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The Impact of Knowledge Sharing Systems on Strategic Integration between Business and Information Technology

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The Impact of Knowledge Sharing Systems on Strategic Integration between Business and Information Technology

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Abstract

The Recent concerns about knowledge sharing systems organizations have accentuated the need for more efficient and effective knowledge sharing to plays an increasingly significant role in order to enhance strategic integration between business and information technology, therefore, the main goal of this study is to investigate the strategic alignment integration enablers and how it can be improved by the firms using knowledge sharing systems, strategic integration which addresses both how IT is in harmony with the business and how the business should, or could be in harmony with IT. The study population contains of selected Jordanian firms from industry sector. The study has reached to the following main conclusions: There is a positive relationship between knowledge sharing systems and strategic integration enablers and there is a significant statistical effect of knowledge sharing upon strategic integration enablers. In addition, the study recommended that the researched Jordanian firms should pay attention to the knowledge sharing systems and should give a specific care to the six enablers of strategic integration between business and information technology.

Keywords: Strategic Alignment, Strategic Alignment Enablers, Knowledge Sharing Systems.

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Introduction

Luen & Al-Hawamdeh (2002) define knowledge sharing as "the deliberate act in which knowledge is made reusable through its transfer from one party to another". On the other hand, Bibi (2008), has classified knowledge sharing as an organizational citizenship behavior, and defined knowledge sharing behavior as "an individual behavior that is discretionary, not directly or explicitly recognized by the formal rewards system, and that in the aggregate promotes the effective functioning of the organization.

The level of human issues and problems embedded in knowledge sharing behavior is much higher than that of any other process within knowledge management. This is due to knowledge sharing is a people-to-people process and there is difficult to implement knowledge Sharing. People will not share their knowledge because they think it is valuable and important. Moreover, the natural tendency is to hoard knowledge and look suspiciously upon knowledge from others. This research focus on knowledge sharing systems role to achieve strategic alignment between business and information technology. Luftman and Brier, (1999) highlight that "alignment grows in importance as companies strive to link business and technology in light of dynamic business strategies and continuously evolving technologies."

Although alignment is considered important, issues such as achieving and sustaining alignment, the assessment of alignment maturity, and the impact of misalignment on an organization are still issues that many organizations need to resolve. Once alignment is achieved within an organization, they need to constantly assess their alignment maturity so that they may achieve and improve their desired level of alignment. By constantly assessing alignment maturity, an organization can determine if progress is being made. Even for organizations that achieve the highest level of alignment, assessing strategic alignment is a necessity, as misalignment may cause organizations to under perform and lose their strategic position. Misalignment, as Papp (2001) illustrates, can cause problems with not only the development and integration of business and IT strategies, but can actually prevent IT from being leveraged to its maximum potential within an organization. While nearly all organizations recognize the significance of strategic alignment, very few believe they are doing it correctly. (Beal, 2004) and Guttman (2004), noted that when IT and business strategies are properly aligned, the various parts of an organization move synchronously to achieve results.

Luftman and Brier (1999) state that strategic alignment is important, as it can build a strategically viable advantage that will provide organizations with increased visibility, efficiency, and profitability. It further allows an organization to respond more quickly to dynamic and changing business environments, thereby using IT to achieve its set goals and objectives. This research study focuses on knowledge sharing as a strategy to enhance the strategic alignment enablers between business and information technology within an organizations.

Literature Review

Knowledge Sharing Systems

Knowledge sharing systems have received major attention in organizations because it is one of the primary pillars in knowledge management systems (KMS) initiative and even is the most controversial one. Perhaps the most prominent information and communication technology tool for facilitating knowledge sharing is an intranet. The potential role of prominent information and communication technology in supporting knowledge sharing, however, goes beyond the facilities of an intranet, although many of these functions may be bundled through the common interface of the intranet. Information and communication technology information and communication technology can enhance knowledge sharing by lowering temporal and spatial barriers between knowledge workers, and improving access to information about knowledge. The process of knowledge management involves several activities. The most commonly activity in the process of knowledge management nowadays is knowledge sharing (Willem, 2001).

