Chapter 74
A Business Motivation Model for IT Service Management

Marco Vicente
Technical University of Lisbon, Portugal

Nelson Gama
University of Lisbon, Portugal

Miguel Mira da Silva
Technical University of Lisbon, Portugal

ABSTRACT

The Enterprise Architecture (EA) approach usually considers a set of motivational concepts that are used to model the reasons and motivations that underlie the design and change of organizations, which corresponds to their Business Motivation Model (BMM). Likewise, this BMM is also present in organizations that provide IT services. However, although ITIL has become a standard for performing IT Service Management (ITSM), there is not one holistic solution to integrate EA and ITIL. Therefore, we propose to join both approaches through the definition of a specific Enterprise Architecture to design organizations according to ITIL's best practices to perform ITSM. Thus, this paper's goal is twofold: on one hand to establish that architecture's motivation model, and, on the other, to contribute for a formal identification and representation of the ITIL business motivation model itself.

INTRODUCTION

Enterprise Architecture (EA) is a coherent whole of principles, methods, and models that are used in the design and realization of an enterprise's organizational structure, business processes, information systems, and infrastructure (Lankhorst et al., 2009).

The purpose of enterprise architecture is to align an enterprise to its essential requirements, to provide a normative restriction of design freedom toward transformation projects and programs. Key elements of enterprise architecture are concerns, models, views, architecture principles and frameworks. Enterprise architecture addresses the properties that are necessary and sufficient for it to be fit for its mission (Greefhorst & Proper, 2011).

The Open Group Architecture Framework (TOGAF) (The Open Group, 2009) is a freely available standardized method for EA that has become a worldwide and broadly accepted standard (Greefhorst & Proper, 2011).

In the view of TOGAF, EA is divided into four architecture domains: business, data, application and technology. These domains describe the architecture of systems that support the enterprise and correspond to the "How, What, Who, Where and When" columns of the Zachman framework (Zachman, 1987). In turn, they do not cover the elements that motivate its design and operation which corresponds to Zachman's "Why" column (The Open Group, 2012).

In fact, these elements belong to what is called the Business Motivation Model (BMM) defined by the Object Management Group (OMG) as a "scheme and structure for developing, communicating, and managing business plans in an organized manner" (Object Management Group, 2010).

The BMM provides a small set of important concepts to express motivation: means, ends, influencers and directives. The model was initially created to provide the motivations behind business rules, but can also be used to find the motivation for architecture principles (Greefhorst & Proper, 2011). Accordingly, TOGAF version 9.0 also includes a business motivation model that is simpler than the OMG one and is based on the concepts of drivers, goals, objectives, and measures.

On the other hand, IT Service Management (ITSM) evolved naturally as services became underpinned in time by the developing technology. In its early years, IT was mainly focused on application development, but as time went by, new technologies meant concentrating on delivering the created applications as a part of a larger service offering, supporting the business itself (The Stationery Office, 2007).

IT Infrastructure Library (ITIL) (Hanna et al., 2008) is the de facto standard for implementing ITSM (Hochstein, Zarnekow & Brenner, 2005).

It is a practical, no-nonsense approach to the identification, planning, delivery and support of IT services to the business (Arraj, 2010). The ITIL Core consists of five publications: Service Strategy, Service Design, Service Transition, Service Operation and Continual Service Improvement. Each book covers a phase from the Service Lifecycle and encompasses various processes which are always described in detail in the book in which they find their key application (Van Bon et al., 2007).

There have been several attempts to integrate and relate EA and ITIL, because having different organizational departments or teams handling each approach independently, results on wasted resources and turns organizations less efficient or effective.

Therefore, we propose to integrate both approaches through the definition of an Enterprise Architecture for organizations that have ITSM as an architectural driver.

In fact, EA does not say anything about designing specific organizations because its goal is to be able to represent every organization. Conversely, our goal is to narrow it down, and define a specific architecture to design organizations according to best practices on specific domains, which in this case is ITSM, but could as well be purchasing or logistics.

In related work, we are already building the models and views that represent the architecture for this kind of organizations, and, in this article, we will just focus on presenting this architecture's motivation model: the set of motivations that underlie its design or change, which should match the ITIL motivations themselves.

On the other hand, when researching through ITIL literature, we noticed that ITIL is presented through textual definitions of concepts and its relationships, while its processes are usually depicted as well defined sequences of activities by flow charts.

However, the motivation behind why we need ITIL, why those were the chosen processes, the

Related Content

A Mobile Intelligent Agent-Based Architecture for E-Business
Zhiyong Wengand Thomas Tran (2007). *International Journal of Information Technology and Web Engineering (pp. 63-80).*
www.irma-international.org/article/mobile-intelligent-agent-based-architecture/2637

Personalized Recommendation Mechanism Based on Collaborative Filtering in Cloud Computing Environment
Xinling Tang, Hongyan Xu, Yonghong Tanand Yanjun Gong (2017). *International Journal of Information Technology and Web Engineering (pp. 11-27).*
www.irma-international.org/article/personalized-recommendation-mechanism-based-on-collaborative-filtering-in-cloud-computing-environment/182261

Resource Scheduling and Load Balancing Fusion Algorithm with Deep Learning Based on Cloud Computing
Xiaojing Houand Guozeng Zhao (2018). *International Journal of Information Technology and Web Engineering (pp. 54-72).*
www.irma-international.org/article/resource-scheduling-and-load-balancing-fusion-algorithm-with-deep-learning-based-on-cloud-computing/204359

Story Boarding for Web-Based Information Systems
Roland Kascek, Klaus-Dieter Schewe, Catherine Wallaceand Claire Matthews (2004). *Web Information Systems (pp. 1-33).*
www.irma-international.org/chapter/story-boarding-web-based-information/31121

Learning Through Sharing and Regulation: A Case Study of Using Web-Supported Collaborative Learning with Initiation and Self-Regulated Learning
Chia-Wen Tsaiand Yi-Fen Chen (2013). *Web-Based and Blended Educational Tools and Innovations (pp. 151-162).*
www.irma-international.org/chapter/learning-through-sharing-regulation/68643