IBIMA Publishing
Journal of Organizational Knowledge Management
http://www.ibimapublishing.com/journals/JOKM/jokm.html
Vol. 2013 (2013), Article ID 496419, 11 pages
DOI: 10.5171/2013.496419

Research Article

A Framework of Critical Factors to Knowledge Workers' Adoption of Inter-organizational Knowledge Sharing Systems

Kamla Ali Al-Busaidi

Sultan Qaboos University, Alkhod, Oman

Received 4 September 2012; Accepted 28 September 2012; Published 27 February 2013

Academic Editor: Haslindar Ibrahim

Abstract

The objective of this research is to outline the critical factors to knowledge workers' adoption of "public-good" Inter-organizational knowledge sharing systems (IOKSS). Public-good IOKSS is one that is open to all firms in a specific sector. Public-good IOKSS is valuable and critical for effective social and economic development of any sector, especially knowledge-based sectors. However, the deployment of inter-organizational knowledge networks and collaborations may incur costs, challenges and risks to organizations and their individuals. To deploy a sustained inter-organizational electronic knowledge sharing, these obstacles must be overcome. Prior knowledge sharing research has mostly focused on the within-firm context. Prior research on inter-organizational systems (IOS) has focused on organizational adoption, and most empirical studies have mainly focused on supply-chain organizations, those that are vertically-linked. Based on KM and IOS literature, the critical factors to knowledge workers' adoption of public good IOKSS can be related to individual factors, their relationships with peers, the organization, the proposed IOKSS system, and the sector.

Keywords: Knowledge Workers, Inter-organizational System, Inter-organizational Knowledge Sharing System, Theoretical model.

Introduction

Knowledge is a powerful resource that enables nations, organizations and individuals to achieve several benefits such as improved learning, innovation and decision-making. Any organization, public or private, requires knowledge management to achieve its best performance. A Knowledge Management System (KMS) "is an integration of technologies and mechanisms that are developed to support knowledge management processes" (Becerra-Fernanadez et al., 2004, p. 31). An Inter-organizational KSS (IOKSS) is a type of KMS and is defined here as a system that enables

 Contact author: Kamla Ali Al-Busaidi E-mail: kamlaa@squ.edu.om

How to Cite this Article: Kamla Ali Al-Busaidi, " A Framework of Critical Factors to Knowledge Workers' Adoption of Inter-organizational Knowledge Sharing Systems," Journal of Organizational Knowledge Management, vol. 2013, Article ID 496419, 11 pages
DOI: 10.5171/2013.496419

seamless dissemination of individual and organizational knowledge (through repositories or networking) between two or more organizations. This study aims to investigate the key success factors for the development of "public good" IOKSS among organizations at the same business level (horizontally-linked) in a specific nation. A "public good" IOKSS is one that is open to all firms even if they did not contribute to the development of the system (Choudhury, 2007).

An IOKSS is one type of inter-organizational system (IOS). The concept of an IOS was coined originally by Cash and Konsynski (1985) and defined as an automated information system shared by two or more organizations, and designed to link business processes (Cash and Konsynski, 1985; Robey, et al., 2008). An IOS can result in several operational, strategic and social benefits for the participating organizations (Barrett and Konsynski, 1982; Robey et al., 2008), the government and society.

There is a persistent need for developing nations to take advantage of new technologies for acquiring and disseminating knowledge. Inter-organizational information integration is crucial for digital government. Partnerships between public and private organizations in specific sectors, especially service or knowledge-based sectors, are vital for the social and economic development of any country and the welfare of society such as in health and education sectors. For instance, an IOKSS can be developed for the health sector to enable physicians in the same or different organizations in the health sector (hospitals, medical centers, etc.) to share knowledge (medical cases, treatments, medical reports). Physicians can share knowledge through health IOKSS by either codifying it in the system, or communicating the knowledge with colleagues in other hospitals through the system (e.g., using video-conferencing). It fosters training and learning among knowledge workers, and lessens the knowledge gap among professionals. Moreover, such initiatives provide support for the government's developmental decision making and planning.

