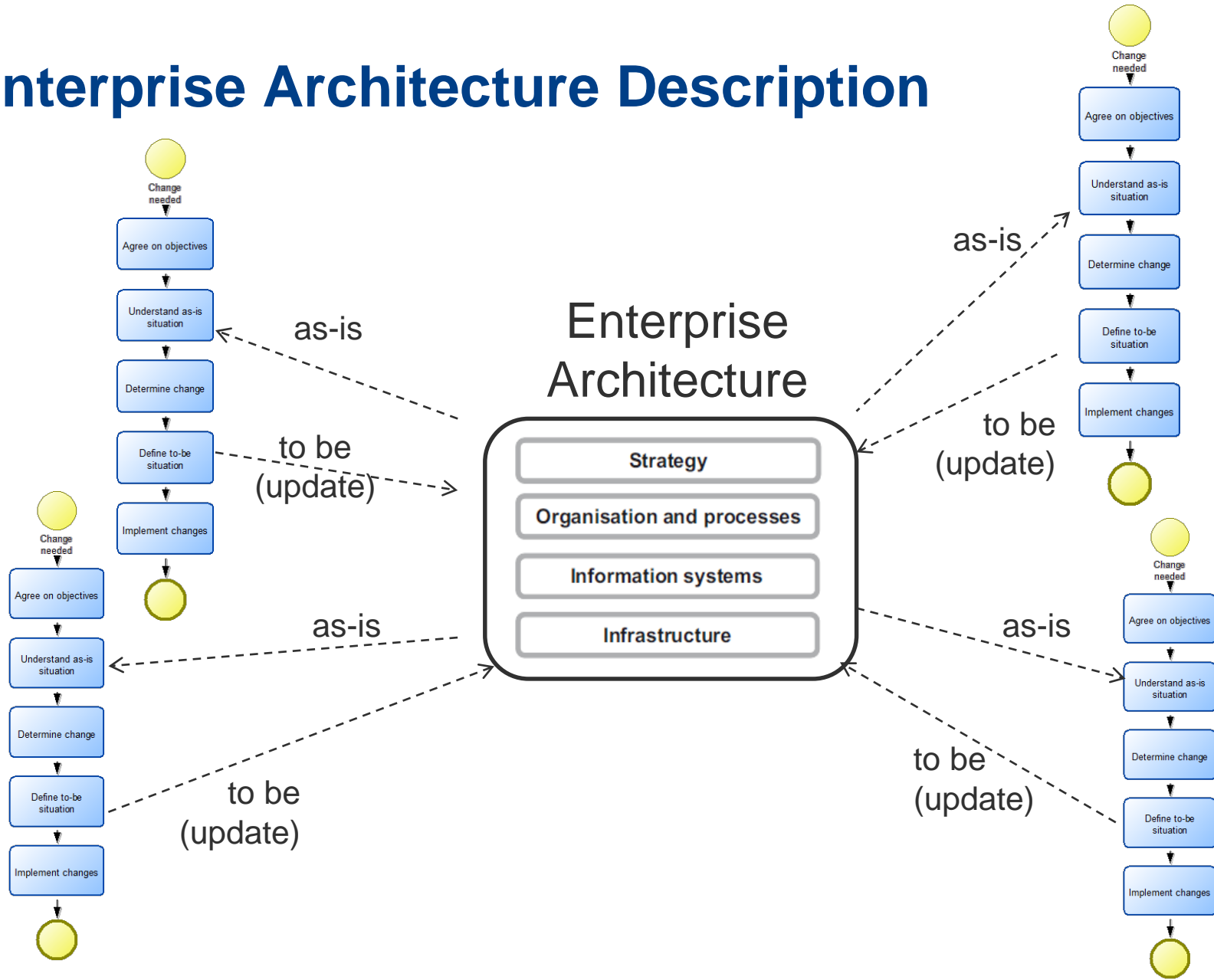
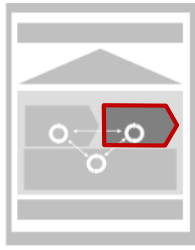


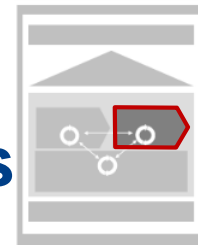
Managing Change

- Change the model before you change the object!