Knowledge can be defined as different types. Nonaka ,(1994) classify knowledge into explicit knowledge and tacit knowledge. Explicit knowledge is codified knowledge that has been articulated in symbolic form, tacit knowledge includes two elements the cognitive element referring to mental models and the technical element referring to skills that can be applied in a special context (know-how). According to M. Alavi and D. E. Leidner(2001) information technology is more useful for supporting explicit KM rather than for tacit KM.

Bartol & Srivastava (2002) define knowledge sharing as individuals sharing organizationally relevant information, ideas, suggestions and expertise with one another. Cummings (2003) states that knowledge sharing is the means by which organizations obtain access to their own and other organizations' knowledge. The systematic sharing of knowledge is assuming a larger role in all kinds of organizations around the world(World Bank, 2005).

Bartol & Srivastava (2002) identify four main mechanisms for individuals to share knowledge in organizations through contributions to organizational databases, formal interactions within or across teams or work unit, informal interactions among individuals, and communities of practice. Knowledge sharing is defined as the voluntary interactions between human actors through a framework of shared institutions, including law, ethical norms, behavioral regularities, and so on, the subject matter of the interactions between the participating actors is knowledge. Such an interaction itself may be called sharing of knowledge.

Knowledge sharing deals with the ways in which knowledge may be shared between individuals, groups, or organizations (Connelly & Kelloway, 2003).

Willem (2002) states that knowledge sharing occurs between at least two parties and is a reciprocal process that allows the reshaping and sense making of the knowledge in the new context.

At the team level, project teams can be particularly effective in the field of knowledge sharing through the timely integration of knowledge across organizational boundaries.

Szulanski, (1996) and Hoegl et al. (2003) examine the network building of individuals in innovative team projects and assert that team design and management are an important source of growth within organizations. Organizational support was most effective in the dissemination of explicit knowledge. In an organizational context the selection of knowledge sharing mechanism should depend on the type of knowledge to be shared, the routine and frequency of the sharing process, and the nature of the knowledge recipient whether at the individual, group, or organization level (Dixon, 2000).

At the inter-organizational level .Tang, 2008 pointed that knowledge sharing occur through contractual inter organizational relations and overlook the fact that knowledge is shared through informal interaction as well as through more formal channels.

To successfully achieve effectiveness in knowledge management, knowledge sharing should be the most important consideration. Many organizations already achieve significant benefits through knowledge sharing activities (M. Alavi and D. E. Leidner,2001). Explicit knowledge and Tacit knowledge People possess slightly different types of tacit and explicit knowledge and apply their knowledge in unique ways. Individuals use different perspectives to think about problems and devise solutions.

Explicit knowledge requires a level of academic knowledge or understanding that is gained through formal education, or structured study. Explicit knowledge is carefully codified, stored in a hierarchy of databases and is accessed with high quality, reliable, fast information retrieval systems. Once codified, explicit knowledge assets can be reused to solve many similar types of problems or connect people with valuable, reusable knowledge. Sharing processes often require major monetary investments in the infrastructure needed to support and fund information technology (Hansen et al., 1999).

Most explicit knowledge is technical or academic data or information that is described in formal language, like manuals, mathematical expressions, copyright and patents. This 'know-what,' or systematic knowledge is readily communicated and shared through print, electronic methods and other formal means. Tacit knowledge is being understood without being openly expressed (Random House Dictionary of the English Language, 1971).

Polanyi (1967) described tacit knowledge as knowing more than we can tell, or knowing how to do something without thinking about it, like ride a bicycle. This highly personal, subjective form of knowledge is usually informal and can be inferred from the statements of others (Sternberg, 1997). Tacit knowledge tends to be local. It is not found in manuals, books, databases or files. Tacit knowledge is technical or cognitive and is made up of mental models, values, beliefs, perceptions, insights and assumptions. Technical tacit knowledge is demonstrated when people master a specific body of knowledge or use skills like those gradually developed by master craftsmen. Cognitive tacit knowledge incorporates implicit mental models and perceptions that are

so ingrained they are taken for granted (Sternberg, 1997). Cognitive models affect how we make sense of events in our world. People use metaphors, analogies, demonstrations and stories to convey their tacit knowledge to others (Stewart, 1997).

