Adoption and Impact of IT Governance and Management Practices: A COBIT 5 Perspective

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ABSTRACT

This paper empirically investigates how adoption of IT governance and management processes, as identified in the IT governance framework COBIT 5, relates to the level of IT-related goals achievement, which in turn associates to the level of enterprise goals achievement. Simultaneously, this research project provides an international benchmark on how organizations are currently adopting the governance and management processes as identified in COBIT 5. The findings suggest that organizations are best in adopting the "IT factory" related management processes and that implementation scores drop in management and governance processes when more business and board involvement is required. Additionally, there are significant differences in perceived implementation maturity of COBIT 5 processes between SMEs and larger organizations. Also, the data offers empirical evidence that the COBIT 5 processes have a positive association with enterprise value creation.

KEYWORDS

COBIT 5, Enterprise Goals, Enterprise Governance and Management of IT, IT Governance, SMEs

1. INTRODUCTION

In today's competitive business environment, organizations are relying heavily on IT for business value creation (Anderson, Banker, & Ravindran, 2006; Chari, Devaraj, & David, 2008; Kohli & Grover, 2008). This leads to an increased focus on the governance and management of IT (De Haes & Van Grembergen, 2015; Wilkin & Chenhall, 2010), required to ensure that the expected business value creation is effectively realized and the associated risks are under control. In order to implement governance and management of enterprise IT, organizations are often drawing upon the

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practical relevance of industry frameworks such as "Control Objectives for Information and Related Technology" (COBIT), currently in its fifth edition, and released by the "Information Systems Audit & Control Association" (ISACA). The framework is built around a set of governance and management enablers and their support in the achievement of IT-related goals and, ultimately, enterprise goals (ISACA, 2012a).

COBIT-based implementations are gaining popularity as COBIT is the framework of choice for enterprise governance and management of IT in many organizations (Debreceny & Gray, 2013; IT Governance Institute (ITGI), 2011; Smits & Hillegersberg, 2013). However, adopting the guidance as described in the COBIT framework requires a considerable amount of effort and is often perceived as complex and costly, while return in stakeholder value is difficult to measure in tangible outcomes (De Haes, Van Grembergen, & Debreceny, 2013; Pereira & da Silva, 2012).

COBIT-based research is still scarce, especially empirical research (Mangalaraj, Singh, & Taneja, 2014). As COBIT is an extensive framework, empirical research often requires large datasets, which are not easily collected. Moreover, with the release of COBIT 5 in 2012, incorporating some significant changes towards a better focus on IT governance, most of the existing research is somewhat outdated. As stated by Mangalaraj et al. (2014), "It is time for IS researchers to examine this important framework, as research on COBIT is highly relevant to IS as its principles directly match with IT governance."

In answer to this call, this research has two objectives:

- Provide an international benchmark on how organizations are adopting COBIT 5 proposed management and governance processes around enterprise IT;
- Investigate if adoption of these management and governance processes relates to better achievement of enterprise goals.

The conceptual model used in this research is entirely based on COBIT 5 (Figure 1). The three main constructs are discussed in the next section.

The remainder of this paper is structured as follows. Section 2 provides a theoretical background by discussing the main constructs for this research. Section 3 presents the research approach. A discussion of the results is presented in section 4, followed by the conclusion in section 5.

2. THEORETICAL BACKGROUND

2.1. Enterprise Governance and Management of IT

The impact of IT on organizations has increased noticeably over the last decades (Sabherwal & Chan, 2001). Over time, IT has become a crucial asset to create current and future business value for organizations (Anderson et al., 2006; Chari et al., 2008; De Haes & Van Grembergen, 2015). This increased dependency on IT implies that business executives and board members can no longer avoid making important IT-related decisions (Bart & Turel, 2010; Nolan & McFarlan, 2005; Trites,

Figure 1. Conceptual model



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