However, there are other costs and risks to establishing inter-organizational networks and collaborations (Williams, 2005). These risks and barriers are linked to individual, organizational, technological, social and political factors related to different stakeholders including for those organizations in horizontal linkages. Knowledge sharing is a challenging process even within a specific organization, as not many people are willing to share their best practices. There are a number of studies that have investigated the enablers (or motivators) of general knowledge sharing behaviour in an organizational context such as Bock et al. (2005), Kankanhalli et al. (2005), Wasko and Faraj (2005), Al-Alawi et al. (2007), Al-Busaidi et al. (2010) and Chen et al. (2012). However, crossing the boundary of an organization through IOKSS will additionally complicate the knowledge sharing process. These obstacles must be overcome, to develop smooth and sustained inter-organizational networks, including IOKSS.

There are several theoretical non-empirical papers on the development of inter-organizational systems (IOS) such as those of Barrett and Konsynski (1982), Cash and Konsynski (1985), Boonstra and De Vries (2005), and Robey et al. (2008). However, most of the prior papers reported empirical studies mainly focused on organizational adoption (Bala and Venkatesh, 2007; Robey et al., 2008), but gave inadequate attention to the context of these IOS (Makipaa, 2006). Very limited studies have assessed IOKSS adoption by knowledge workers, who are the end users, and therefore key stakeholders for achieving the expected benefits in a knowledge management initiative. In a knowledge-based system, knowledge workers, the end users, are the driving force of the system; such a system can only survive through their commitment and use. Thus, recognizing knowledge workers' attitude at a

very early stage will enable the organization to make a better decision and ensure end users' commitment throughout the whole development process.

IOKSS can be deployed to connect organizations in vertical linkage such as those in the supply chain (suppliers, organizations, customers, etc.), or organizations in horizontal linkage (those that operate in the same business level). Most prior empirical studies have investigated IOS deployment in vertical linkage of organizations (Reich and Benbasat, 1990; Grover, 1993; Rai et al., 2006; Ranganathan et al., 2011). However, a few (e.g., Pardo et al. (2006); Dawes et al. (2009); Yang and Maxwell (2011)) address IOS adoption for organizations that participate in horizontal linkages. Linking rivals through IOKSS can be more challenging than linking organizations in vertical linkage because of competition and rivalry, especially if it involves private organizations. With respect to horizontal linkage, some researchers who address the public sector have developed theoretical frameworks for IOS deployment such as Pardo et al. (2006), Dawes et al. (2009) and Yang and Maxwell (2011).

Organizations that are horizontally-linked can develop IOS cooperatively for strategic alliance or/and public good (Choudhury, 1997). Little is empirically known about the enablers of sharing knowledge in systems that connect organizations (public or private) in horizontal linkage in a specific sector or industry. Knowledge sharing processes and systems will not only be challenged by individual and organizational factors but also can be challenged by social, technical and political inter-organizational factors.

Determining the critical factors that impact knowledge workers' adoption (attitudes and intentions) of IOKSS in horizontally-linked organizations will help to improve organizational adoption of such systems. The goal of this research is to outline the critical factors to knowledge workers' adoption of IOKSS in horizontally-linked organizations. Based on KM and IOS literature, these factors include the characteristics of the knowledge workers and managers, their relationships with peers, the organizations, the proposed system (IOKSS), and the sector/industry.

IOKSS Success Factors

Knowledge Workers Adoption

As previously mentioned, this study aims to develop an explanatory model of the antecedents of knowledge workers adopting of inter-organizational knowledge sharing systems (IOKSS) for horizontally-linked organizations in service-based sectors that include public and private organizations. The antecedents of IOKSS are related to the factors that produce effective knowledge sharing behaviour and boundary spanning. Thus, the antecedents of IOKSS may be related to individual (computer self-efficacy, personal innovativeness, knowledge self-efficacy, image, knowledge ownership perception, perceived benefits/costs), peers (attitude, interactivity level, trustworthiness), system (perceived ease of use, perceived usefulness, perceived security, perceived compatibility), organization (management support, rewards, technological competence, organization structure), and sector (support, regulations/policies, standardization level, competitive pressure, information systems homogeneity). These factors are shown in Figure 1.