Socialization is described by Nonaka (1994) as the "process of creating tacit knowledge through shared experience". Experience is vital to this mode of knowledge creation because it allows tacit knowledge to be transferred from one person to another through such social interactions as apprenticeship or training. Numerous authors, including Davenport and Prusak (1998) have stressed the importance of direct, face to face interaction for the successful transfer of tacit knowledge.

Socialization mechanisms are likely, however, to be just as important in managing relationships across firm boundaries as they are in facilitating intra firm relationships. Socialization mechanisms encourage two-way information exchange, build and establish relationship trust, and enable transparency of information and cost sharing.

Despite the development of the socialization concept in other bodies of literature, it has not been applied in the context of managing inter organizational development teams (Cousins and Mengue, 2006).

In contrast, exchange mechanisms focuses on the sharing of explicit knowledge to communicate or transfer explicit knowledge between individual, groups and organizations.

Strategic Alignment

Strategic Alignment has many synonyms such as alignment (Silvius, 2007), harmony (Luftman et al; 1996), linkage (Reich and Benbazat, 1996) and business – IT alignment (Maes et al; 2000). The concept of strategic alignment has been developed for more than a decade; there are number of definitions to this concept presented by different authors in literature. According to Henderson and Venkatraman (1993), the strategic alignment refers to Strategic Fit and Functional Integration among business strategy, IT strategy, business infrastructure, and IT infrastructure.

According to Reich and Benbasat (1996 & 2000), the strategic alignment refers to "The degree to which the IT mission, objectives and plans support and are supported by the business mission, objectives and plans. Maes et al (2000) define strategic alignment as the continuous process involving management and design sub-processes of consciously and coherently interrelating all components of the business-IT relationship in order to contribute to the organization's performance over time. Luftman (2000) argues that strategic alignment refers to applying information technology in an appropriate and timely way, in harmony with business strategies, goals and needs. Many authors have established that strategic alignment is important, and that it improves business performance (Cheo, 2003).

Organizations are investing extensively on information systems to get the maximum benefits of Information Technology (IT) in today's competitive business set-up. Despite significant efforts to improve information systems

projects' success, many information systems tend to be unsuccessful most of the time. The reasons sought are the lack of alignment between information systems planning and business planning (Adarsh Garg, et al, 2010).

Besides, Incorporating information systems and information technology in the organizations have considerable risks, and these risks are increased when a strategic plan for its incorporation is not done. The objective is to contribute in the alignment between business and information technology strategies (Llanos Cuenca, 2010).

Connecting the Information Systems, Information Technology strategy with business strategy has become a crucial issue. The level of integration between business strategies requires the explanation of interrelationships, in order to achieve business goals.(Abdullah, et al, 2009).

Val. A et al, (2010) described the importance of the alignment between information systems (IS) and the business strategies. They found that IS-marketing alignment had a positive impact on both business performance and marketing performance. Finally, mutual understanding between the CEO and CIO is thought to facilitate the alignment of an organization's IS with its business strategy, and thereby enhance the contribution of the information systems to business performance (Alice. M, et al, 2010).

Strategic Alignment Enablers and Inhibitors

There is a lot of literature about business-IT strategic alignment that are concerned with issues of control of resources rather than managing relationships. Although the alignment gap represents an important concept in business-IT strategic alignment, it has not been presented or discussed explicitly in business-IT strategy context. Moreover, in all the literature that the researchers have studied, there was no evidence as to who has referred to the concept of alignment gap between business strategy and IT strategy (Majali and Dahlin, 2010). The concept of alignment gap between business strategy and IT strategy has actually appeared due to the fact that there is a separate organizational unit in the business firm or organization (Shamekh, 2008). Many academic and practitioners" show that misalignment or lack of alignment between IT and business strategies are one of the main reasons why enterprises fail to exploit the full potential of their IT investments. (Silva et al., 2006) argue that organizations that have accomplished a high degree of alignment are often associated with better business efficiency and effectiveness performance. Major reasons for alignment failure as related to executive roles include: the inability to maintain internal and external business and IT relationships, failure to implement change, lack of senior management support, and a culture that refuses to shift (Weiss and Anderson, 2004). More specifically, (Luftman and Brier, 1999) made a significant research over 500 firms in 15 industries, in addition to surveys they used interviews and observations from consulting engagements, As a consequence of all these data analysis they found that there are six important enablers and inhibitors.

