Knowledge Transfer And Acquisition In IS Outsourcing: Towards A Conceptual Framework

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Abstract

The knowledge management literature has recognized the importance of knowledge transfer and acquisition on organizational success and viability. However, there is a dearth of research that has explicitly focused on knowledge transfer and acquisition in the information systems (IS) outsourcing context, and in particular, the factors that facilitate or impede such transfer. This paper attempts to fill this gap by examining the factors that have been cited as significant influences on the ability to transfer knowledge from the vendor to the client organizations in the context of IS outsourcing. In this study, the factors are categorized into four groups and these groups are integrated into a conceptual framework. Conclusions are drawn about how effective knowledge transfer and acquisition can be managed in the context of IS outsourcing.

Keywords: Knowledge transfer and acquisition, IS outsourcing, conceptual framework

1.0 Background

Knowledge has been defined as “a product of human reflection and experience” (De Long and Fahey, 2000, p. 114). According to Wasko and Faraj (2005), knowledge is the most valuable resource in an organization and has been considered as a source of competitive advantage. However, not all organizations possess such resources and capabilities necessary to perform every possible activity internally, and so they need to build connection and make linkages to outside organizations to transfer and acquire the required knowledge and skills and learn from other experience (Hackney et al., 2008). Knowledge transfer and acquisition refers to organizational or individual activities to identify and acquire externally generated knowledge that is potentially useful (Goo et al., 2008). Furthermore, it has been found that knowledge transfer and acquisition in interorganizational relationships have been challenging processes, particularly among organizations with different structures, goals and culture (Karisen and Gottschalk, 2004).
Recent knowledge management studies have identified and discussed various modes for transferring knowledge through interorganizational collaborations including strategic alliances, joint ventures and mergers and acquisitions (Rottman, 2008). However, there has been a relative lack of studies that have offered a comprehensive perspective on the important factors that influence the efficiency and effectiveness of knowledge transfer through information systems (IS) outsourcing (Ko et al., 2005), despite the recognition that outsourcing provides a platform for transferring new expertise, skills, talents and know-how technical knowledge that are not available or hard to develop in-house (Bandyopadhyay and Pathak, 2007).

The objective of this paper is twofold. First, to identify and classify the factors which facilitate or hinder knowledge transfer and acquisition in interorganizational collaborations. Second, to develop an integrated conceptual framework in the context of IS outsourcing. The rest of the paper is organized as follows. First the factors which facilitate or hinder knowledge transfer and acquisition are reviewed and discussed. Then, the conceptual framework for this research is developed and specific hypotheses are proposed. Finally, the paper presents conclusion and suggestion for further research.

2.0 Research Framework and Hypotheses

A review of the literature revealed that there is a broad range of factors that impact the effectiveness of knowledge acquisition and transfer between organizations in the context of IS outsourcing. These various factors are synthesized into a single knowledge transfer and acquisition framework that is presented in figure 1. This framework organized the factors into four categories: knowledge-related factors, client-related factors, vendor-related factors and relationship-related factors. In this study, the vendor is the ‘source’ of knowledge and the client is the ‘recipient’ of knowledge.
2.1 Knowledge Transfer and Acquisition

The dependent variable in the research framework is ‘knowledge transfer and acquisition’. In the IS outsourcing context, the client attempts to transfer, acquire and apply the external knowledge from the vendor. Moreover, knowledge transfer and acquisition enable client organizations to develop skills and competences, increase value, and sustain their competitive advantage (Karisen and Gottschalk, 2004). The success of knowledge transfer and acquisition depends on the affect of four sets of factors that are presented and discussed below.

![Conceptual Framework for Knowledge Transfer and Acquisition](image)

Figure 1. Conceptual Framework for Knowledge Transfer and Acquisition

2.2 Knowledge-Related Factors

- **Nature of Knowledge**
  The ease of knowledge transfer and acquisition is influenced by the nature and the characteristics of the underlying knowledge (Narteh, 2008). The knowledge management literature identified several dimensions by which knowledge is described. The two most cited dimensions are ‘complexity’ and ‘tacitness’ (Gosain, 2007; Simonin, 1999). Knowledge complexity refers to “the number of interdependent routines, individuals, technologies and resources linked to a particular knowledge” (Simonin, 1999, p. 470). Knowledge tacitness is “how easy or difficult
it is to codify and articulate the information that needs to be transferred for specific knowledge” (Gosain, 2007, p. 259). Renzl (2008) argued that knowledge that can be articulated and codified can be documented and then transferred more easily than non-codifiable knowledge.

H1: *The more complex and tacit the knowledge transferred, the less the knowledge transferred and acquired by the client.*

- **Mechanisms of Knowledge Transfer and Acquisition**
  The knowledge transfer literature has identified a number of strategies that are employed by organizations to facilitate knowledge acquisition and transfer. Hansen (1999) suggested that on-the-job-training is an effective mechanism for transferring less-complex and codified knowledge. In enterprise resource planning (ERP) implementation, Srivardhana and Pawlowski (2007) found that the social integration between the team of the client and their counterparts in the vendor side can lower the barriers to knowledge sharing and increase the efficiency of and the effectiveness of transformation and exploitation capabilities.

