

Chapter 13

Introduction



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As of its inception in the late 1980s, enterprise architecture (EA) and its associated approaches and principles draw a considerable attention in both research and practice. The early approaches to EA essentially promoted an enforcement-centric doctrine to systematically guide local technology initiatives toward long-term objectives. More recently, however, a mix of enforcement-centric with influence-centric doctrine is promoted to account for organizations' need for agility to effectively and promptly adapt with changes in the contemporary hyper-turbulent environments (Winter, 2014). Notwithstanding such advances in EA, there is an ongoing discourse on whether and how EA can be employed to tame the complexity of the environment and to deal with challenges associated with digital transformation. This discourse is indeed provoked by referring to the *raison d'être* of EA in systematically deriving long-term and consensus-based directions to an organization's technology investments rather than swiftly responding to changes in the environment.

To contribute and give direction to the abovementioned discourse, we first need to have a thorough understanding of EA's theoretical foundations. In effect, EA comprises both a descriptive and a prescriptive aspect, as two sides of the same coin (Greefhorst & Proper, 2011a; Haki & Legner, 2021). The descriptive aspect is associated with the artifacts representing an organization in its as-is

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and to-be states, with a focus on creating architecture representations to depict and explain an organization's design in terms of its constituents, properties, and relationships (Haki & Legner, 2021). The prescriptive aspect, in turn, emphasizes the principles governing architecture's design and evolution, drawing attention from architecture representations toward the architectural shape and the question of "how" organizations should be designed and built (Haki & Legner, 2021). Although the twin descriptive-prescriptive aspects have been inherent in the EA concept, the extant literature mostly emphasizes the descriptive side, such that the prescriptive side (more specifically *architecture principles*) remains the crux of the EA concept.

The constituent chapters of this part seek to make advances in prescriptive EA. While Chap. 14 discusses how architecture principles are defined and implemented in EA initiatives, Chap. 15 raises the need for brand-new architecture principles in the realm of digital transformation, and Chap. 16 proposes a principle-based framework for digital transformation. After seeing all these chapters, in the conclusion of this part (Chap. 17), we will discuss how EA can be employed to adapt with changes in the contemporary hyper-turbulent environments and to address digital transformation's associated challenges.