Table 1. Strategic Alignment Enablers and Inhibitors (Luftman and Brier, 1999)

Strategic alignment enablers	Strategic alignment inhibitors		
1. Senior executive support for IT	1. IT/business lack close relationships		
2. IT involved in strategy development	2. IT does not prioritize well		
3. IT understands the business	3. IT fails to meet commitments		
4. Business-IT partnership	4. IT does not understand business		
5. Well-prioritized IT projects	5. Senior executives do not support IT.		
6. IT demonstrates leadership	6. IT management lacks leadership		

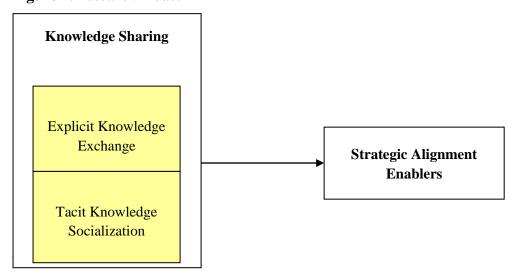
Research Model and Hypotheses

Knowledge sharing (independent variable) is an overarching concept which includes explicit Knowledge Exchange and tacit Knowledge Socialization in order to enhance strategic alignment enablers (dependent variable). Based on the research model as illustrate in Figure 1, this research aim to identify the following questions and hypotheses, there are:

- What is the level of knowledge sharing in selected Jordanian firms?
- What is the level of strategic alignment enablers in selected Jordanian firms?
- What is the relationship between independent variable (Knowledge Sharing) and its constructs with dependent variable (strategic alignment enablers) and its constructs in selected Jordanian firms?

Research Model

Figure 1. Research Model



The following hypotheses will be tested:

H1: H1: There is a significant statistical effect of knowledge sharing (KS) upon strategic alignment enablers (SAE).

The first main hypothesis includes the following sub hypotheses as follows:

H1a: There is a significant statistical effect of explicit knowledge sharing (Exchange) upon strategic alignment enablers.

H1b: There is a significant statistical effect of Tacit knowledge sharing (Socialization) upon strategic alignment enablers.

Research Methodology

The population of this study is made up of two selected leading firms from industry sector. Selected firms were chosen in preference to small or medium firms as they are more likely to have a strategic alignment between business strategy and information technology strategy. The purposive sample of this research includes Arab Potash and Jordan Cement Factories Company from industry sector. The sample designed to include people from different managerial levels of selected firms.

The questionnaires' data are arranged in terms of the two variables, and five-point Likert scales are used. Respondents are asked to indicate the extent to which they disagree or agree. A pilot test was conducted before sending out the final questionnaire version to examine the syntax of the questionnaires' items. Ten employees were asked to check the semantic content of the questionnaires. The survey was conducted over a period of one month. A total of 110 questionnaires were distributed and 66 were returned, giving a response rate of 67 percent. The results of the study were computed and analyzed using Statistical Package for Social Sciences (SPSS) version 12 (Table 2).

Table 2. *Management Level of Respondents*

Management Level of Respondents		
Senior Management	11	24.1
Middle Management	23	50.4
Junior Management	32	25.4
Total	66	100.0

Analysis and Results

Descriptive, Correlation and linear-multiple regression analyses were conducted to examine the research question and hypotheses. Table 3 and 4 summarize the descriptive statistics and analysis results of each variable as a follow:

Q1: What is the level of knowledge sharing in selected Jordanian firms?

Q2: What is the level of strategic alignment enablers in selected Jordanian firms?

Table 3. *The Mean Statistic for the Independent Variable of the Study*

Independent Variable	Mean	St Dev
Knowledge Sharing		
Independent Variable Constructs		
Explicit Knowledge Exchange	3.67	0.79
Tacit Knowledge Socialization	3.45	0.70

Reviewing the mean statistics of the main constructs of knowledge sharing, most respondents have agreed that a reasonable but not a high level. Dimensions are found in the researched firms ranging from (3.45 to 3.67). From these results, the importance of studying how to enhance these levels is increasing.