Previous studies have investigated knowledge sharing based on: (1) attitude as in Chen et al. (2012) and Jeon et al. (2011); (2) intention as in Chen et al. (2012), Jeon et al. (2011) and Bock et al. (2005); or actual knowledge sharing behaviour as in Kankanhalli et al. (2005), Wasko and Faraj (2005), Al-Busaidi et al. (2010) and Alawi et al. (2007). Since this model assesses knowledge workers' perception of IOKSS at the pre-implementation stage, knowledge sharing will be assessed by knowledge workers' attitudes toward the systems and intention to adopt IOKSS in general and to share knowledge.

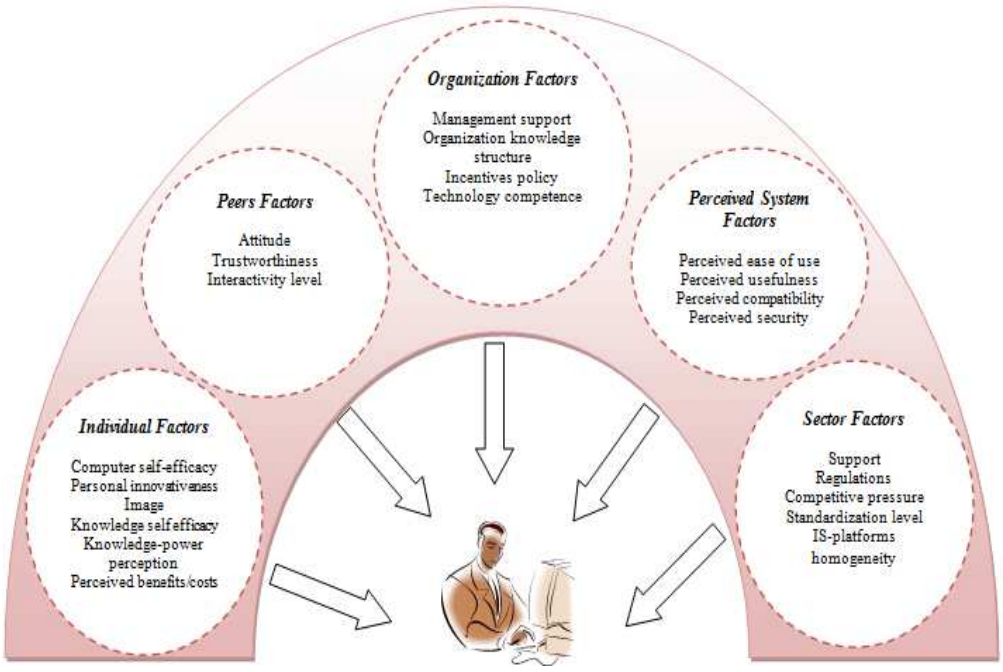

Fig 1. Critical Factors to Knowledge Workers' Adoption of "Public Good" IOKSS

Individual Factors

There are several individual factors that might affect knowledge workers adoption of IOKSS; these factors can be related to their self-efficacy, personal innovativeness, knowledge self-efficacy, image, knowledge ownership perception and perceived benefits/costs.

Knowledge workers' computer self-efficacy may impact their perception of new technological innovations such as IOKSS. "People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p.391). In the knowledge-based systems context, self-efficacy significantly impacts knowledge contributors' usage of the system (Kankanhalli et al., 2005). Not many IOS studies have investigated the impact of end users' characteristics. However, having sufficient technical skills to use IOKSS, will reduce the resistance to change factor that is often highlighted as a barrier in IS research including KMS.

Knowledge workers' personal innovativeness may also impact their attitude toward IOKSS. "Being used to adapting to new systems and processes might reveal the usefulness and ease of use more quickly to an innovative person than to a non-innovative person" (Schillewaert et al., 2005, p.843). Personal innovativeness influences end users' adoption of a knowledge management system (Xu and Quaddus, 2007). Also, willingness to experiment may impact adoption of inter-organizational knowledge networks (Dawes et al., 2009).

