Framework for Managing Shared Knowledge in an Information Systems Outsourcing Context

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ABSTRACT

Both information systems (IS) outsourcing and knowledge management are well-established business phenomena. The integration of shared knowledge in an IS outsourcing arrangement, represents the blending of organisational knowledge with external knowledge sources. In an attempt to provide tactical mechanisms for creating and managing shared knowledge in organisations embarking on IS outsourcing arrangements, this article focuses on the design and application of a knowledge framework for IS outsourcing, with the purpose of guiding organisations in their knowledge exchange planning through concrete mechanisms, practical steps and validation. Key considerations for IS outsourcing is mapped to critical success factors, each associated with a set of knowledge requirements and knowledge flows to support the successful achievement of a specific critical success factor. An associated assessment tool was designed to identify knowledge exchange mechanisms and potential issues and gaps in current or future IS outsource arrangements.

KEYWORDS

Client-Vendor Shared Knowledge, Critical Success Factors, Information Systems Outsourcing, Knowledge, Knowledge Framework, Knowledge Management, Knowledge Transfer, Shared Knowledge

INTRODUCTION

Information system (IS) outsourcing is an organisational practice aligned to organisational objectives of transferring all or a part of the organisation’s IS functions to an independent third party under the terms of a formalised agreement (Akomode, Lees, & Irgens, 1998; Barthélémy & Adsit, 1993). Through outsourcing, an organisation gains access to expertise, knowledge and capabilities of its outsource partner (Brown & Fersht, 2014; Edersheim, 2007; Power, Desouza, & Bonifazi, 2006; Sood, 2005).

Knowledge is an essential consideration for IS outsourcing activities and choices from two perspectives. Firstly, organisations share organisational knowledge with the outsourcer vendor through the outsourcing process and, in turn, acquire external knowledge from the outsourcer vendor (Mansingh, Osei-Bryson, & Reichgelt, 2009; Tajdini & Nazari, 2012). Secondly, the transfer of knowledge is important for the vendor selection and contract negotiation period, the implementation and service
transfer period and all the way through the contract management and contract maintenance period (Mansingh et al., 2009; Zelt, Wulf, Uebenickel, & Brenner, 2013). Since the loss of knowledge may impact both the organisation and outsource vendor negatively, particular and focused attention is required in order to develop and sustain the creation of new knowledge, as well as sharing existing knowledge (Alexandrova, 2012; Willcocks, Hindle, Feeny, & Lacity, 2004).

Multiple research studies in the past focused on the impact of knowledge-sharing mechanisms on shared knowledge and outsourcing accomplishment (Beyah & Gallivan, 2001; Blumenberg, Wagner, & Beimborn, 2009), while little consideration has been given to theoretical frameworks guiding an understanding of IS outsourcing specifically (Beyah & Gallivan, 2001; McIvor, 2000). One aspect that lacks attention is the management of knowledge-based assets in IS outsourcing. Currie and Pouloudi (2000) argue that the growing practice of IS outsourcing encourages researchers to study the value of knowledge-based assets, as well as the degree to which knowledge-based assets can be obtained or lost through IS outsourcing. Teo (2012) agrees that, while scholars highlight the significance of knowledge management in IS outsourcing, little research has been concluded on how organisations manage knowledge in outsourcing circumstances. A need therefore exists for the establishment of a set of tactical mechanisms that may assist organisations during the IS outsource process to ensure that knowledge is properly managed, captured and available.

The main purpose of the study presented in this paper is to conceptualise such tactical and application mechanisms within a knowledge framework for organisations embarking on IS outsourcing. The aim of the knowledge framework is to assist and guide organisations in their knowledge exchange planning through concrete mechanisms, practical steps and validation. Key considerations for information systems outsourcing are mapped to critical success factors, each of which is associated with a set of knowledge requirements and knowledge flows to support the successful achievement of a specific critical success factor. The research was guided by the research question of “what are the critical success factors for knowledge exchange in an IS outsourcing context and how can organisations measure these factors with a focus on knowledge requirements and knowledge flows?”

In the next section, the background to the study is presented, followed by an overview of the research methodology employed. Thereafter we present the analysis of the data collected, the proposed framework, and conclude the paper with a discussion of the contribution of the paper.

BACKGROUND

Organisations today face the challenge of creating an infrastructure that facilitates knowledge transfer through defining and quantifying the source and nature of the bodies of knowledge in the organisation (Wilson & Frappiano, 1999). In addition, an organisation must protect itself from knowledge leaving the organisation in order to optimally use what it knows across all perspectives of vision, strategy, roles, skills, policies, procedures, tools and platforms (Clarke & Rollo, 2001; Gordon, 1999; Jennex, 2008). An understanding of knowledge in organisations, the modes and context of conversion of knowledge and the technologies used in this conversion, are tactical approaches to knowledge creation (Hoffmann, Loser, Walter, & Herrman, 1999; Marwick, 2001; Vequist & Teachout, 2006).

The rest of this section further explores knowledge transfer processes and specifically the transfer of explicit knowledge, the transfer of tacit knowledge and the externalisation of explicit knowledge in order to understand the theoretical grounding for knowledge exchange in IS outsourcing arrangements. This is followed by an introduction to the key consideration for knowledge exchange in IS outsourcing and an introduction to tactical and application mechanisms for IS outsourcing.

Knowledge and IS Outsourcing Phases

Knowledge is an essential element of an IS outsourcing arrangement, as knowledge flows in both directions between organisation and the outsource vendor with the aim of increasing the collective knowledge of each other’s knowledge domain (Bandyopadhyay & Pathak, 2007; Blumenberg