Table 4. The Mean Statistic for the Dependent Constructs of the Study

Dependent variable	Mean	St Dev
Strategic Alignment Enablers		
Strategic Alignment Enablers		
Constructs(SAE)		
Senior executive support for IT	3.66	0.77
IT involved in strategy development	3.44	0.63
IT understands the business	3.65	0.78
Business-IT partnership	3.57	0.78
Well-prioritized IT projects	3.44	0.63
IT demonstrates leadership	3.31	0.61

Reviewing the mean statistics of the main constructs strategic alignment enablers, most respondents have agreed that a reasonable but not a high level. Dimensions are found in the researched firms ranging from (3.31 to 3.66). From these results, the importance of studying how to enhance these levels is increasing.

The Third Question

What is the relationship between independent variable (Knowledge Sharing) and its constructs with dependent variable (strategic alignment enablers) and its constructs in selected Jordanian firms?

Table 5. Pearson's Correlation Coefficient.

	SAE	Enabler 1	Enabler 2	Enabler 3	Enabler 4	Enabler 5	Enabler 6
KS	0.57**	0.40**	0.39**	0.50**	0.48**	0.56**	0.59**
EKS	0.61**	0.45**	0.45**	0.45**	0.46**	0.61**	0.57**
TKS	0.68**	0.48**	0.46**	0.50**	0.52**	0.56**	0.52**

^{**} Significance at 0.01

Table 5 shows the correlations among independent variable Knowledge sharing and its constructs (Knowledge exchange, knowledge socialization) and dependent variable strategic alignment enablers (from Enabler 1 to Enabler 6)

are examined to test the first main question. Knowledge sharing and its constructs (Knowledge exchange, knowledge socialization) was consistently associated with dependent variable strategic alignment enablers,

Knowledge sharing is positively related to strategic alignment enablers with Pearson's correlation coefficient of (r=0.57). The significant value for this correlation coefficient is less than (0.01). Therefore it can be concluded that there is a marked relationship between) Knowledge sharing (KS) and strategic alignment enablers (SAE). It can be noticed that tacit knowledge socialization (TKS) has the highest correlation coefficient of (r=0.68) with (SAE) among of all. Whereas, KS is the lowest correlation coefficient of (r=0.39) with Enabler 2. Therefore, there is appositive relationship between (KS) and (SAE) Based on the Pearson's correlation coefficient values between independent variable constructs and dependent variable constructs.

Hypotheses Testing

As noted above, the key hypothesis is stated as follows: There is a significant statistical effect of knowledge sharing upon strategic alignment enablers.

The test of hypotheses by using Linear Regression. The value of R square represents the percentage with which the independent variables explain the variation in the dependent variable.

H1d: There is a significant statistical effect of knowledge sharing (KS) upon strategic alignment enablers (SAE).

Tabla 6	I ingar	Regression	Test of the	First Main	Hypothesis
i abie o.	Linear	Regression	resi oi ine	e r usi wiain	nybolitesis

Model	Beta	t	\mathbb{R}^2	F	Sig
Predictors:					
(constant) KS	0.58	11.27	0.38	124.41	0.000
Dependent					
Variable: SAE					

Referred to Table 6 $R^2 = 0.38$ which means that approximately 38% of the variance in strategic alignment enablers (SAE) is accounted by knowledge sharing (KS), t value equals 11.27 with significance equal 0.000, which is less than 0.05. Therefore, the result confirms the main hypothesis, which indicates that there is an effect of KS upon strategic alignment maturity enablers (SAE). Consequently, the independent variable has a significant effect on (SAE).

The test shows there is a positive relationship between (KS) and (SAE), where Beta equals 0.58 t equals 11.27, Sig equals 0.00.

The Sub Hypotheses Testing

H1a: There is a significant statistical effect explicit knowledge sharing upon strategic alignment enablers.

