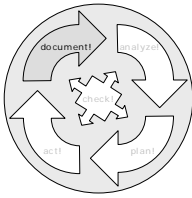


4

Documentation: Structuring Enterprise Architecture

*How do I know, what I think,
before I hear, what I say.*



The classic definition of management is based on the assumption that things can be moved by systematic action, by a controlled circuit of planning, organization, control and navigation. As we are all aware, this presupposes information. How are we to plan, organize, control and, above all, navigate if we do not know where we are and where we would like to go? Any form of management is based on information, irrespective of whether it is a matter of our sales information system that enables us to direct sales activities and product development or our business intelligence suite that gives us an overview of all of the relevant indicators. If we would like to achieve a state in which things simply work, then we will have to actively manage development. This cannot be done in the dark.

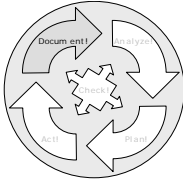
EA is the CIO's management information system.

As trivial as these observations may sound, one still often encounters a lack of the transparency that is necessary for the intelligent management of complex (and expensive) development and operational processes in the area of IT. Points of impact and dependencies are not transparent and are not detected on time. Weaknesses remain concealed and potential is left unexploited. Enterprise architecture (EA) can help here as the management information system that is an indispensable tool for the CIO. It is the place of convergence for the relevant information, including information about strategy, business, application systems, infrastructure components, and projects.

In the present chapter, we will concern ourselves with the issue of what an EA model is to look like, what information it is to contain, how detailed its structure is to be and what we will need to form it into a real foundation for lastingly effective IT governance and professional IT management. How do we develop and document business architecture? What terms do we use to describe software architecture? What are the elements of systems architecture? How does one administer EA? How are we

to understand the relationships between all of these factors? How can we evaluate these relationships?

4.1



Anatomy of an Enterprise Architecture Model

There are many approaches to structuring EA models. These essentially distinguish themselves in terms of the number of architectural levels they involve, the demarcation of these levels and their granularity. I will proceed according to the keep-it-simple principle and make use of a generalized and simplified structure. While there will be ample occasion for refinement, let us first concentrate on the essential elements that are relevant to decision making and management in the context of EA.

The basic structure of EA can be represented by three main levels. These correspond to the levels shown in the EA pyramid and may be restructured as necessary:

- Business architecture
- Software architecture
- Systems architecture

Figure 4-1 below offers a representation of the three main levels with their respective elements: