Chapter 1

The Business Transformation Framework and Enterprise Architecture Framework for Managers in Business Innovation:
The Alignment of Enterprise Asset Management and Enterprise Architecture Methodologies

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ABSTRACT

The AMM is supported by a real-life case of a business transformation architecture in the domain of enterprise asset management (EAM) that is supported by the alignment of a standardized enterprise architecture blueprint. This chapter proposes an assets alignment pattern (AAP) and offers a set of solutions in the form of design, technical, and managerial recommendations to be used by the target company's asset analysts and enterprise architects to implement EAM solutions in the context of business transformation projects (BTP). Heuristics is applied in real-world complex problems that are very similar to transformation projects. The EAM-based AAP is not influenced by any specific business domain and has a holistic approach that uses a neural networks processor.

INTRODUCTION

Today, business enterprises are encountering massive pressure to manage their enterprise assets proactively and holistically in order to insure their business sustainability, reduce costs, and to integrate the continuously transformed assets related legal, regulatory and economic environments. For a BTP, there is a need for a just in time decision making, planning and optimization activities; and to achieve that the designed transformation process can manage the inventory of the EAM. Heuristics is applied in real world complex problems that are very similar to iterative transformation projects. The EAM based AAP, is not influenced by any specific business (or other) domain and has a holistic approach that uses an authentic neural networks processor. The AAP is based on a reasoning concept that is basically a qualitative research method that manages, weights and qualifies Critical Success Factor (CSF) sets, actions to final solutions (Capecchi, Buscema, Contucci, D'Amore, 2010). The AAP's underlined system supports BTPs or Enterprise Architecture Project (EAP) (simply the *Project*) in integrating scenarios that are sets of interactive services (Trad & Kalpić, 2018a; Trad & Kalpić, 2018b).

BACKGROUND

This chapter's background combines: asset management, patterns design, enterprise architecture, mathematical models, heuristics, technology management, business transformation and business engineering fields; where the main focus is on how to integrate EAM solutions. Building an AAP for an EAM system is probably, the most strategic goal for a business company. Fast transformations for efficient business environments have to be supported by a holistic and intelligent AAP based EAM systems (Cearley, Walker, Burke, 2016). The AAP is business driven and is agnostic to a specific technology, financial, business, architecture or any other pattern concept. As shown in Figure 1, AAP, is founded on a research framework that in turn is based on industry standards, like the Architecture Development Method (ADM) (The Open Group, 2011a). Enterprise Architecture (EA), is a methodology, which can be used to develop *Projects*: 1) requirements; 2) business architecture; 3) EAM interfaces and integration; and 4) its Information and Communication System's (ICS) components. The Business Transformation Manager (BTM), EAM responsible, or an Enterprise Architect (simply the *Manager*) can use the APP and EA to integrate the EAM in the business interprise (Trad & Kalpić, 2017b; Trad & Kalpić, 2017c; Thomas & Gartner (2015); Tidd, 2006). This AAP proposal's aim is to deliver recommendations for managing aligned EAM's enterprise architecture integration. The applied research methodology is based on literature review, a

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