H1b: There is a significant statistical effect of Tacit knowledge sharing upon strategic alignment enablers.

N/L 1 - 1	odel Beta T R ² F Sig	TD.	D ²		G.	Colinearity Statistics	
Model		Sig	Tolerance	VIF			
Predictors: (constant) EKS TKS Dependent Variable: SAE	0.27 0.24	5.17 4.40	0.63	92.43	0.00 0.00	0.661 0.612	1.513 1.633

Referred to Table 7 $R^2 = 0.63$ which means that approximately 63% of the variance in (SAE) is accounted by (EKS, TKS) t value equals (5.17, 4.40) with significance equals 0.00, which is less than 0.05. Therefore, the result confirms the first two sub hypotheses, which indicates that there is an effect of (EKS, TKS) upon (SAE). Consequently the independent variable has a significant effect upon (SAE). The test shows there are a positive relation between (EKS, TKS) and (SAE), where Beta equals (0.27, 0.24).

Results Discussion

The main objective of this study is to investigate the impact of knowledge Sharing on strategic alignment enablers between business and information technology within an organizations. The findings show how organizational knowledge Sharing improve and facilitate strategic alignment.

Based on these results, some interesting propositions are exhibited. The researcher had assumed that there is a significant statistical effect of knowledge sharing upon strategic alignment enablers, and the results of the statistical analysis indicate that knowledge sharing affects significantly upon strategic enablers. This means that the strategic alignment between business and information technology will be enhanced by using innovative strategies such as knowledge sharing because there are dynamic changes in business environment In addition, there is a consistency between this result and several studies such as M. Shin(2004) study findings that emphasize the importance of knowledge sharing due to Many organizations already achieve significant benefits through knowledge sharing activities in order to quickly adapting not only to deal with the change, but in many cases to exploit it for strategic alignment between business and information technologies.

The results of this study are corresponding with the study of Markus and Benjamin, (1997), Willcocks, et al, (1997) has noted that organizational learning processes are increasingly important in identifying successful IT-

based investments and creating IT enabled change. Also organizational competitiveness is dependent upon the use of organizational learning processes that can uncover dispersed knowledge capable of rendering superior organizational performance (Hunt, 1999). In addition Reich and Benbasat, (1996) mentioned the strategic IT alignment is an organizational learning process that combines business and IT knowledge in order to support business objectives; it can positively affect organizational profitability by creating superior strategies that achieve a competitive advantage.

The results of this study are corresponding with many studies such as Tang, (2008) which mentioned that knowledge sharing enhances strategic alignment and the competitive advantage and there is a positive relationship between supportive knowledge sharing and IT/ business strategic alignment. In addition, organization learning (Knowledge sharing) has a good level that contributes to enhance alignment maturity between business and information technology.

Besides, the results of the research that was introduced by Bibi,(2008) mentioned that the strategic IT alignment is an organizational learning process that combines business and IT knowledge in order to support business objectives. It also can positively affect organizational profitability by creating superior strategies that achieve a competitive advantage.

According to the previous results in this study, all results were at good level and indicated to the positive relationship between the two Variables and between independent variable constructs and dependent variable constructs.

Conclusions and Recommendations

Leading organizations focuses on developing interpersonal, structural, and network relationships to achieve effective knowledge sharing and to further generate new knowledge or capabilities in order to achieve high level of strategic alignment.

Assessing Strategic alignment enablers should be continuous as a result to the dramatic changes, in business environment, that the firms face. The six strategic alignment enablers should be taken into account in order to achieve high level of strategic alignment maturity level. This means that the six enablers should receive a high importance in order to enhance strategic alignment maturity level, firms must understand the current situation to reach a high level through understanding the gaps between Business and information technology.

According to the results of this study, several important implications for practitioners are interested in knowledge sharing. Some of recommendations may assist firms willing to adopt the knowledge sharing to achieve dramatic improvements in strategic alignment levels therefore, firms must apply knowledge sharing strategy that have a positive impact on strategic alignment enablers. This means that knowledge sharing should receive a high attention

According to the results of research, relatively reasonable level of strategic alignment is found which requires to adopt innovative strategies to enhance the alignment between business and information technology. In future research, it is recommended to use quantitative and qualitative methods in order to combine the advantages of both.

