

Taking up Three Challenges to Business-IT Alignment Research by the Use of Activity Theory

Andy Weeger, Neu-Ulm University of Applied Sciences, Neu-Ulm, Germany

Ulrich Haase, University of Bamberg, Bamberg, Germany

ABSTRACT

This paper offers a novel view on the business-IT alignment that takes on the three major challenges of prior research: theory, process and applicability. The theoretical deliberations and empirical data of a single in-depth case study shows that taking an activity theoretical lens offers a way to conceptualize the mechanisms, triggers and complexities of business-IT alignment that enhance our understanding of the alignment process and reveal important implications for practice. Building on activity theory and the notion of interrelated activity systems, the authors propose to view business and IT as two distinct, yet related activity systems that co-evolve over time. Moreover, they show that business-IT alignment can be understood as a process of continuous adjustments between the two collective, pragmatic, contested and situated activity systems of business and IT. Examining data spanning six years of transformation processes, the authors systematically increase their understanding of the processes and underlying mechanisms of aligning business and IT. These insights are facilitated via the conceptualization of the alignment as a process aimed to reduce contradictions and tensions within and between the linked activity systems of business and IT. The theoretical deliberations and empirical evidence show that AT provides a strong theoretical foundation and a robust framework that is able to facilitate rigorous process-oriented studies, whose findings can guide endeavors of detecting and approaching misalignments in practice.

KEYWORDS

Activity Systems, Activity Theory, Business-IT Alignment, Healthcare

INTRODUCTION

Aligning business and information technology (IT) is a long-standing issue of discussion both in information systems (IS) research and practice (Yolande E. Chan & Reich, 2007; Kappelman, McLean, Luftman, & Johnson, 2013). In general, striving for business-IT alignment means that organizations utilize IT resources in a way that they efficiently enable or support business strategies, objectives, infrastructures and processes and thus create value for the firm (Yolande E. Chan, Huff, Barclay, & Copeland, 1997; Coltman, Tallon, Sharma, & Queiroz, 2015; Sabherwal & Chan, 2001). Cultivating business-IT alignment is, for instance, expected to intensify utilization of IT, increase profitability and generate sustainable competitive advantage (Gerow, Thatcher, & Grover, 2014b; Grover S. Kearns

DOI: 10.4018/IJITBAG.2016070101

Copyright © 2016, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

& Lederer, 2003). In contrast, failing to evolve business-IT alignment could lead to poor resource allocation and failed IT initiatives, which adversely affects firm performance (Chen, Mocker, Preston, & Teubner, 2010; Ravishankar, Pan, & Leidner, 2011).

Although, more than 30 years of cumulative research in this field offers strong empirical evidence that organizations revealing high levels of business-IT alignment outperform those with low levels (Yolande E. Chan et al., 1997; Yolande E. Chan & Reich, 2007; Henderson & Venkatraman, 1999; G. S. Kearns & Lederer, 2000; Yayla & Hu, 2011), we seem to be still far from solving the riddle of how to synchronize the efforts of business and information technology (IT) in practice (Grant, 2010). Various reasons for this observation have been brought forward, particularly too mechanistic views of business-IT alignment (Grant, 2010), missing applicability of findings (Vermerris, Mocker, & van Heck, 2014) and, perhaps most importantly, a lack of strong and effective theoretical foundations (Yolande E. Chan & Reich, 2007; Luftman, Lyytinen, & Zvi, 2015).

Intended to find a way of conceptualizing the evolving reciprocal relationship between business and IT that takes on the three major challenges of prior research, we propose a new theoretical perspective on business-IT alignment based on cultural historical Activity Theory (AT). We then show how the tenets of AT enhance our understanding of the process and underlying mechanisms of business-IT alignment within organizational complexities. Moreover, we demonstrate how these concepts can guide alignment efforts in practice.

The remainder of this paper is structured as follows. First, we discuss recent developments in the field of business IT-alignment research and lay out its three major challenges. Second, following a succinct introduction of AT, we outline our activity theoretical perspective on business-IT alignment. Then, the context of our case study as well as our methods are briefly presented. We then continue to report on our findings and discuss the emerging insights. Finally, we discuss the limitations of our study as well as its practical and theoretical contributions.

THEORETICAL BACKGROUND

Business-IT Alignment

Up to this point, valuable research was undertaken to understand the antecedents and consequences of alignment between business and IT (Yolande E. Chan & Reich, 2007; Coltman et al., 2015). Prior research particularly considers the relationship between business and IT executives (i.e., social alignment), organizational structure (i.e., structural alignment) and information system planning processes (i.e., intellectual alignment) as key antecedents of business-IT alignment (Yolande E. Chan, 2002; Johnson & Lederer, 2010; Grover S. Kearns & Lederer, 2003; Preston & Karahanna, 2009). The central argument underlying these studies is that performance will increase if IT and business managers are able to align key IT resources and plans with business strategy (Coltman et al., 2015). Many of these studies further presume that ‘top-down’ processes like strategy development (Preston & Karahanna, 2009), governance mechanisms for IT (De Haes & Van Grembergen, 2009; Schlosser, Beimborn, Weitzel, & Wagner, 2015) and enterprise architecture planning (Ping-Ju Wu, Straub, & Liang, 2015) play dominant roles in attaining business-IT alignment. Moreover, this view typically conceptualizes business-IT alignment as a static relationship between business and IT (Yolande E. Chan & Reich, 2007; Luftman et al., 2015) leading to a more or less stable state, which is usually measured by capturing the business or IT manager’s perception (Coltman et al., 2015).

Looking at this stream of alignment research, several limitations can be discovered (Coltman et al., 2015; Gerow, Thatcher, & Grover, 2014a). The first major limitation is concerned with a tendency to regard alignment as a –more or less– static state resulting from linear cause-effect relationships (i.e., the process challenge). Moreover, critics state the “current alignment research is largely atheoretic” (Yolande E. Chan & Reich, 2007, p. 311) (i.e., the theory challenge). Last not least, many alignment

19 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/article/taking-up-three-challenges-to-business-it-alignment-research-by-the-use-of-activity-theory/171199

Related Content

Investigating a Process Approach on Business Cases: An Exploratory Case Study at Barco

Kim Maes, Steven De Haes and Wim Van Grembergen (2013). *International Journal of IT/Business Alignment and Governance* (pp. 37-53).

www.irma-international.org/article/investigating-a-process-approach-on-business-cases/101915

A Research Journey into Maturing the Business Information Security of Mid Market Organizations

Yuri Bobbert and Hans Mulder (2010). *International Journal of IT/Business Alignment and Governance* (pp. 18-39).

www.irma-international.org/article/research-journey-into-maturing-business/52061

Paradigms of Governance: From Technocracy to Democracy

Sylvain Lavelle (2013). *Ethical Governance of Emerging Technologies Development* (pp. 126-148).

www.irma-international.org/chapter/paradigms-governance-technocracy-democracy/77184

CIO Perspectives on Organizational Learning within the Context of IT Governance

Koen De Maere, Steven De Haes and Michael von Kutzschenbach (2017). *International Journal of IT/Business Alignment and Governance* (pp. 32-47).

www.irma-international.org/article/cio-perspectives-on-organizational-learning-within-the-context-of-it-governance/180693

Due Diligence in Cyberspace

Joanna Kulesza (2014). *Organizational, Legal, and Technological Dimensions of Information System Administration* (pp. 76-95).

www.irma-international.org/chapter/due-diligence-in-cyberspace/80711