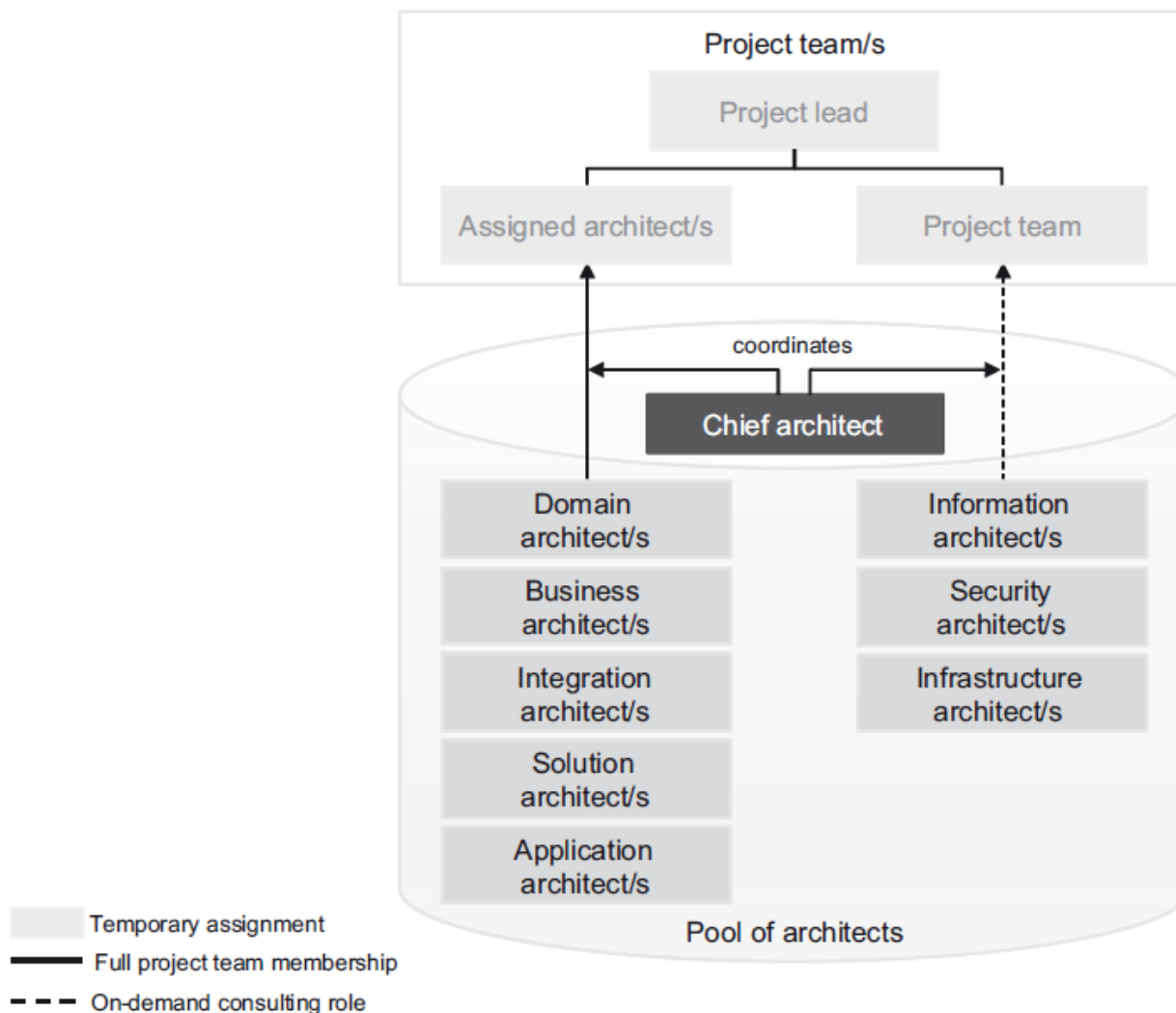


Enterprise Architecture Description



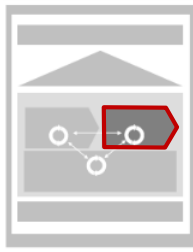


Assignment of Architectural Roles to Project Teams

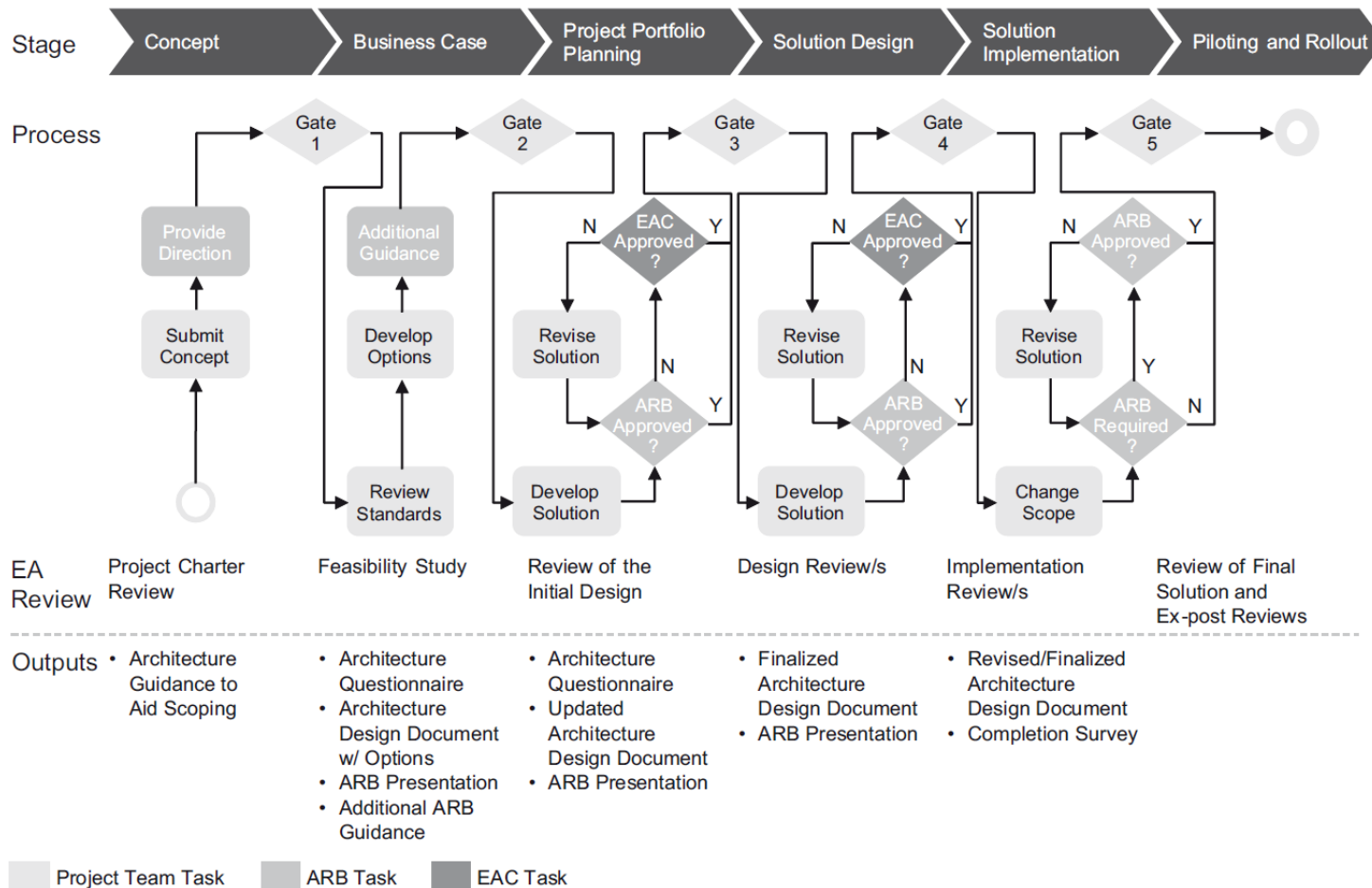


(Ahlemann et al. 2012, p.151)

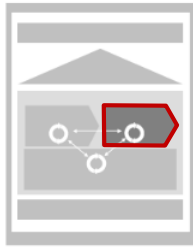




EA reviews in the project life cycle



(Ahlemann et al. 2012, p.157)



Assessing projects from an EAM perspective

1. Project charter review

Does the project align with the EA strategy?

2. Feasibility study

Is the project feasible in terms of architecture?

3. Review the initial concept

Does the initial solution architecture fit with the EA strategy?

4. Design review(s)

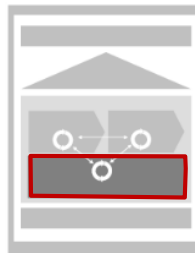
Does the (detailed) design fit with the EA strategy, standards and principles?

5. Implementaiton review(s)

Is the solution evolving as planned and in conformance with the EA strategy?