References

- Adarsh Garg, D.P. Goyal, Anu Singh Lather. 2010. The influence of the best practices of information system development on software SMEs: a research scope, *International Journal of Business Information Systems, Vol. 5, No.3, (2010)*, Pp. 268 290.
- Alavi, M. and D. E. Leidner.2001. "Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues," *MIS Quarterly, vol.* 25, pp. 107-136, 2001.
- Alice M. Johnson and Albert L. Leader. 2010. CEO/CIO mutual understanding, strategic alignment, and the contribution of IS to the organization, *Information & Management, Volume 47, Issue 3* (2010), Pp 138-149.
- Al majali, D., & Dahlin, Z. 2010. "Diagnosing the gap in it business strategic alignment: a qualitative analysis among public shareholding firms in Jordan", *International Journal of Electronic Business Management*, 8, (4), 2010/263-271
- Bartol, K., & Srivastava. 2002. A Encouraging knowledge sharing. *Journal of Leadership & Organizational Studies*, 9(1), (2002), 64-76.
- Beal, B. 2004. IT-Business Alignment Elusive for Some. [On-Line]. Availablehttp://searchnetworking.techtarget.com/originalContent/0,289142,sid1 9 gci956494,00.html> [Accessed on: 04 February 2007], 2004.
- Bibi, 2008, *Understanding knowledge behavior: A theoretical framework*, Rutgers University, USA.
- Bordia, P., Irmer, B. E., Garden, M., Phair, K., & Abusah, D. 2004. *Knowledge sharing in response to a supportive work environment*: evidence from an Australian engineering firm.
- Cheo, J. 2003. The Effect of Environmental Uncertainty and Strategic Application of IS on Firms Performance, *Information Management Journal*, *Vol.* 40, (2003), pp. 257–268.
- Connelly, C., & Kelloway, E.2003. Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal*, 24(5), (2003), 294-301.
- Cousins, P.D. and Menguc, B. 2006. The Implications of Socialization and Integration in Supply Chain *Management. Journal of Operations Management* 24(5), (2006), 604–620
- Cummings, J. 2003. *Knowledge sharing: A review of the literature for the World Bank Operations Evaluation Unit. Retrieved from*: http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/D 9E389E7414BE9DE85256DC600572CA0/\$file/knowledge_eval_literature_revie w.pdf.
- Davenport, T.H. and Prusak, L. 1998. *Working Knowledge*. Boston: Harvard Business School Press.
- Dixon, N. M. 2000. *Common knowledge: How companies thrive by sharing what they know*, Boston, Mass: Harvard Business School Press.

