Chapter 4
Knowledge Requirements for Information Systems Outsourcing

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ABSTRACT

Information systems (IS) outsourcing is a complex, multi-layered and a multifaceted concept. An organisation may gain access to knowledge it does not own in-house or be able to obtain it at a lower price by entering into an outsourcing relationship. At the same time, the organisation may risk losing key skills and capabilities unless the outsourcing arrangement is managed strategically and knowledge transferred properly. Knowledge management is valuable in preventing a loss of knowledge when an organisation outsources its information system activities. This chapter analyses and describes the knowledge requirements relevant in an IS outsourcing arrangement.

INTRODUCTION

Outsourcing as a business practice is flourishing in almost every domain and organisations are outsourcing software development, innovation and even functional departments [Hirschheim & Dibbern, 2014; Power, Desouza & Bonifazi, 2006]. In an environment where survival depends on cost-cutting and downsizing, information systems (IS) becomes a probable target for outsourcing as it is difficult to measure direct contribution of the IS function to the organisation as a whole [Benamati & Rajkumar, 2002; Dibbern, Goles, Hirschheim & Jayatilaka, 2004].

Outsourcing is defined as the action of transferring organisational work to an outsource vendor [Power et al., 2006]. The scope of work outsourced and the delivery of the outsource vendor against the scope is

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managed by an outsourcing arrangement that stipulates the contract conditions, the required service levels and the required deliverable quality of the arrangement [Power, Bonifazi & Desouza, 2004]. A special type of outsourcing is IS outsourcing and Sparrow [2003: 1] defines IS outsourcing as “the practice of handing over planning, management and operation of certain functions to an independent third party, under the terms of a formalised service level agreement”. Sparrow [2003] maintains that outsourcing should be seen as a strategic management tool. As such, it should be evaluated in the context of the strategic position of the organisation [Power et al., 2006].

In the context of an IS outsourcing arrangement, the focus of value creation no longer remains internal to the organisation, but occurs within the relationship between the client organisation and the outsourcer partner. The client organisation has to rely on its outsourcer partner to share knowledge and continually respond to change [Gottschalk, 2006]. Currie and Pouloudi [2000b] observe that one of the emerging issues for management will be how to identify and evaluate knowledge-based assets in the context of IS outsourcing. A part of this emerging research agenda “is due to the growth in outsourcing and the realisation that many contracts have simply failed to take into consideration important issues of intellectual property protection, core competencies, managerial and technical capabilities and skills, and software development and exploitation” [Currie & Pouloudi, 2000b: 162].

However, the use of IS outsourcing as a strategy presents several knowledge management challenges to IS managers since both knowledge management and IS outsourcing are complex, multi-layered and multifaceted concepts [Currie & Pouloudi, 2000b]. An organisation may gain access to knowledge it does not own in-house, or may be able to obtain it at a lower price, by entering into an outsourcing relationship. At the same time, the organisation may risk losing key skills and capabilities, unless the outsourcing arrangement is managed strategically and knowledge transferred properly [Al-Salti, 2009; Currie & Pouloudi, 2000b; Laplante, Costello, Singh, Bindiganavile & Landon, 2004]. Knowledge management is important in preventing a loss of knowledge when an organisation downsizes or outsource its business activities [Aydin & Bakker, 2008; Christopher & Tanwar, 2012]. Currie et al [2000b] identified that one of the emerging issues for management is how to identify and evaluate knowledge-based assets in the context of IS outsourcing.

Knowledge transfer between the organisation and outsourcer vendor is required for all the phases prior and during an IS outsource arrangement [Beyah & Gallivan, 2001; Dibbern et al., 2004]. Currie et al [2000b] argue that knowledge transfer in all the IS outsourcing phases provides an opportunity to encourage researchers, and managers, to consider the value of knowledge-based assets, and to evaluate the extent to which knowledge can be acquired or lost through IS outsourcing. Aydin and Bakker [2008] concur that, although the importance of knowledge management in IS outsourcing is highlighted by scholars, little research is being done on how organisations deal with managing knowledge in outsourcing situations [Blumenberg, Wagner & Beimborn, 2009].

The focus of this chapter is to address this gap in research with the objective to investigate how organisations manage knowledge in outsourcing activities, with a specific focus on knowledge requirements. In order to analyse and describe the knowledge requirements relevant in an IS outsourcing arrangement, a research study was conducted in a telecommunication company in South Africa. This chapter reports on the knowledge requirements identified pertinent to IS outsourcing. The background section provides context for this chapter, the IS outsourcing strategy and lifecycle section provides a knowledge management perspective on IS outsourcing and the study on knowledge requirements in IS outsourcing section defines the method followed to conduct the research, as well as the findings of the study. The chapter is concluded with the future research possibilities and conclusion sections.