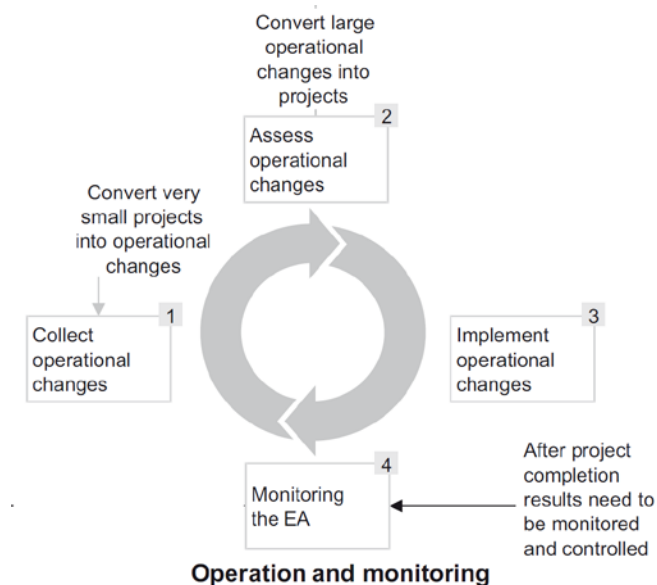
6. Review of the final solution and roll-out plans

Are there any concerns abot the final solution from an EA perspective?



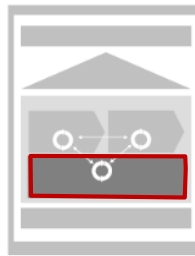
Embedding EAM into Operations and Monitoring

- Projects are the vehicle for large EA changes
- Small changes are handled during routine EA operations.
- Operations and monitoring establishes procedures for the efficient handling of small changes in order to counter the risks that changes ...
 - ... affect the functionality of applications, the topology of the network infrastructure, or the control flow of a business process.
 - ... are in conflict with EA guidelines or cause unforeseen side effects.
 - ... may not be documented properly, and future decision-making might therefore not be based upon complete information.



(Ahlemann et al. 2012, p. 47)



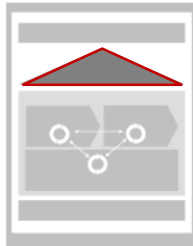


Frameworks, Modelling and Tools / People, Adoption and Introduction of EAM

- Frameworks comprise guidelines, procedural models and methodologies for the EA's structured development.
 - ◆ Software tools have the potential to lift these activities to a new productivity level.
- EAM's impact is also heavily influenced by 'soft factors' resulting from the social sphere in which EAM is applied.
 - ◆ Individual resistance, incentives and supportive stakeholders therefore all play an important role.

(Ahlemann et al. 2012, p. 48f)



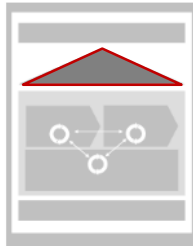


EAM Governance and Organisation

- EAM governance and organisation deal with the manner in which EAM is institutionalised in an organisation.
 - ◆ The right **governance** ensures that good decisions are made at the right time and in the right way
 - ◆ The right **organisation** structure is key to effective EAM execution: Having the right people, with the right skills, in the right roles doing the right things in a correctly empowered way.
- Balance local autonomy and global coordination

(Ahlemann et al. 2012, p. 42f)