Knowledge self-efficacy is critical to individuals' knowledge sharing behavior especially in electronic format including IOKSS. Professionals with high expertise may feel confident to advice and consequently share their knowledge;

whereas those who have insufficient knowledge may feel incompetent and are reluctant to share their knowledge. Knowledge-self efficacy is significant knowledge contributors' usage KMS (Kankanhalli et al., 2005).

Individuals' perception of knowledge as power may impact their adoption of IOKSS. Knowledge is perceived as power by many individuals especially in knowledge-based services, and this perception typically affects knowledge sharing behavior (Wang and Noe, 2010). Thus, individuals may be reluctant to share their knowledge as they may feel it would reduce their value (power). Yang and Maxwell (2011) indicated that information/knowledge ownership can be a critical factor of information sharing through IOS in public organizations, especially if it is not part of the organizational culture.

Image can be an important social factor that affects knowledge workers' attitude and intention toward IOKSS in their domain. Image is the degree to which an individual believes the use of an innovation will improve one's position in one's social system (Moore and Benbasat, 1991). Bock et al. (2005) found that subjective norm, which is positively associated with image, impacts individuals' intention to share knowledge. In the IOS context, Yang and Maxwell (2011) indicated that people are motivated to contribute to the collective good in an organization as long as they maintain their social identity.

Perceived benefit/cost can be a major issue in individuals' attitude and decision to use IOKSS. Perceived benefits/costs impacts individuals' knowledge sharing behavior (Wang and Noe, 2010). Knowledge sharing can results in benefits such as enhancing professional reputation Wasko and Faraj, 2005), and enjoyment in helping others(Kankanhalli et al., 2005). There are some perceived costs about knowledge sharing (such as time, efforts and loss of power) that might negatively impacts individuals' attitude toward it. In the IOS context, direct and indirect perceived benefits and costs can be major factors in IOS adoption (Robey et al., 2008; Yang and Maxwell, 2011).

Peers Factors

There are several peers' factors that might affect knowledge workers adoption of IOKSS; these factors can be related to peers' attitude, trustworthiness and interactivity. Based on social influence theory (i.e., subjective norms), peers' attitudes toward the technology may impact individuals' attitudes toward the technology (Ajzen, 1991) and technology acceptance (Venkatesh and Davis, 2000). In the knowledge-based system context, Bock et al. (2005) found that subjective norm affect individuals' intentions to share knowledge. In public good IOKSS, individuals may have positive attitudes toward IOKSS and knowledge sharing if they think that their peers in the domain have knowledge/information needs. Partner's commitment affects the extent to which companies undertake IOS integration and increase the percentage of IOS exchange and performance (Lee and Lim, 2005). This principle can be also applied at the knowledge workers level.

Knowledge sharing or "selling" in an organization depends on the trustworthiness of the knowledge utilizers (or buyers) (Davenport and Prusak, 1998). The significance of trust in several knowledge-based activities including knowledge externalization was found to be statistically significant (Lee and Choi, 2003). Al-Alawi et al. (2007) found that trust is positively related to knowledge sharing in organizations. Lee and Lim (2005) found that a partner's trust affects organization adoption of IOS and the effectiveness of the IOS' performance. This principle can be also applied at the knowledge workers level because if individuals trust their peers within their organization and across organizations in this integration of knowledge sharing, it can positively impact their performance.

Peers' existing inter-organizational communication and social networking level in a specific domain may impact the individuals' attitudes toward inter-organizational knowledge sharing behaviour. The level and quality of interaction among peers in specific domains illustrates the need for IOKSS and motivates its implementation. Team cohesiveness and communication style were found to be positively related to individuals' knowledge sharing behaviour (Wang and Noe, 2010). Yang and Maxwell (2011) indicated that the existing social network impacts intra-organizational information sharing, including inter-organizational information sharing in the public sector.

