Examining Cross-Domain Alignment: The Correlation of Business Strategy, IT Management, and IT Business Value

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ABSTRACT

Prior research hardly investigates how externally focused competitive strategies can be bridged with internal IT processes. We aim to explore the relationship between five archetypical IT management profiles (ITMP) and four business strategy archetypes linked with six IT business value domains. Considering prior literature, we propose that each ITMP delivers unique sources of value, thus, contributes to specific IT business value domains. Furthermore, we assume that each business strategy archetype requires contributions to these domains. To test our hypotheses, we conducted a matched-pair study within manufacturing firms. Our findings indicate that IT business value domains link competitive strategy and IT management approaches. For instance, IT functions that act as Project Coordinator of IT-based activities, manage relationships between vendors and business units were found to contribute to firm's external integration. We present evidence for the significance of aligning externally focused strategies with internal IT management approaches.

KEYWORDS

Business Strategy Archetypes, Cross-Domain-Alignment, IT Business Value Domains, IT Business Value Profiles, IT Management Profiles

INTRODUCTION

Corporations around the world depend on information technology (IT) to fulfill their business requirements. The use of IT has significantly increased during the last decades (Schryen, 2013). Many –if not most– contemporary business processes are not conceivable without the support of adequate IT. Furthermore, in industries where products and business models are increasingly digitized, firms are not viable without IT (Peppard & Ward, 2004; Venkatraman, 1989). Consequently, spending on IT became a weighty part of corporate expenses (Schryen, 2013), since the worldwide IT spending was \$3.5 trillion in 2015 (Rivera & Goasduff, 2015).

Despite these developments, prior research has shown that investments in IT do not automatically contribute to positive firm performance. Rather, measurable impacts of IT investments seem to be particularly dependent on a firm's ability to effectively manage the resource IT (Santhanam & Hartono, 2003). Additionally, the nature of the contribution of IT to firm performance are multi-layered (see e.g. (Kohli & Grover, 2008)) and contingent on complementary firm resources (Melville et al., 2004; Wade & Hulland, 2004). Subsequently, IT management capabilities (Kohli & Grover, 2008) and strategic business-IT alignment (Chan & Reich, 2007) have been identified as key factors for realizing business value.

Examining IT management approaches and related capabilities, Guillemette & Pare (2012) proposed a typology of idealized profiles. They provide descriptions and characteristics of five distinct and consistent ITMPs based on prior literature and empirical data. Each profile supplies a unique source of value to the company. We will present an overview of each ITMP later in this paper. In line with the argument that the value of IT is multi-layered (Kohli & Grover, 2008), each profile is associated with a unique value contribution to the organization. Guillemette & Pare (2012) further argue that IT functions that are close to any given ITMP are most likely to outperform. However, further research is needed to gain confidence in these findings. Therefore, we follow the call of Guillemette & Pare (2012) and bring forward following research question:

RQ1: Do ideal ITMPs provide a distinctive source of value to the organization?

Considering the adoption of an ITMP, Guillemette & Pare (2012) confine their examination to CIOs interpretation of the centrality of IT as well as the perceptions on their strategic influence and top-managements IT knowledge. However, following the imperative of business-IT alignment research (Chan & Reich, 2007), the selection of an ITMP that provides maximum value for an organization is dependent on the organizations business strategy. In order to gain knowledge on the relation between ideal ITMPs and business strategies, we additionally propose a second research question:

RQ2: Do business strategy archetypes require IT to contribute to specific sources of value?

To approach these research questions, we first present our theoretical background and discuss our hypotheses in the light of prior research. Subsequently, we empirically test the hypotheses by conducting a matched-pair study (CIO and CEO). In order to examine the interrelations of business strategy archetypes, ITMPs and the IT functions contribution to the IT business value domains, we apply a correlation analysis. We close the paper with discussing our findings, the limitations of this study and its implications for further research.

Theoretical Background

The phenomena of business-IT alignment is intensively discussed in the literature and still one of the most important concerns of CIOs and top level management (Armstrong & Sambamurthy, 1999; Preston & Karahanna, 2009). In their seminal work, Henderson & Venkatraman (1999) note that IT and business need to be aligned on strategic and operational levels as well as across these levels. Although there is much research focusing on the strategic level (Chan & Reich, 2007), but cross-domain alignment remains largely untouched by research. Cross-domain alignment refers to all aspects of bridging higher level strategies, externally focused strategies with lower level, internally focused processes (Gerow et al., 2014), such as reflected by various IT management approaches.

Figure 1. Research model



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