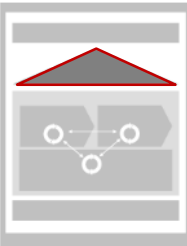


EAM Governance

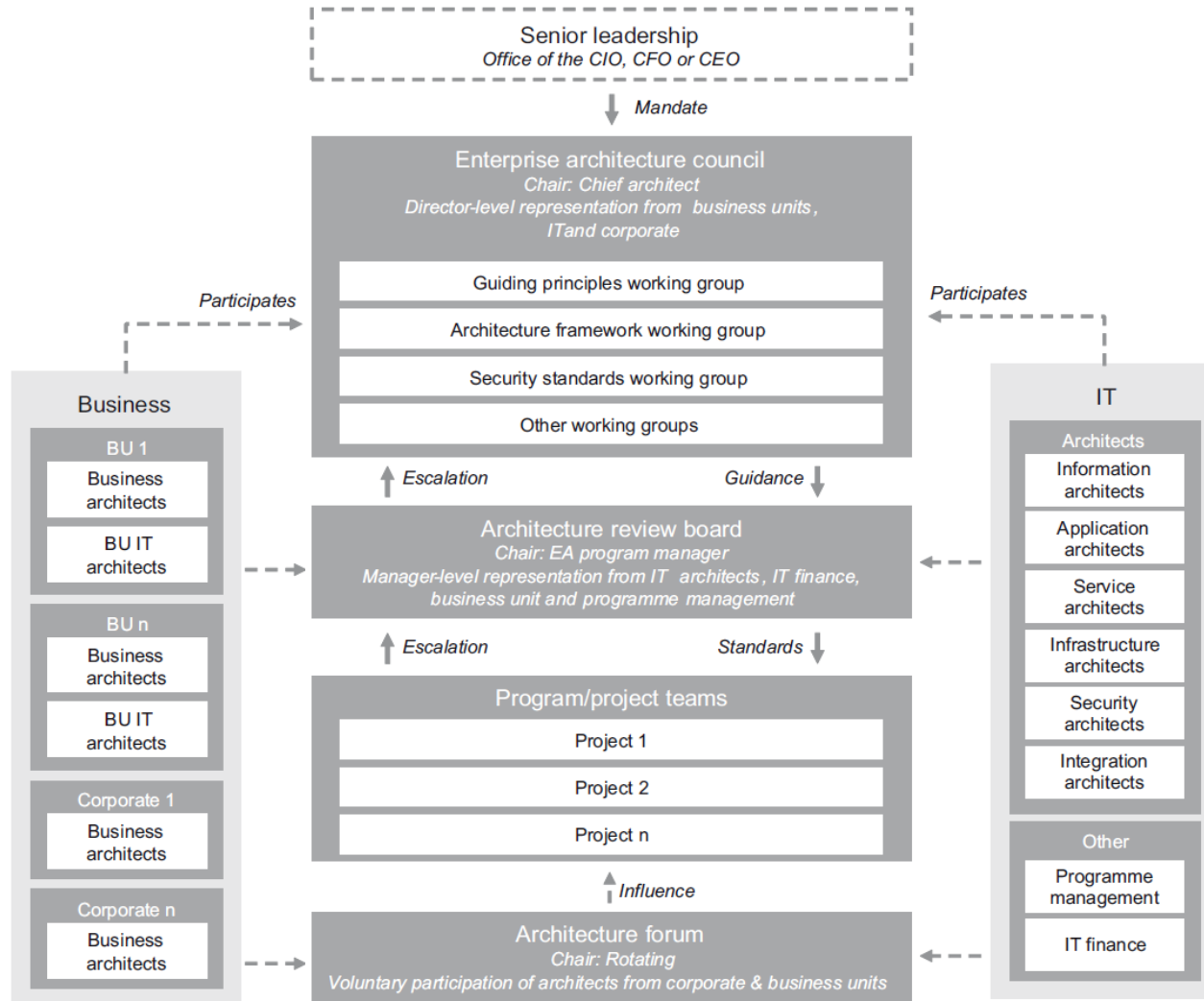
- EAM governance covers:
 - ◆ the definition and operation of organisational bodies, roles and committees
 - ◆ the specification of their tasks, responsibilities and decision rights,
 - ◆ the establishment of guidelines, standards and references to ensure that the right things are done at the right time,
 - ◆ integration of EAM within project life cycles and other organisational processes and entities to ensure timely and effective decision-making

(Ahlemann et al. 2012, p. 91)



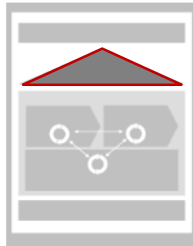


A possible Architecture Governance Model



(Ahlemann et al. 2012, p. 92)





Four Types of EAM Organisation Models

■ Centralised

- ◆ appropriate for very centralised organisations in which most of the IT services are performed from a central unit or location.

■ Decentralised

- ◆ appropriate for organisations that operate largely autonomous divisions, business units or territories.

■ Centre of Excellence (CoE)

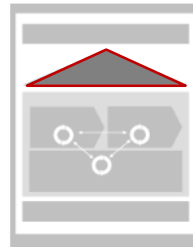
- ◆ also known as the competency centre model
- ◆ resources are grouped together in areas of specialisation, offered as a shared service to other organisational entities.