Perceived System Factors

Several IOKSS factors may contribute to knowledge workers' adoption of IOKSS. These factors can be related to IOKSS' perceived ease of use, perceived usefulness, perceived compatibility and perceived security. Perceived ease of use can be a factor in knowledge workers' perception of IOKSS. Researchers indicate that perceived ease of use affects users' intention to use a technology (Bailey and Pearson, 1983; Venkatesh and Davis, 2000). Having a user-friendly, easy to learn and use knowledge management system influences end users' adoption (Xu and Quaddus, 2007). Likewise, perceived ease of use of IOS can be a critical factor to its implementation (Yang and Maxwell, 2011).

Perceived usefulness and capabilities can impact knowledge workers' perception of any information system including IOKSS. Perceived usefulness is one of the main significant factors on individuals' acceptance of a technology (Venkatesh and Davis, 2000). Perceived usefulness was found a significant factor on professionals' attitude toward knowledge sharing (Hung et al., 2010). Perceived usefulness of IOS can be a critical factor to its implementation (Yang and Maxwell, 2011).

Perceived compatibility of IOKSS with work practices is critical to knowledge workers' attitude toward the system. Perceived compatibility (how consistent is the innovation with an individual's values and experience) is an important characteristic of KMS to end users' adoption (Xu and Quaddus, 2007). Based on Venkatesh and Davis's (2000) technology acceptance model (TAM2), people perceive the system's usefulness by cognitively comparing its capabilities with what they need to get done in their job (job relevance). Based on task-technology fit research, job relevance is an important influence on the acceptance of a technology (Goodhue, 1995). The compatibility of technology is also a factor in IOS adoption and diffusion (Robey et al., 2008).

Perceived security is an important technical issue for the adoption of IOKSS especially when confidential information/knowledge is shared among several organizations. The importance of security on the use of information systems is confirmed by several researchers such as Chang and Wang (2011), and KM researchers such as Gold et al. (2001) and Jennex and Zyngier (2007). Similarly, the importance of security on IOS is highlighted by Boonstra and De Vries (2005), Suomi (1993), and Yang and Maxwell (2011). Designing IOS with access authorization and authentication is critical for sharing information (Suomi, 1993; Yang and Maxwell, 2011).

Organization Factors

Organization factors such as management support, organization structure, incentives policy and technology competence might impact knowledge workers adoption of IOKSS.

Management support for knowledge exchange reduces individual experts' fear of losing their values. Management support is critical for KMS (Davenport and Prusak, 1998; Gold et al., 2001), and extremely critical to endorse KMS including the IOKSS,

and consequently change employees' attitudes. Management support was found to be significantly correlated with knowledge sharing behaviour (Al-Busaidi et al., 2010). IOS literature has also emphasized the importance of top management support for IOS adoption (Grover, 1993; Robey et al. 2008).

Organizational structure is essential in leveraging technological architecture and knowledge management effectiveness (Gold et al, 2001; O'Dell and Grayson, 1998). Creating a flexible organizational structure that endorses knowledge sharing within an organization optimizes knowledge sharing not only within the organization but also across the organization's boundaries (Gold et al., 2001). The importance of the organization's structure s is also highlighted by Robey et al. (2008) and Yang and Maxwell (2011).

Organizations that want to encourage and promote employee interaction and knowledge sharing activities should adopt an incentives/rewards policy (Davenport and Prusak, 1998). Rewards policy is positively related to knowledge sharing in organizations (Al-Alawi et al., 2007; Al-Busaidi et al., 2010). Rewards/Incentives for the implementation of IOS are highlighted by Robey et al. (2008) and Yang and Maxwell (2011). Without good incentives employees will be reluctant to exchange and contribute their own knowledge to the KMS (O'Dell and Grayson, 1998).

The technical systems and infrastructure within an organization can contribute to knowledge workers' attitude toward IOKSS. A technological infrastructure that supports the communication of various types of knowledge is critical for building a firms' knowledge infrastructure capability (Gold et al., 2001) and the development of IOS (Lin, 2006; Robey et al., 2008; Yang and Maxwell, 2011). Having a compatible IT infrastructure (good technology and competent IT staff competency) is a major enabler of IOS, and improves knowledge workers' attitude and adoption of IOKSS.

Sector Factors

Several factors related to the sector where IOKSS is deployed might impact knowledge workers' adoption of IOKSS. These factors include sector support, regulations, competitive pressure, standardization level and homogeneity of organizational IS-platforms in different organizations in the sector.

