Chapter X
Enterprise Architecture Management and its Role in IT Governance and IT Investment Planning

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ABSTRACT

A comprehensive enterprise architecture management has strategic and operative aspects. Strategic tasks cover the identification of appropriate fields of activity for information technology (IT) investments in accordance with business strategy and portfolio management. Enterprise architecture management is cross-linked with other IT management processes and delivers the necessary information for a sustainable governance. The continuous analysis of the IT landscape, the deduction of measures for optimization and its controlling also belong to the tasks of architecture management. Standards for development and infrastructures are made, e.g. reference architectures and a "book of standards", whose implementation is overseen by solution architects throughout the operative architecture management.

INTRODUCTION

In many companies the role of architecture management amounts to nothing more than drawing up plans of the actual IT landscape and putting them at the disposal of target groups like IT management, project leaders, or IT steering committees. Sometimes there is also the role of a project- or solution architect, who designs appropriate architecture concepts for single projects. Thus, architecture management concentrates on the modelling of the actual status and, through project support, on the accompanying of change processes evolving from the business.

Yet, are there no other big opportunities for a more comprehensive version of architecture management?

- Could the actual model not serve as the basis for a target-oriented evaluation with which weaknesses in the grown IT landscape can be identified? (s. section 5.2, Figure 8)
- Could this as-is model not also serve a better controlling of a company´s IT investments? (s. section 5.2, Figure 9)
- Could there be standards and guidelines for transformation processes evolving from the business which guarantee an efficient development, maintanance, and safe operations? (s. section 5.3.1)
- Finally: is it not possible to cross-link the work of solution architects with planning tasks more tightly? (s. section 5.4)

By dealing with these questions this chapter tries to show approaches for the development of a more comprehensive enterprise architecture management

BACKGROUND

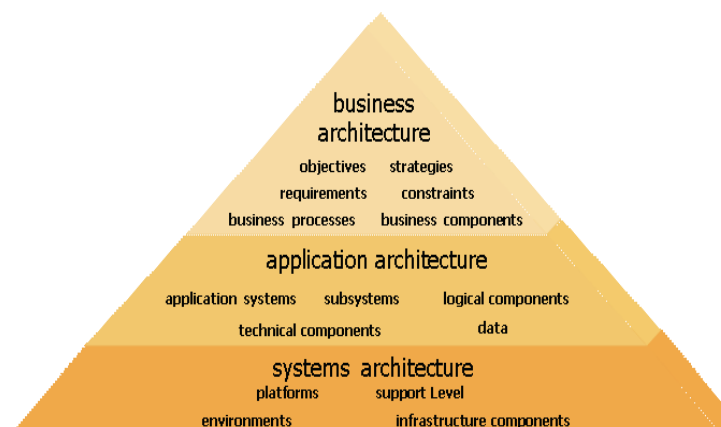## Enterprise Architecture Management

Enterprise architecture (see Figure 1) is a structured and coordinated collection of plans for the design of the IT-landscape of a company,

- Which represent in various details and views,
- Focused on special groups of interest (e.g. managers, planners, clients, designers)
- Different aspects of IT-systems (e.g. data, functions, interfaces, platforms, networks)
- And their embedding within the system (e.g. goals, strategies, business processes)
- In past, present, and future specifications (Niemann, 2006).

Enterprise architecture management combines all those processes, methods, tools, and responsibilities which are necessary to make things work, to ensure that IT-systems do just what they must do – cost-efficient, smoothly, and elegantly. Simply said: architecture management is a process resulting in enterprise architecture.

Enterprise architecture management is the instrument with which to run the household: to cul-

Figure 1. Enterprise architecture

business architecture
objectives   strategies
requirements   constraints
business processes   business components

application architecture
application systems   subsystems   logical components
technical components   data

systems architecture
platforms   support Level
environments   infrastructure components

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