Chapter 12
An Investigative Assessment of the Role of Enterprise Architecture in Realizing E-Government Transformation

Leonidas Anthopoulos
Technological Education Institute (TEI) of Larissa, Greece

ABSTRACT

Major e-strategies around the world have been implemented for more than a decade, and they have resulted in digital public service delivery and in internal efficiency for further transformation. Most of these strategies have been or are being updated, and their current versions focus on cross-departmental service delivery and on Connected Government. Enterprise Architecture (EA) offers the ability to determine and close departmental gaps, and in this context, it can support the migration to Connected Government.

In this chapter, some important e-strategies are investigated concerning the existence and the contribution of an EA to strategic implementation and transformation. Different EAs are compared, and architectures are aligned to strategic and to transformation objectives, via Connected Government. Moreover, the necessity of the alignment of an EA to the strategic update is underlined, and an EA maturity roadmap to Connected Government is considered.

DOI: 10.4018/978-1-4666-1824-4.ch012

1. INTRODUCTION

Ambitious e-strategies have led e-Government development around the world for more than a decade. Major e-strategies share common challenges and difficulties in the delivery of online public services, and on the implementation of a friendlier, more effective, and more efficient public administration. Most of the major e-strategies have closed their initial life cycles, and after review processes, they updated their targets or kept some for further improvement. Strategic visions were updated too, while strategic missions were reconsidered before re-launching.

Most of the updated e-strategies were *incremental* (Lysons & Farrington, 2006) or followed *forward integration* (Lysons & Farrington, 2006) to define their new targets without documenting or determining the reasons of success or failures of their previous versions. They all realize that the future of e-Government concerns cross-departmental service delivery, citizen satisfaction, social inclusion, and participation; perspectives that put "openness" and "connected" at the centre of the strategic vision. With respect to "openness," Obama (US OMB, 2009) envisioned an accountable and open public administration, where all citizens have access to well organized public information. Concerning "connected," Saha (2009) described United Nations' (UN) vision for the Connected Government as a networked approach to operations and structure: *the concept of connected government is derived from the Whole-Of-Government* (WOG) *approach which is increasingly looking towards technology as a strategic tool and as an enabler for public service innovation and productivity growth*.

On the other hand, the Enterprise Architecture (EA) standardizes and aligns e-Government projects to strategic vision (Anthopoulos, 2009; FEA Group, 2005), and encodes e-Government elements in a form that can be understood by its stakeholders (for example politicians, political parties, councils, heads of departments, etc.) (Adigun & Biyela, 2003). All major e-strategies are accompanied by centrally defined EAs that can supply e-Government projects with common standards and operation principles. However, central EA has to deal with problems similar to the ones that central strategic planning faces (Anthopoulos, et al., 2007): "smooth transition" of the public Agencies from traditional procedures to e-Government, change acceptance by all target groups, and the treatment of individual, local, and peripheral needs.

Major e-Strategies seek their updated forms after more than a decade of implementation. Most of them present different review results, and are being directed mainly on citizen satisfaction and on service simplification (Fitsilis, et al., 2009), while the cross-departmental service execution is becoming a common pillar of their transformation. The demand for Business Process Reengineering (BPR) and Management (BPM) in order to align business processes to IT implementation for cross-departmental service delivery, suggests the existence of an architecture framework (Embrahim & Irani, 2005). In this context, it is questioned whether a close connection exists between the WOG approach and the availability of an architecture framework.

In this chapter the existence and the contribution of an EA to e-strategic implementation and transformation is investigated. Different EAs are compared, and architectures are aligned to strategic and to transformation objectives that relate to Connected Government. Moreover, the necessity of the alignment of an EA to the strategic update is underlined, and an EA maturity roadmap to Connected Government is considered.

This chapter is structured in four sections. In the primary section 2, various transformed e-strategies are briefly presented and compared to Connected Government vision. In the following, section 3, the main thrust of this chapter is presented according to the key findings from section 2: the existence and of an EA in all the examined e-strategies is concluded, and the particular role