Chapter IV
Maturity Model Based on Quality Concept of Enterprise Information Architecture (EIA)

Hong Sik Kim
Korea Polytechnique University, Korea

Sungwook Moon
ComponentBasis, Co., Ltd., Korea

ABSTRACT

Quite a good amount of time has been spent seeking appropriate solutions to handle the giant information technology expenditure not only in government sectors but also in private sectors all over the world. Beginning with OMB, which substantially leads the U.S. governmental efforts in ITA/EA area, seems to be on the right path using process improvement concept in its ITA/EA maturity model (OMB, 2007_2). EA community still finds it difficult to introduce quality management concept into its business and practices. Therefore in this chapter, we would like to suggest a more practical ITA/EA maturity model based on the quality concept of enterprise information architecture (EIA), which is ROI–driven, practical and based on four-phased process improvement approach for the EA community. We hope that this approach could bring a substantial reduction in the costs and efforts in the entire ITA/EA area and provide sustainable development environment for the ITA/EA like the argument of the environmentalists.

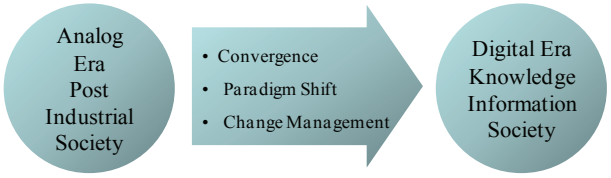
INTRODUCTION

We are faced with a number of enormous complexities in this era, which represent the so-called information society. A deluge of information would be the most proper expression to the people living on this earth. This situation is as if everything is mixed in a great bowl under the name of information society. This kind of mixing would often result in the various trials of integrating everything in that society, the appearances of new paradigms for adaptation, and another chaos and the complexity arising from large-scale transitions. Since Zachman (1987) addressed the management of the complexity of information systems using an architectural metaphor, there have been a lot of efforts to address and resolve the challenges of complexities. And these efforts have resulted in a number of architectural frameworks and methodologies. The information technology architecture (ITA) and enterprise architecture (EA) is one of the various approaches in the enterprise-wide architecture horizon to manage this modern complexity caused by a deluge of information in government sectors as well as in private sectors (Figure 1).

ITA/EA, however, became another challenge to an organization because of the difficulties in the initial adaptation, utilization, continuous evolution and evaluation of its effectiveness. So the early ITA/EA Maturity Model contributors such as OMB, GAO (United States General Accounting Office), and NASCIO (National Association of State Chief Information Officers) have introduced their ITA/EA maturity models as milestones to guide the current chaotic IT situation to more manageable future complexity (GAO, 2003; NASCIO, 2003; OMB, 2007_2). But it is also extremely difficult to evaluate the progress of the ITA/EA using these maturity models because of its huge and complicated nature, the inappropriateness of the maturity models in some architectural perspectives, and the lack of proper metrics and experts for the models (EA Shared Interest Group, 2005). Furthermore, we can't even see the clear and well-prepared definition of the ITA/EA as its concept is continuously evolving over time.

With these challenges and uncertain circumstances, the future of the ITA/EA seems to be not so promising; therefore it needs to be reinforced with more sustainable approaches and assessment frameworks. Though there may not be a silver bullet as a solution for the problems, there should be a more practical approach to assess the maturity and effectiveness of ITA/EA in order for an organization to get real benefits from its huge investment in it.

Figure 1. ITA/EA and knowledge information society



- Convergence: Capital Market Consolidation Act (2007), Bancassurance, Digital convergence
- Paradigm Shift: Plan for update law of 393 e-government implementation (2007), Sarbanes-Oxley Act (2002)
- Change Management: **ITA/EA**, TQM, Six Sigma, Process Improvement, CMMI, ITIL, COBIT

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