

## Chapter III

# Role of Beacon Architecture in Mitigating Enterprise Architecture Challenges of the Public Sector

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### ABSTRACT

*This chapter introduces the concept of Beacon Architecture as a formalized and ordered grouping of architectural elements, describing the constituents, their order, correlation and likely evolution of the grouping; and illustrating its specific value to the public sector. The first half of the chapter builds up to the concept, the reasons behind its specific nature, and its value to enterprises, especially in the public sector. For this, the chapter is split into a number of sections that may be studied separately and that also build up to introduce Beacon Architecture. The sections may be broadly divided as concepts, historical overview, illustrative case studies in public sector transformations along with a summary of peculiar architectural challenges they face, and a cyclical pattern to Architecture Development. After introducing and elucidating on concept and constituents of Beacon Architecture, the chapter delves into its correlation with architecture concepts in currency and its role in mitigating enterprise architecture challenges illustrated earlier in the chapter, before concluding on an assessment of future trends.*

## INTRODUCTION

Whereas the concept of *Beacon Architecture* discussed here is an invention in so far as the term, its precise definition/usage and its organization into ordered constituents go, the underlying idea in generic terms is far from novel. Reference architectures have existed in practically all successful architecture governance regimes and transformations, and in a good many of unsuccessful ones too. The precise connotation, well-defined & ordered constituents and specific relationship with architectural concepts such as Vision, Roadmap, Baseline & Target Architectures that underpin Beacon Architecture, are however not a predictable hallmark of such reference architectures. In this chapter, we shall start with aspects that define Enterprise Architecture as a *living thing*, deliberate on architecture transformation and its journey through the architecture development cycle, meander through evolution of EA frameworks (most of which have had a public-sector pedigree), discuss in some depth Enterprise Architecture challenges peculiar to the public sector, before delving into the concept of Beacon Architecture, its correlation with various architecture transformation concepts, its value to significant architecture transformations and, in particular, its significance to definition, governance and transformation of Enterprise Architecture in the Public Sector.

The chapter is organized into a number of broad sections. The first four of these lead up to the *Beacon Architecture* concept:

- The first section defines and deliberates on prevailing Enterprise Architecture concepts and relates them, under the three headings *Enterprise Architecture*, *Aspects of Enterprise Architecture*, *Transforming Enterprise Architecture*
- The second section titled *Evolution of Enterprise Architecture Concepts – An Overview*

provides a brief journey through how Enterprise Architecture concepts have developed and how sectors/industries have contributed to this. This also sets background to what is and is not covered in present day popular EA frameworks, giving context to concepts introduced under *Beacon Architecture*.

- The third section, under the heading *Public Sector Transformations*, cites three examples from the UK, which illustrate the consequences of a lack of development of concepts, grouped under *Beacon Architecture* later on in the chapter, thus establishing a background as to why Beacon Architecture is important and citing some of the oft occurring inconveniences, wastages and even outright failures that can be avoided by establishing it. The next heading in this section, *Enterprise Architecture Challenges Peculiar to the Public Sector*, expands, summarizes and generalizes on this
- The fourth section, under the heading *Progression of Architecture Development Cycle* elaborates the generic treatment followed by a number of methodologies and architecture frameworks in effecting architecturally-significant enterprise transformation

These sections provide the right background to understand why constituents grouped under the concept of Beacon Architecture are important and are sequenced as they have been. The Author, in his role as Architecture Authority / Strategist has formalized and successfully introduced in the industry these constituents. The chapter then puts these constituents together in a logical order and highlights relevance of such effort to the Public Sector. The chapter ends with a pragmatic assessment of the likely resistance to establishing Beacon Architecture and the likely scenarios of its institutionalization over the next few years.

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