An Overview of the EA3 Cube

About this Document:

- This document deals Scott A. Bernard's introduction to Enterprise Architecture.
- This document is based on the first chapter of Scott A. Bernard's book "An Introduction to Enterprise Architecture EA3" second edition.
- The EA3 framework and how it is designed.
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2 What is Enterprise Architecture

Enterprise Architecture (EA) can be viewed as \( EA = \text{Business} + \text{Strategy} + \text{Technology} \) in a single framework (and paradigm).

EA is however more than technology planning since it integrates the three elements of Business, Technology and Technology and tries to combine them to a framework the decision makers in the organization can make use of to empower the organization by better decision making.

2.1 EA as a Management Program

Enterprise Architecture is both a management program and a documentation method. The method will give the management an overview of strategic direction, business services, information flow, and resource utilization.

The EA framework EA3 and the concept of EA is not only focusing on IT but can be applied on various other fields of interest. In the book IT is the dominant focus.

2.2 The Management Program

Management has to be understood as an integrated approach that consist of many different forms of management techniques and approaches and these can be aligned with EA or better understood. In that way EA is also a way to create a common understand of the Enterprise and its architecture.

Enterprise Architecture can be made use to identify gaps that limits the agility of the organization not to mention identify gaps that in one way or the other limits the performance of the organization; thereto can opportunities to implement Information Technology to bridge the gaps.

From a strategic management point of view then Enterprise Architecture can be applied since it supports both the macro level of the organization and the micro level of the organization.

2.2.1 EA and other Management Initiatives

EA can be connected to strategic management, IT security, workforce planning, program management and capital planning. All in all this can be considered the integrated governance structure.

2.2.2 Standardization of processes and policies

The Enterprise Architecture approach will if applied to enterprise assist the decision makers with creating and enforcing policies. In addition to this the EA approach will enable the decision maskers with articulating policies for identifying strategic and operational requirements, determining the
strategic alignment of activities and resources, developing enterprise-wide business and technology resources, prioritizing the funding of programs and projects, overseeing the management of programs and projects, identifying performance metrics for programs and projects, identifying and enforcing standards and configuration management (Bernard 2005, p.35).

The alignment of resources will be scrutinized by the “AS-IS” and “TO-BE” documents to investigate and validate if the projects (IT as well as Business) supports the strategic goals.

2.2.3 Resource Deployment
When the “AS – IS” phase has been investigated will the IT related initiatives be more visible to the decision makers. This means that the purpose (the advantages and disadvantages) and the strategic and economic consequences can be communicated, understood and dealt with.

2.2.4 The Coherent View
When the various forms of management are combined into the same framework then it is possible for the management of the enterprise to understand how a new strategy, technology or financing will have an impact on the over all enterprise.

2.3 The EA3 Cube Framework
The framework is also known as an approach. The framework serves as a way to document the
enterprise from various levels of detail. The approach can be split into two different views. The first view is known as the “AS – IS” which covers how the enterprise architecture is in the moment. The other view is known as “TO-BE” which serves as the future view of the enterprise.

The framework is build around the cube and consist of individual modules which are linked and have various functions.

Between the “AS-IS” and the “TO-BE” should be the “Architecture Management and Transition Plan” dealing with the plan for moving the architecture to the new “TO-BE” situation.

When applying the EA Framework EA3 (the cube) then there are six steps which needs to be a part of the framework and therefore necessary to complete (Bernard 2005, p.35):

1. An EA Documentation framework
2. An Implementation Methodology that supports the creations of the current and the future view of the architecture
3. Current view of the enterprise architecture
4. The future view of the enterprise architecture
5. The articulation of an EA Management plan that enables the transformation from the “AS-IS” (current view) to “TO-BE” (future view)
6. That supports the issues of elements that can be reused through out the architecture that is known as a concept called “threads” e.g., workforce, security and standards.

![Drawing 2: The EA3 Cube](image)

The above mentioned drawing is not fully representable for the framework. The framework takes its
focus on the cube and on the artifacts, segments and levels. Thereto are components and threads also handled in the segment.

2.3.1 Artifacts
Artifacts are the documentation of the components. This included components at each level and it includes the threads.

2.3.2 Components
The concept of the components are defined as changeable goals, resources, processes and standards. These can be enterprise wide or for that matter solely focus on a single line of business.

The components can be identified as two different types. The first one is the cross cutting and the second one is the vertical component.

2.3.2.1 The Vertical Components
The vertical component is a goal, resource, standard or process that only serves one “line of business”.

Drawing 3: The EA3 Cube Framework!
2.3.2.2 The Horizontal Components

The horizontal component (also known as the cross cutting) is defined as a goal, resource, standard or process that serves several “lines of business”.

2.3.3 Segments

A segment is defined by Bernard as being a business activity and with allocated resources. The segments go vertical of the enterprise architecture.

2.3.4 Line of Business

A line of business is defined as a division or a way the organization produce a product or service that the customers can make use of.
3 Sources