■ hybrid or federated

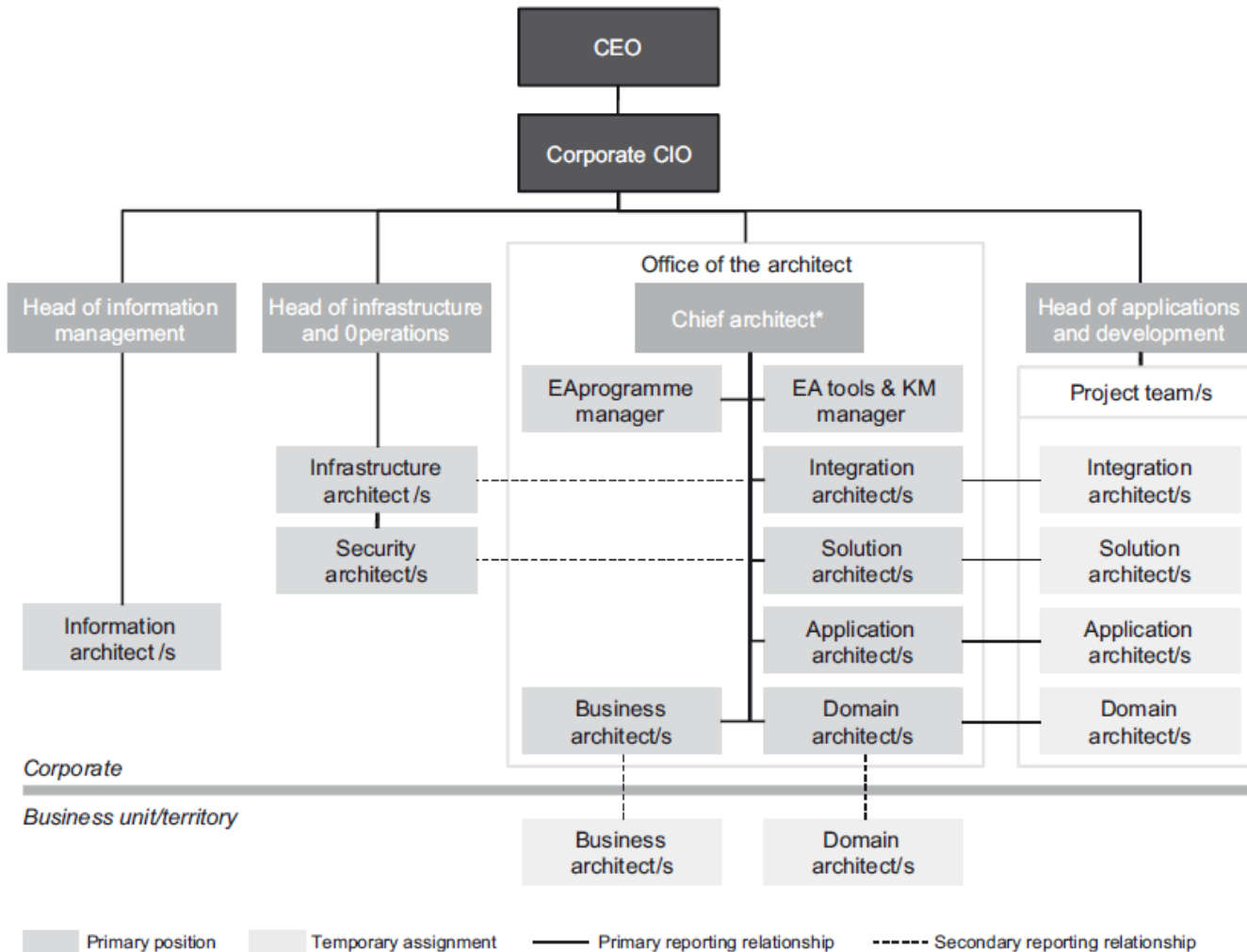
- ◆ combination of the decentralised model and the centres of excellence (CoE) model

(Ahlemann et al. 2012, p. 83)



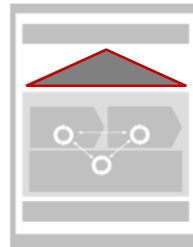


Centralised EAM organisation model

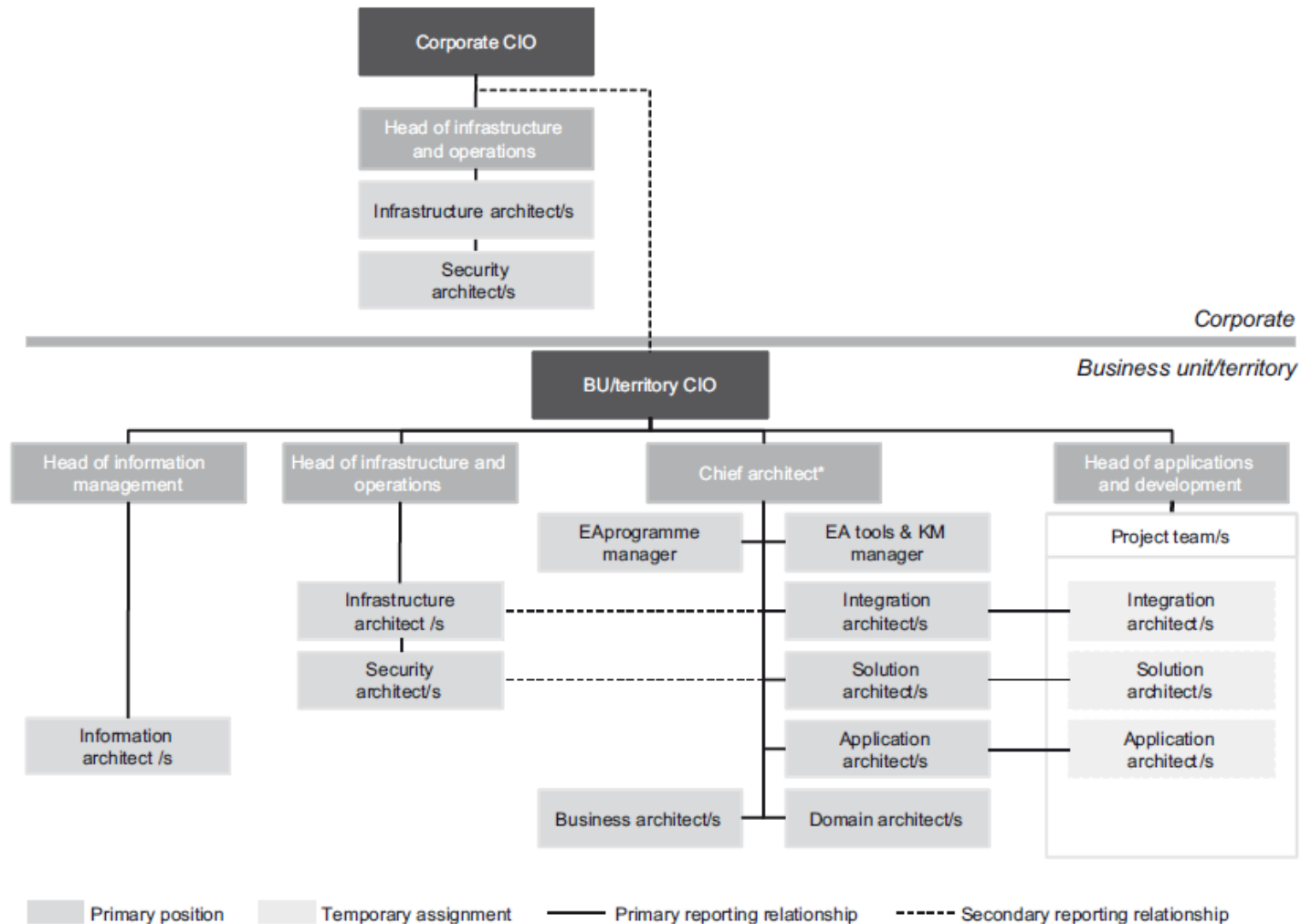


(Ahlemann et al. 2012, p. 102)