Sector/government support for a "public good" IOKSS can be positively associated with knowledge workers' attitude toward its implementation and adoption. If a sector or related government agency fully supports such an initiative, knowledge workers should value it and consider it useful. This positive impact can be also explained by Ajzen's (1991) social influence theory which suggests that if one's superior thinks using a system is useful, then that person may also believe it. Sector or government pressure impacts IOS adoption and diffusion (Robey et al., 2008). For instance, Dawes et al. (2009) indicated that acquiring legal authority through an existing statute for a knowledge network in the public sector is a necessity.

Regulations and policies can be a major factor impacting knowledge workers' adoption of IOKSS. Regulations may hinder the adoption of IOKSS because government may prohibit sharing sensitive and regulated information in domains and sectors related to public safety and national security (Pardo et al., 2006; Yang and Maxwell, 2011). Legal barriers related to cross-organizational information transfer inhibit IOS adoption (Boonstra and De Vries, 2005; Robey et al., 2008). Having government/industry regulations that support IOS deployment and knowledge sharing across organizations in a specific domain encourages individuals to contribute to the systems and have positive attitudes toward its deployment.

Competitive pressure in a specific sector may also impact knowledge workers' attitude toward IOKSS implementation. Competitive pressure results from a threat of losing competitive advantage and therefore positively affects IOS planning effectiveness (Lin, 2006). Likewise, IOS research has highlighted the impact of competitive pressure on organizational adoption of the system. Lin (2006) found it significantly correlated with internet-based IOS adoption.

Having standardized business processes and shared understanding among firms in a specific sector can promote knowledge workers' attitude toward IOKSS in that domain. Having standardized business processes and practices can reflect a sense of integration and shared practices in the domain and improve the acceptance of IOKSS. Effective knowledge sharing depends on shared understandings, professional norms and standardized business processes and practices (Dawes et al., 2009). Different operational procedures, workflows and control mechanisms can impact inter-organizational information sharing (Yang and Maxwell, 2011).

Having existing homogeneous IS platforms can enhance knowledge workers' attitude toward IOKSS. Deploying IOKSS in a sector with organizations that use different information systems can negatively impact knowledge workers' attitude toward IOKSS deployment. That is, heterogeneous information systems with different platforms (hardware and software) and data standards can challenge IOS adoption (Boonstra and De Vries, 2005; Mäkipää, 2006; Pardo et al., 2006; Yang and Maxwell, 2011).

Conclusion

Inter-organizational knowledge sharing systems (IOKSS) is very valuable especially for service-based and knowledge-based sectors in any nation. IOKSS can be an integral part of e-government. However, costs, challenges and risks to organizations and their individuals may result from inter-organizational knowledge networks and collaborations. These obstacles must be overcome to develop stable and sustained inter-organizational networks and inter-organizational electronic knowledge sharing. The majority of prior theoretical and empirical research on knowledge sharing has focused on the within-firm context. In addition, studies on inter-organizational systems (IOS) lacks investigations on knowledge workers' adoption of such systems. Most empirical IOS studies have mainly focused on organizational adoption of IOS in vertically-linked supply-chain organizations. The objective of this research is to develop a model of the key antecedents of knowledge workers' adoption of IOKSS in organizations that are horizontally-linked.

Based on KM and IOS, this study proposed that the antecedents of knowledge workers' adoption of "Public good" IOKSS in a specific sector are related to personal factors, peers factors, organization factors, system factors and sector factors.

This study proposed a detailed framework that can be used by researchers and practitioners to examine knowledge workers' attitude and adoption of IOKSS, and ensure successful deployment of IOKSS. This study only proposed a theoretical model, thus empirical investigations are also needed to verify the effects of these factors. Also, future research should develop or adopt reliable and valid measurements for researcher and practitioners to evaluate this proposed model. Future qualitative studies (such as case analysis, interviews etc.) might reveal some further insights on these factors. However, further quantitative rigorous studies are needed to validate the model and generalize it.

