

ARCHITECTURE VISION MAPPING BETWEEN TOGAF AND ZACHMAN ARCHITECTURE FRAMEWORKS

Isov Metin, Grigorova Katalina

University of Ruse, Bulgaria

Abstract

Zachman and TOGAF are two of the most common enterprise architectures. To some extent they complete each other. They are developed with different perspectives to enterprise architecture (EA) modeling. The article discusses the methodologies for mapping the Zachman architecture's business vision and TOGAF's architecture vision. The mapping will enable the enterprise architect more easily to acquire business requirements from existing EA.

Захмана и TOGAF два наиболее распространенных методов построения архитектуры предприятия. В какой-то степени они дополняют друг друга. Они представляют различные точки зрения на моделирование архитектуры предприятия (АП). В статье рассмотрены методики для сопоставления архитектуры Захмана и TOGAF, которое поможет бизнес архитектору легче выводить бизнес-требования из существующих АП.

Without well defined and IT supported business architecture it is almost impossible for the enterprises to adapt on the changing environment. A big number of methodologies were created to support different enterprise aspects. The recent business history shows undoubtedly that what business needs is covered by so called Enterprise Architecture EA[1]. EA framework (EAF) is a standardized set of components and procedures for developing a wide range of architectures. It helps in defining the current architecture, target architecture and the transformation path between them. TOGAF is one of the most commonly used enterprise architecture frameworks today[2]. Beside it, there are a few dozen of similar frameworks – all developed by some organizations or government agencies. The businesses don't have any options except implementing the best suited and the most promising enterprise architecture framework in their architectural projects. Practically, that restricts the possible ways on architecture teams to the usage of only four widespread architecture development methodologies, which find broad usage in different business domains. They are: Zachman EAF, TOGAF, Federal Enterprise Architecture and Gartner's EA framework[1]. All of them are different in their architecture development process. For example Zachman EAF is not a complex to develop, for some researches it is even not an architecture framework. It is just a taxonomy scheme for architecture artifacts. Anyway, even that it doesn't offer procedural way for architecture development it has proven its benefits and is widespread today. While Zachman framework is better suited for general classified view on corporate architectures, TOGAF is more specific and consist of a lot of procedures for detailed development of architecture components. In that sense they can complement each other, this poses a lot of compatibility problems related to different meaning and scope of architecture artifacts of the both frameworks.

The main subject of the article is the particular integration between TOGAF and Zachman EA. TOGAF indicates that in the near future it will be the most common enterprise architecture framework, but one obstacle on its way of commonality is the lack of compliance between TOGAF and the other architecture methodologies. The most common EAF after TOGAF is the Zachman EAF, both of them hold 90 percent of EAF market, so some mapping between their development phases will provide improvements in EA landscape. It is possible to create an architectural continuum for Zachman deliverables in order to use them in the Architecture Vision development and implement them in ADM of TOGAF. In the article the both architectures are observed, some methods and a relevant matrix for actual mapping are proposed. The first three rows of Zachman framework are quite proper for use in developing of Architecture Vision deliverables of TOGAF[2]. The other rows of Zachman framework can also be mapped to the relevant phases of ADM, but the most logical way is only to map Zachman architecture's business vision to the first phase of TOGAF. This will guarantee that an agreement between business and IT stakeholders will be the most accurate and the real architectural models will be developed in TOGAF architectural framework, which is better suited for procedural development of enterprise architectures. Layered mapping between the rows of Zachman Framework and phase A of TOGAF will ease the adaptation of series of architectural artifacts, among which are the architecture requirements, architecture policies and business motivations. To achieve the best results, in that mapping it is required to know the essence of both EAF. Due to its complexity and direct relevance to actual architecture; Architecture Vision development process of TOGAF deserves special attention. The mapping of the both architecture visions based on mapping rules and some domain specific analyses, will help in the development of the most current business vision embodied in Architecture Vision deliverable of TOGAF. If an agreement between both parties is met it will give a clear sign to the enterprise architects and designers to continue on with ADM phases, otherwise, the project will be destined to be a hard and business impeding. Mapping of Zachman architecture view to TOGAF's Architecture Vision will provide another level of compatibility between the both, which will ease the job of enterprise architects in developing the enterprise architecture being between business and IT side of the enterprise. More, it will provide a way for standardization of TOGAF as an architecture framework which can use the architecture deliverables of Zachman EAF.

References:

1. Lankhorst Marc , Enterprise Architecture at Work, Springer, 2009
2. The Open Group web site: <http://www.opengroup.org/>