H2: *The more effective the mechanism used to transfer knowledge, the greater the knowledge transferred and acquired by the client.*

2.3 **Client-Related Factors**

- **Organizational Culture**
  Organizational culture refers to the values, practices and assumptions that motivate members of an organization to act and behave in a particular manner (Alavi et al., 2005). Thus, the culture of an organization has the potential to facilitate or constrain knowledge transfer and acquisition. For example, a flexible and innovative organizational culture can facilitate a learning environment and constantly promote employees to capture and utilize external knowledge, skills and expertise to solve problems and energize creative new ideas (Ajmal and Koskinen, 2008). On the contrary, a rigid organizational culture that dose not promote learning and
collaboration is found to be a significant hurdle to effective knowledge transfer (Gold et al., 2001).

H3: The more flexible the organizational culture of the client, the greater the knowledge transferred and acquired by the client.

- **Absorptive Capacity**
  Absorptive capability is the ability of the ‘recipient of knowledge’ to recognize the value of new, external knowledge supplied by the ‘source of knowledge’, assimilate it and apply it to commercial ends (Srivadhana and Pawlowski, 2007; Ko et al., 2005). In ERP implementation, Srivadhana and Pawlowski, (2007) argued that project success is much related to the ability of individuals in the client organization to acquire, assimilate and exploit new external knowledge available through the “best practices” embedded in the system as well as knowledge from vendors and consultants involved in system implementation and support.

H4: The greater the absorptive capacity of the client, the greater the knowledge transferred and acquired.

- **Motivation and Rewards**
  Motivation has been recognized as an important trigger for transferring and acquiring knowledge. Gold et al. (2001) asserted that motivation and incentive systems should be structured so that individuals are motivated and rewarded for taking the time to acquire and utilize new knowledge and share it with others. On the other hand, Narteh (2008) found that poor remuneration for individuals who are assigned the responsibility of transferring and acquiring knowledge would tend to affect the knowledge acquisition efforts.

H5: The more motivated the client, the greater the knowledge transferred and acquired.
2.4 Vendor-Related Factors

• Vendor Capability
The transfer of knowledge from the source to the recipient is highly depends upon the capability (i.e. the wealth of knowledge and experience) of the source (Gupta and Govindarajan, 2000). Szulanski et al. (2004) suggested that a source with relevant experience in knowledge transfer can easily initiate a transfer of knowledge from itself to the recipient.

H6: The more capable the vendor, the greater the knowledge transferred and acquired by the client.

• Vendor Credibility
Vendor credibility is the extent to which the client (recipient of knowledge) perceives the vendor (source of knowledge) to be trustworthy, reputable and expert (Joshi et al., 2007). Szulanski et al. (2004) highlighted the importance of credibility of the source to ensure successful knowledge transfer. Likewise, Ko et al. (2005) found that the credibility of the consultant (source) is essential for successful knowledge transfer in ERP implementation projects.

H7: The more credible the vendor, the greater the knowledge transferred and acquired by the client.

2.5 Relationship-Related Factors

• Communication Quality
Communication quality between business partners has been well established in various business literatures such as marketing, supply chain management and information systems. Burkink (2002) studied knowledge transfer between a wholesaler and retailer and found that effective communication significantly accounted for the success of knowledge transfer between the parties. In IS context, Ko et al. (2005) posited that transferring knowledge of ERP implementations from the
consultant (vendor) to the client requires successful communication and interaction between the parties.

H8: The higher the quality of communication between the client and the vendor is, the greater the knowledge transferred and acquired by the client.

• Use of Collaborative Technologies
Organizations are increasingly investing in collaborative technologies to encourage and facilitate their employees to share and acquire new knowledge (Alavi et al., 2005). According to Gold et al. (2001) collaborative and distributed technologies allow organizations to effectively communicate, transfer and acquire knowledge from their business partners, eliminating the structural and geographical impediments that may have previously prevented such interaction.

H9: The greater the use of collaborative technologies between the client and the vendor, the greater the knowledge transferred and acquired by the client.

H10: The greater the use of collaborative technologies between the client and the vendor, the higher the quality of communication between them.

• Cultural Distance
In today’s global business environment there has been much emphasise on the importance of acknowledging cross-cultural issues in interorganizational collaborations (Alami et al., 2008). In IS context, many outsourcing studies have recognized cultural differences as one of the reasons for failures and highlighted that client and vendor need to educate and train staff on the cultural differences between the two organizations (Krishna et al., 2004). Lin et al. (2005) posited that insufficient background about each other and lack of common languages limits the ability of the client and vendor to communicate and transfer knowledge across their organizational boundaries.

H11: The greater the cultural distance between the client and the vendor, the less knowledge transferred and acquired by the client.
H12: **The greater the cultural distance between the client and the vendor, the less the quality of communication between them.**

### 3.0 Conclusion

This conceptual paper proposed an integrative preliminary framework that links four groups of key factors namely, knowledge-related factors, client-related factors, vendor-related factors and relationship-related factors, and discuss how these factors can encourage and improve knowledge transfer and acquisition. It is believed that the application of the framework may provide useful insights into IS outsourcing decisions.

### References