Acknowledgment

This manuscript is a part of a granted research project by Sultan Qaboos University (SQU). The manuscript also benefited from the feedback received from Professor Lorne

Olfman at Claremont Graduate University in California.

References

Ajzen, I. (1991). "The Theory of Planned Behavior," *Organizational Behavior and Human, Decision Process,* 50 (2), 179-211.

Al-Alawi, A. I., Al-Marzooqi, N. Y. & Mohammed, Y. F. (2007). "Organizational Culture and Knowledge Sharing: Critical Success Factors," *Journal of Knowledge Management,* 11(2), 22-42.

Al-Busaidi, K. A., Olfman, L., Ryan, T. & Leroy, G. (2010). "Sharing Knowledge to a Knowledge Management System: Examining the Motivators and the Benefits in an Omani Organization," *Journal of Organizational Knowledge Management.* [Online], [Retrieved September 2012], http://www.ibimapublishing.com/journals/JOKM/2010/325835/325835.html

Bailey, J. E. & Pearson, S. W. (1983). "Development of a Tool for Measuring and Analyzing Computer User Satisfaction," *Management Science,* 29(5), 530-545.

Bala, H. & Venkatesh, V. (2007). "Assimilation of Interorganizational Business Process Standards," *Information Systems Research,* 18 (3), 340-362

Barrett, S. & Konsynski, B. (1982). "Inter-Organizational Information Sharing Systems," *MIS Quarterly,* 6(4), 93–105.

Becerra-Fernandez, I., Gonzalez, A. & Sabherwal, R. (2004). 'Knowledge Management,' *Pearson Education Inc, New Jersey, NJ, USA.*

Bock, G. W., Zmud, R. W., Kim, Y. G. & Lee, J. N. (2005). "Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate," *MIS Quarterly,* 29(1), 87–111.

Boonstra, A. & De Vries, J. (2005). "Analyzing Inter-Organizational Systems from a Power and Interest Perspective," *International Journal of Information Management,* 25(6), 485–501

Cash, J. I. & Konsynski, B. R. (1985). 'IS Redraws Competitive Boundaries,' *Harvard Business Review,* March-April, 134-142.

Chang, K.- C., Wang, C.- P. (2011). "Information Systems Resources and Information Security," *Information Systems Frontiers,* 13 (4), 579-593.

Chen, S.- S, Chuang, Y.- W., Chen, P.- Y. (2012). "Behavioral Intention Formation in Knowledge Sharing: Examining the Roles of KMS Quality, KMS Self-Efficacy, and Organizational Climate," *Knowledge-Based Systems,* 31, 106-118.

Choudhury, V. (1997). "Strategic Choices in the Development of Interorganizational Information Systems," *Information Systems Research,* 8(1), 1-24.

Davenport, T. H. & Prusak, L. (1998). Working Knowledge: How Organizations Manage What they Know, *Harvard Business School Press,* Boston, MA, USA.

Dawes, S. S., Cresswell, A. M. & Pardo, T. A. (2009). "From "Need to Know" to "Need to Share": Tangled Problems, Information Boundaries, and the Building of Public Sector Knowledge Networks," *Public Administration Review,* 69(3), 392-402.

Gold, A. H., Malhotra, A. & Segars, A. H. (2001). "Knowledge Management: An Organizational Capabilities Perspective," *Journal of Management Information Systems,* 18(1), 185- 214.

Goodhue, D. L. (1995). "Understanding the Linkage between User Evaluations of Systems and the Underlying Systems," *Management Science,* 41(12), 1827-1844

Grover, V. (1993). "An Empirically Derived Model for Adoption of Customer-Based Inter-Organizational Systems," *Decision Sciences,* 24(3), 603–640.

Jarvenpaa, S. L. & Staples, D. S. (2001). "Exploring Perceptions of Organizational Ownership of Information and Expertise," *Journal of Management Information Systems,* 18(1), 151–183.

Jennex, M. E. & Zyngier, S. (2007). "Security as a Contributor to Knowledge Management Success," *Information Systems Frontiers,* 9 (5), 493-504.

