

Chapter 10

The Enterprise Architecture as Agent of Change for Government Enterprises

Tiko Iyamu

 <https://orcid.org/0000-0002-4949-094X>

Cape Peninsula University of Technology, South Africa

ABSTRACT

In the last three decades, two fundamental things have happened to the concept of the enterprise architecture (EA). One, the interest on EA continues to increase, which enacts popular debate and discourse at both academic and business platforms. Two, the pace of deployment within government enterprises is slow, which affects actualisation of the benefits towards service delivery. This can be attributed to confusions and misunderstandings about the concept, which manifests from the fact that the influential factors of the concept are not clear. As a result, many enterprises continue to be hesitant or dismissive about the concept. Thus, the purpose of this study was to develop a conceptual an EA framework that can be used to guide government enterprises towards transformative goal. The framework is intended to guide the fundamental components, which causes confusion about the deployment of EA as agent of change within government enterprises.

INTRODUCTION

The concept of enterprise architecture (EA) is not new, it has been adopted in many private organisations (Ross, Weill & Robertson, 2006) and government institutions and agencies for many years (Urbaczewski & Mrdalj, 2006). The views of Cabrera et

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al. (2016) are that the EA is an approach that enables and supports an organisation's competitive edge by being at the forefront of information systems and technologies (IS/IT), and fulfilling consumers' needs. Governments' reliance on IS/IT to deliver services continue to increase in both developing and developed countries. The reliance on IS/IT is enforced by the need to have better and seamless government service delivery (Olsen & Trelsgård, 2016). According to Al-Nasrawi and Ibrahim (2013), governments around the world increasingly rely on IS/IT in order to accomplish core services and functions, helping some of them to transition into what is known as e-government. Thus, to government of many countries, IS/IT offers unlimited benefits such as ease of access to various governmental services, from online to faster response time (Siddiquee & Siddiquee, 2016). Johnson, Ekstedt and Lagerstrom (2016) argued that irrespective of the level of reliance, the complexity of IS/IT in enterprises continue to increase. According to Shaanika and Iyamu (2018), some of IS/IT challenges include incompatibilities, lack of integration, and lack of scalability. As a result, some governments' enterprises invest in approaches such as the EA, to manage their IS/IT activities including e-government systems (Mohamed et al., 2012).

Since John Zachman introduced the concept of the EA over three decades ago, other frameworks have been developed (Tamm et al., 2011). This includes META Group Inc., Forester, department of defence Architecture Framework (DoDAF), the Federal EA Framework (FEAF), the Treasury EA Framework (TEAF), the open group architecture forum (TOGAF), and the Zachman framework (Lapalme et al., 2016; Urbaczewski & Mrdalj, 2006). The existence of different frameworks have helped to drive various viewpoints about the concept of EA in many organisations and government enterprises (Rouhani et al., 2015). Cameron and McMillan (2013) argue that one of the objectives of the EA is to provide governance for change, from the IS/IT perspectives. Radeke (2011) states that the role of the EA is to guide an organization's strategic goals and facilitate change within which IS/IT activities are governed and managed. Along the same line of viewpoint, Aier (2017) argues that the EA helps to maintain consistency when building, deploying, and managing complexities of IS/IT that are constantly evolving. To both private organisation and government enterprises, the EA facilitates change based on how it is defined, scoped, deployed, and managed, which manifests into its signification in an environment.

The EA promises a different approach through which government institutions and agencies can transform their activities for improved services (Hjort-Madsen & Pries-Heje, 2009). As government enterprises strive to employ EA as an agent of change, and exhume the benefits, so comes the risks and challenges (Safari, Faraji & Majidian, 2016). Some of the challenges were highlighted by Buckle et al., (2011) as follows: gap between requirements and product; unclear time of product delivery; and uncertainty around committed parties. The challenges could be caused by factors such as: how the EA was problematized by the promoters, among various groups

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