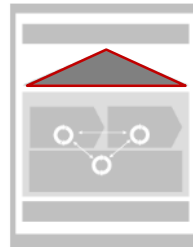
Decentralised EAM organisation model



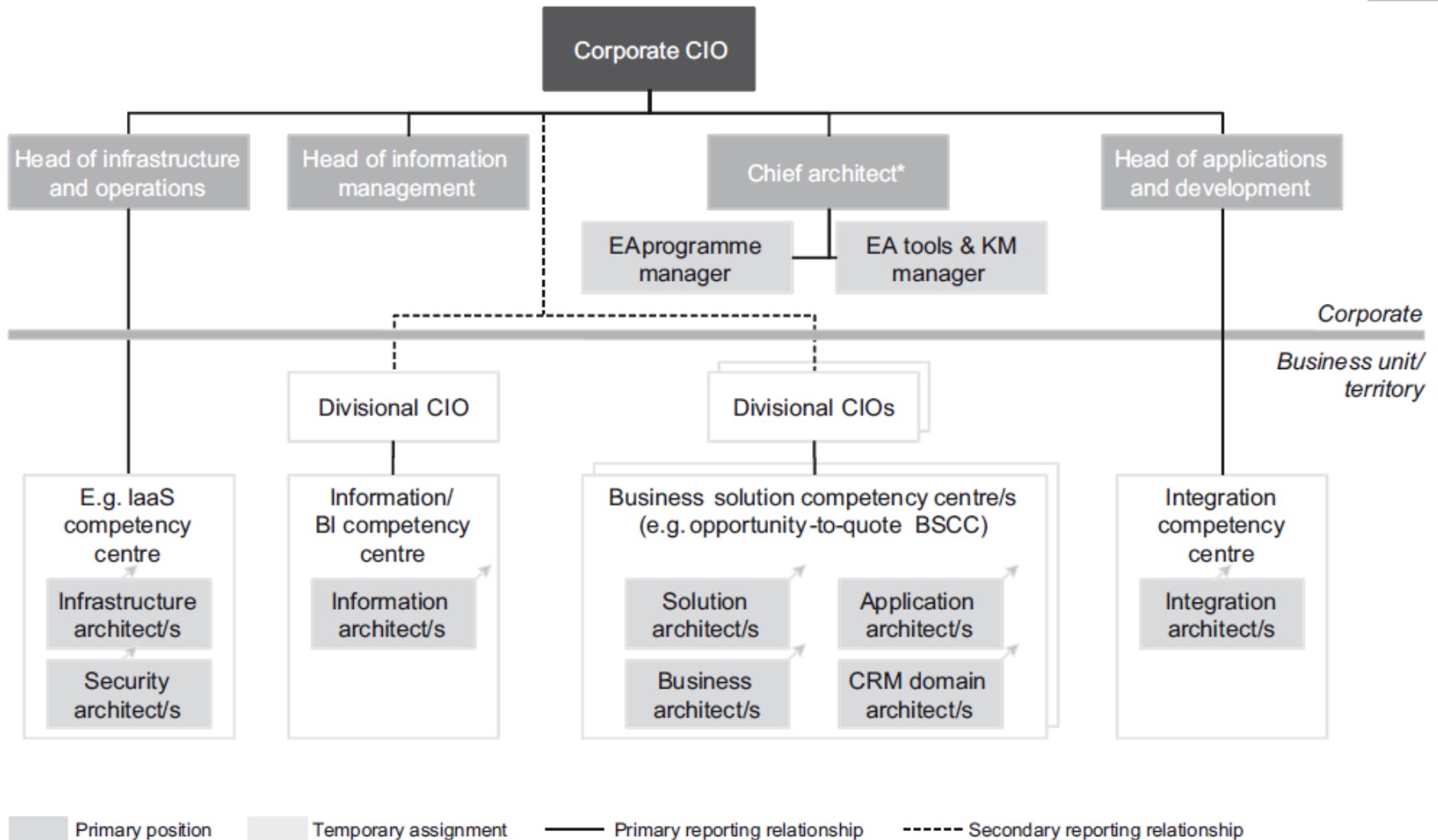
* In some instances chief architect may report to other top-level executive e.g. BU head

(Ahlemann et al. 2012, p. 1037)



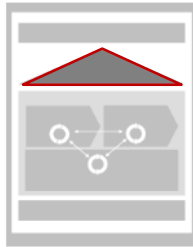


Centres of excellence (CoE) model



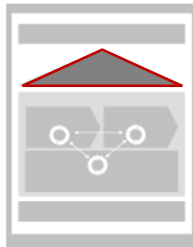
(Ahlemann et al. 2012, p. 104)





Enterprise-specific Organisation and Governance

- The previous slides showed some possible governance and organisation models.
- **BUT:** There is no one solution that fits all firms.
- Each organisation is different, with different cultures, decision styles and objectives.
- An effective EAM governance and organisation structure must therefore be tailored to every company's unique needs



Two Unhelpful Extremes

- You need to **avoid** two unhelpful extremes when you establish EAM practices
 - ◆ The first is **implementing minimal EAM**; in other words, dabbling in EAM without a real commitment. This approach will at best produce sporadic and inconsistent results.
 - ◆ At the other extreme, EAM organisations can become **self-serving** and lose sight of their true purpose, namely to deliver business value. In this case, EAM organisations become useless ivory towers.

(Ahlemann et al. 2012, p. 85)