Jeon, S., Kim, Y.- G. & Koh, J. (2011). "An Integrative Model for Knowledge Sharing in Communities-of-Practice," *Journal of Knowledge Management,* 15 (2), 251-269.

Kankanhalli, A., Tan, B. C. Y. & Wei, K. K. (2005). "Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation," *MIS Quarterly,* 29(1), 113–143.

Lee, H. & Choi, B. (2003). "Knowledge Management Enablers, Processes and Organizational Performance: An Integrance View and Empirical Examination," *Journal of Management Information Systems,* 20(1), 179-228.

Lee, S. & Lim, G. G. (2005). "The Impact of Partnership Attributes on EDI Implementation Success," *Information & Management*, 42, 503–516.

Lin, H.- F. (2006). "Interorganizational and Organizational Determinants of Planning Effectiveness for Internet-Based Interorganizational Systems," *Information and Management,* 43 (4), 423-433.

Mäkipää, M. (2006). "Inter-Organizational Information Systems in Cooperative Inter-Organizational Relationships: Study of the Factors Influencing to Success," *IFIP International Federation for Information Processing,* 226, 68-81.

Moore, G. C. & Benbasat, I. (1991). "Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation," *Information Systems Research,* 2(3), 173-191.

O'Dell, C. & Grayson, C. (1998). "If Only We Knew What We Know: Identification and Transfer of Internal Best Practices," *California Management Review,* 40(3), 154-174.

Pardo, T. A., Cresswell, A. M., Thompson, F. & Zhang, J. (2006). "Knowledge Sharing in Cross-Boundary Information System Development in the Public Sector," *Information Technology and Management,* 7(4), 293–313.

Rai, A., Patnayakuni, R. & Patnayakuni, N. (2006). "Firm Performance Impacts of Digitally-Enabled Supply Chain Integration Capabilities," *MIS Quarterly,* 30(2), 225–246.

Rainer, R. K., Turban, E. & Potter, R. E. (2007). Introduction to Information Systems: Supporting and Transforming Business, *John Wiley & Sons,* Inc, NJ, USA.

Ranganathan, C., Teo, T. S. H. & Dhaliwal, J. (2011). "Web-Enabled Supply Chain Management: Key Antecedents and Performance Impacts," *International Journal of Information Management,* 31(6), 533–545.

Reich, B. H. & Benbasat, I. (1990). "An Empirical Investigation of Factors Influencing the Success of Customer Oriented Information Systems," *Information Systems Research,* 1 (3), 325-347.

Robey, D., Im, G. & Wareham, J. D. (2008). "Theoretical Foundations of Empirical Research on Interorganizational Systems: Assessing Past Contributions and Guiding Future Directions," *Journal of the Association for Information Systems,* 9(9), 497-518.

Schillewaert, N., Ahearne, M. J., Frambach, R. T. & Moenaert, R. K. (2005). "The Adoption of Information Technology in the Sales Force,"

Industrial Marketing Management, 34(4), 323– 336.

Suomi, R. (1993). "What to Take into Account When Building an Inter-Organizational Information System," *Information & Management,* 30(1), 151-159.

Venkatesh, V. & Davis, F. D. (2000). "A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal," *Management Science,* 46(2), 186-204.

Wang, S. & Noe, R. A. (2010). "Knowledge Sharing: A Review and Directions for Future Research," *Human Resource Management Review,* 20, 115–131.

Wasko, M. M. & Faraj, S. (2005). "Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice," *MIS Quarterly,* 29(1), 35-57.

Williams, T. (2005). "Cooperation by Design: Structure and Cooperation in Inter-Organizational Networks," *Journal of Business Research,* 58(2), 223-31.

Xu, J. & Quaddus, M. (2007). "Exploring the Factors Influencing End Users' Acceptance of Knowledge Management Systems: Development of a Research Model of Adoption and Continued Use," *Journal of Organizational and End User Computing,* 19(4), 57-79.

Yang, T.- M. & Maxwell, T. A. (2011). "Information-Sharing in Public Organizations: A Literature Review of Interpersonal, Intra-Organizational and Inter-Organizational Success Factors," *Government Information Quarterly,* 28(2), 164–175.