- Guttman, H.M. 2004. *Alignment Unplugged Bring your talented people together*. Executive Excellence, pp. 17 18.
- Hansen, M.T., Nohria, N. and Tierney, T. 1999, "What's your strategy for managing knowledge?", Harvard Business Review, March-April, pp. 106-16.
- Henderson, J.C. & Venkatraman, N. 1993, 'Strategic alignment: Leveraging information technology fortransforming organizations', *IBM Systems Journal*, *Vol. 32*, *no. 1*.
- Hoegl, M., Parboteeah, K, Praveen., & Munson, Charles, L. 2003 Team-Level Antecedents of Individuals' Knowledge Networks. *Decision Sciences*, *34*(4), 741-769.
- Lee, L., & Al-Hawamdeh, S. 2002. Factors impacting knowledge sharing. *Journal of Information and Knowledge Management*, 1(1), 49-56.
- Llanos Cuenca, Angel Ortiz and Andres Boza. 2010. Business and IS/IT Strategic Alignment Framework, *Springer Boston, Volume 314*, (2010), pp. 24-31.
- Luen, T. & Al-Hawamdeh, S. 2001. Knowledge management in the public sector: principles and practices in police work. *Journal of Information Science*, 27(5), 311-318.
- Luftman, J. N. 2000, "Assessing Business-IT Alignment Maturity", *Communications of the Association for Information Systems, Vol. 4*, Article 14, December 2000.
- Luftman, J. and Brier, T. 1999. "Achieving and Sustaining Business-IT Alignment", *California Management Review*, 42, (1), 1999/109-122.
- Luftman, J. 1996. Competing in the Information Age: Practical Applications of the Strategic Alignment Model, New York: Oxford University Press.
- Maes, R., Rijsenbrij, D., Truijens, O. and Goedvolk, H. 2000, 'Redefining Business-IT Alignment through aunified framework', white paper, http://imwww.fee.uva.nl/~maestro/PDF/2000-19.pdf.
- Nonaka, I. & H. Takeuchi. 1995. The knowledge Creating Company: How Japanese Companies Create the Dynamics of Innovation. New York: Oxford Uiversity Press.
- Nonaka, I. 1994. A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14-37.
- Papp, R. 2001, "Strategic Information Technology: Opportunities for Competitive Advantage," Idea Group Publishing.
- Polanyi, M. 1967. The Tacit Dimension, Doubleday, New York, NY.
- Random House Dictionary of the English Language 1971. *Random House*, New York, NY.
- Reich, B.H. and Benbasat, I. 2000, 'Factors that Influence the Social Dimension of Alignment between Businessand Information Technology Objectives.', *MIS Quarterly, Vol. 24, No. 1*, pp. 81.
- Reich, B.H. and Benbasat, I. 1996. 'Measuring the Linkage between Business and Information Technology Objectives.' *MIS Quarterly, Vol. 20, No. 1*, pp. 55-81.
- Shamekh, F. 2008." *Business-IT Strategic Alignment Concept in Theory and Practice*". Technology, Master. 1-66. Chalmers University of Technology and Goteborg University.
- Shin., M. 2004. A framework for evaluating economics of knowledge management systems, *Information and Management 42(1)*, (2004), 176–196.
- Silva E., Plazaola L., Ekstedt M. 2006. "Strategic Business and IT Alignment: A Prioritized Theory Diagram". Istanbul, Turkey, July 2006.

- Silvius, A.J.G. 2007. 'Business & IT Alignment in Theory and Practice', 40th Hawaii International Conference on Systems Science (HICSS-40 2007), CD-ROM / Abstracts Proceedings, 3-6 January 2007, Waikoloa, Big Island, HI, USA.
- Sternberg, R.J. 1997. Successful Intelligence, Penguin Putnam, New York, NY.
- Stewart, T.A. 1997, Intellectual Capital, Currency/Doubleday, New York, NY.
- Szulanski, G. 1996. Exploring Internal Stickiness: Impediments to the Transfer of Best Practice within the Firm. *Strategic Management Journal* 17:27–43.
- Tang, L. 2008. Informal Inter Organisational Knowledge Sharing: The Case of the Biotechnology Industry. Paper presented at the annual meeting of the NCA 94th Annual Convention, TBA, San Diego, CA. Retrieved from: //www.allacademic.com/meta/p255092_index.html.
- Trezzeni, P. Lambe, S. Hawamdeh (Eds.), People, knowledge and technology: what have we learnt so far. *Proceeding of the first IKMS International conference on knowledge management (pp. 129–139)*. Singapore: World Scientific.
- Val A. Sid L. Peter C. 2010. The impact of IS-marketing alignment on marketing performance and business performance, *ACM*, *Volume 41*, *Issue 1 (2010)*, Pp36 55.
- Weiss, J. W. and Anderson, D. 2004. "Aligning Technology and Business Strategy: Issues & Frameworks, A Field Study of 15 Companies", *Proceedings of the 37th Annual Hawaii International Conference on System Sciences (HICSS'04)*, IEEE Computer Society Press, Washington, USA, pp. 1-10: (2004)>
- World Bank. 2005. *Social capital and the public sector*. Retrieved from http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVEL OPMENT/EXTTSOCIALCAPITAL/0,contentMDK:20185275~menuPK:404103~pagePK:148 956~piPK:216618~theSitePK:401015,00.html.
- Willem, A. 2002. Leveraging knowledge integration through social identity: A knowledge based theory of the firm perspective. *Academy of Management Annual Conference, Denver, Colorado*, 12-14 August 2002.