

Chapter 14

Bi-Directional Business / IT Alignment

Hashim Chunpir

German Climate Computing Centre (DKRZ), Germany

Frederik Schulte

University of Hamburg, Germany

Yannick Bartens

University of Hamburg, Germany

Stefan Voß

University of Hamburg, Germany

ABSTRACT

Business/IT (information technology) alignment can be considered as one of the key challenges of information management (IM). A vast majority of studies assumes a unidirectional alignment process that seeks to link the IT strategies to superior business objectives. However, there are plenty of market situations where the ability of an enterprise, or even entire branches, to adjust their business model to new IT developments is crucial to survive among their competitors. Under the umbrella of new buzz words like digital transformation and digital transition and their glaring examples such as media streaming, these competitive requirements have recently become more vital. Currently dominant business-driven alignment paradigms are seemingly not capable of accommodating these requirements to a full extent. In this chapter, the concept of bi-directional business/IT alignment is explained and defined by extending a well-known three-layer model of IM. Furthermore, different IM models as well as common IT governance frameworks are analyzed to find the extent to which they support this paradigm.

INTRODUCTION

Business/IT alignment – as the process of aligning business and IT to achieve organizational objective and competitive advantages – is a core task of information management (IM) with implications for IT innovations management. Recent research has revealed the need to depict business/IT alignment as bi-directional process in IT governance frameworks to appropriately capture customer-driven IT requirements (Bartens et al., 2016; 2014a; 2014b; Chen, 2008; Patel, 2002, 2004).

DOI: 10.4018/978-1-5225-7362-3.ch014

The requirement for a bi-directional business/IT alignment becomes obvious regarding the case of e-business (Bartens et al., 2014b) and in two-sided markets (Bartens et al., 2016, 2014a). In this context, technological development often leads to altered customer requirements that trigger a need to adjust business models. Prominent examples can be observed in the media streaming movement. For a long time media were sold as products such as books, records, DVDs, etc. With the emergence of streaming technology, the respective business models faced a drastic need to adapt to flexibility and technology requirements of customers. While those requirements are incorporated in the discussion around buzz words like digital transformation (Patel & McCarthy, 2000) and digital transition (McFadden, 2012), they involve the reversal of the causal chain of requirements in IM. In contrast to current approaches, as the top-down business/IT alignment in the IT governance framework COBIT 5, in these business models, requirements can emerge out of the business operations and may be defined by the customer. The business cooperation of T-Mobile and Spotify Inc., where the fulfillment of customer needs required the adjustment of both business models (Bartens et al., 2016), may serve as a specific example.

Current IT governance frameworks, definitions and models of IM predominantly still assume a one-directional top-down business/IT alignment process (Krcmar, 2010; Singh & Woo, 2009; Voß & Gutenschwager, 2001; Wollnik, 1988). Thus, they neglect the requirements of changing business models, e.g., in e-business. In the light of the work by Pérez Lorences and García Ávila (2013) as well as De Haes et al. (2013), IM and IT governance is a focus of discussion here and it is put into perspective in this article. Pathways on how IM models and definitions should be extended to integrate bi-directional business/IT alignment are introduced. The remainder of this article is structured as follows. Section 2 provides a brief literature review of IM and business/IT alignment. Section 3 proposes possible extensions of current IM models and definitions to cover bi-directional business/IT alignment. Section 4 gives conclusions and implications for related research.

BACKGROUND: FUNDAMENTALS OF BUSINESS IT/ ALIGNMENT

In this section, a background on the fundamentals of business / IT alignment is given. The alignment of the strategic plans of a business and its IT can be considered an important responsibility and function of IM (Krcmar, 2010). Furthermore, the current state of IM and business/IT alignment is defined and presented in the following.

Information Management

While a broad range of definitions on IM — even contradicting ones — are proposed in literature, the definition by Voß and Gutenschwager (2001) serves as a fundament for the discussion in this article. According to Voß and Gutenschwager, IM is seen as the economic (efficient) planning, acquisition, processing, distribution and allocation of information as a resource for the preparation and support of decisions (decision-making), as well as designing the required infrastructure for this purpose. Applying a similar definition, the majority of authors, argue that IM can be subdivided into several fields of action. One of them is a strategic field in which business IT/alignment as well as the definition and implementation of IT governance are key functions (Boaden & Lockett, 1991; Choo, 2002; Sabherwal et al., 2001; Krcmar, 2010; Voß & Gutenschwager, 2001). The above definitions do not explicitly incorporate busi-

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/bi-directional-businessit-alignment/212109

Related Content

Fusion of Artisan and Virtual: Fashion's New World Opportunities

Karen Webster (2018). *Fashion and Textiles: Breakthroughs in Research and Practice* (pp. 299-325).
www.irma-international.org/chapter/fusion-of-artisan-and-virtual/187850

The Implementation of Industry 4.0 by Using Industrial and Service Robots in the Production Processes

Isak Karabegovi, Edina Karabegovi, Mehmed Mahmic and Ermin Husak (2020). *Handbook of Research on Integrating Industry 4.0 in Business and Manufacturing* (pp. 1-30).
www.irma-international.org/chapter/the-implementation-of-industry-40-by-using-industrial-and-service-robots-in-the-production-processes/252357

Let's Get a Two-Sided Platform Started: Tactics to Solve the Chicken and Egg Paradox

Daniel Trabucchi (2020). *Journal of Business Ecosystems* (pp. 63-77).
www.irma-international.org/article/lets-get-a-two-sided-platform-started/250364

How Can Accessibility for Deaf and Hearing-Impaired Players be Improved in Video Games?

Robert Costello, Murray Lambert and Florian Kern (2019). *International Journal of R&D Innovation Strategy* (pp. 16-32).
www.irma-international.org/article/how-can-accessibility-for-deaf-and-hearing-impaired-players-be-improved-in-video-games/234351

How Can Accessibility for Deaf and Hearing-Impaired Players be Improved in Video Games?

Robert Costello, Murray Lambert and Florian Kern (2019). *International Journal of R&D Innovation Strategy* (pp. 16-32).
www.irma-international.org/article/how-can-accessibility-for-deaf-and-hearing-impaired-players-be-improved-in-video-games/234351