

8th International Strategic Management Conference

Assessing the knowledge sharing in terms of risk level in-house service sector assisted with logistic regression model

Seyfi Top^{aa}

^a *Istanbul Aydın Üniversitesi, Turkey*

Abstract

There is an increasing emphasis on the importance of knowledge sharing for organizational performance and effectiveness both private and public sectors thorough the dimension of globalization. Knowledge sharing activities creates opportunities for business and organizations to gain sustainable competitive advantage in the market place. The aim of this study is to analysed and examined effectiveness of knowledge sharing in service sector from the side of employee's perceptions. Logistic regression model is applied in this study. Before the factors that affecting in-house knowledge sharing has been identified, after then these factors have been ranked according to their risk levels. The highest risk in knowledge sharing in-house has been found the role of top management which ranked according to the level of risk. The second highest risk in knowledge sharing in-house has been seen on the technological infrastructure and information systems of knowledge sharing. Third place risk in knowledge sharing in-house has been seen on trust and relationships between employees and managers. Fourth degree of risk in knowledge sharing in-house has been found the nature of knowledge and comprehension of the strategic importance of knowledge. The lowest risk in knowledge sharing in-house has been found on intrinsic motivation.

Keywords: Knowledge Sharing, Risk Level, Service Sector

© 2012 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of the 8th International Strategic Management Conference Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

Today, knowledge as a competent technology is one of the big factor that affect both our business and lives. How accessible, cheap raw materials and energy have played important roles in the firm's success, in the industrial age. Knowledge just serves similar roles in information age (Mehlinger, 1995:7). Again, an analogy with other, how the motor and electrical technologies are turned into different areas by changing the energy spread to use all sectors, just as knowledge is a source of competitive advantage by undertaking similar role in motor (Coates and Jarratt,1992:9; Kim, 2000:1).This point of view, knowledge sharing is a critical factor that strategic context of firms and institutions to keep their subsistence of business (Caldeira and Ward, 2001:1160; Li, Pike and Haniffa, 2006:7). On the other

^a *Corresponding author. Tel. + 90-212-697-1879*

Email address: seyfitop@gmail.com

hand, knowledge sharing as the basic element of the processes to achieve certain goals or developing a specific opinion is also used as an important input determining the vision (Ülgen, 1990:3), and coordinating main functions in organizations (Grover and Davenport, 2001:5).

2. Literature Review

Strategic Importance of Knowledge: Information as a concept that derived from the word of Latin information means an act such as what the format, formatting, news, news-making (Top, 2008:127). Knowledge is also expressed as intuition, understanding, comprehension, prediction, lighting, intelligence and skill (Laird, 1985: 422). Also knowledge is synthesized by persons perceptions and intuition (Hall & Andriani, 2003:145). In addition knowledge is a resource, including people's cognitive structures and based on data that reflects a reality (Krogh, et al, 2002:16). In other words knowledge is synthesis that obtained from the information and by adding belief, experience, intuition, insight, foresight, converted into a form of business jobs (Duffy, 2000:11; Huotari & Iivonen, 2004:4; Renzl, 2008:208). In this sense knowledge rather than things specified documents, spreadsheets, reports, but is a factor that make a difference, in the strategic value and source that the daily functioning (Davenport & Prusak, 1998:5; Yaman, 2000:15-16), of the institutions, processes, strategies, decisions, products, all kinds of designs, management practices, standards and culture, corporate culture (Itami, 1987:12).

In strategic context, knowledge refers to make appropriate resource and decision factor to work (Nooteboom, 1996:8). Emerging as an important strategic factor of the organisations, knowledge is proved through testing established the validity for competitive advantage (Lee, 2001:324; Renzl, 2008:208). So knowledge has become identification as a new competitive advantage, creating by new knowledge which non imitable resources (Cantner et al, 2009:187). Knowledge sharing between units of the firm influences positively on the success of the company (Quinn et al, 1996:8). Looking at the global dimension, the studies about the knowledge sharing is to be said new. However, in the process of managing from the existing company, knowledge is not new in the portfolio management activities and the origin goes back to the old dates. What is new? The new is taking advantage of employees' skills, ideas, insight and mastery that combining them in the capacity of business and using of these a strategic sense (Cantner et al, 2009: 188). Knowledge sharing is also facilitating the organizational learning through the establishment of social and technological network systems (Hsu, 2007:3). In this respect, knowledge sharing presents opportunity to the business that acquired a sustainable competitive advantage and develops skills and capacity (Renzl, 2008:206). In the context of a sustainable competitive advantage is also originate an opportunity creating activity and providing solutions for companies to meet the needs of the institution's ability to maximize (Lin, 2007: 315).

Hypothesis: 1. Misunderstanding of the strategic importance of knowledge is a risk for knowledge sharing

Information Technology: One of the determination of contemporary knowledge sharing factor is information technology (IT) (Scarborough & Swan, 2001:4). Physical technology resources consists of the overall IT compounds, computer and communication infrastructure (Akdede & Turan, 2008:11; O'Neill & Adya, 2007:1). Namely IT is referred sub-structures such as data recording, storage, production of a particular transaction process by passing the information and access to the information generated, stored, transported that allows for effective and efficient manner (Baker & Badamshina, 2002:19). Therefore knowledge sharing is required infrastructure based on virtual environments (Fang & Qu, 2007:577). Establishing the mass of information structure, such as internet, intranet and electronic media has become easier to share knowledge for everybody in the organizations (Şimşek, 2000:413; Tekin et al, 2000:83; Tutar, 2000:28; Lu & Hsiao, 2007:348). In this respect any organizational knowledge infrastructure or systems provide opportunities for human being (employees) to the critical feedback learning (Baker & Badamshina, 2002:15-16; Hislop, 2002:165 Connelly & Kelloway, 2003:294) and idea creating. There is an important contribution of IT for sharing knowledge, but these instruments should be supplemented with the right business philosophies and relationships (Faniel & Majchrzak, 2007:1685).

Hypothesis: 2. Not well operating of organization IT and mechanisms is a risk for knowledge sharing

Motivation and Perceived Organisational Support: In order to achieve a sustainable knowledge sharing needs boosting employees' morale and required investment for employees as much as technology investments (O'Neill & Adya, 2007:1). Motivation, occur when any activity for the employees is a valuable and these values are sustainable

for them. Therefore, businesses are formulated consciously emotional contracts that should build trust between the parties (O'Neill & Adya, 2007:4).). If there is a certain level of mistrust between people, this mistrust or insecurity affect to share knowledge and internal motivation negatively (Zhang et al, 2006:2). In a social change relation from personal to organization and from organization to the personal is to be explained employees how to devote themselves their organizations (Eisenberger et al, 1986:501). Employees have a universal belief for their contributing to the welfare of the organisation and in the same way they expect to value from the organization. In other words, if the organizational support is to be understood valuable by employees they have access internal motivation and share their knowledge more easily.

Hypothesis: 3. Lack of motivation and organizational support is a risk factor for knowledge sharing

Organisational Culture Relations and Trust: Cultural dimension is also important factor knowledge sharing activities (Watson et. al.1994). As a matter of fact knowledge sharing is called a socio-technical system (Müller et al, 2005:2), that the people who share information are motivated by institutional or social aspects of loyalty (O'Neill & Adya, 2007:4) and is perceived as a general interest in a given institution and social recognition (Calder & Staw, 1975:599). Basically, sharing culture is an exchange of sociability between individuals. When employees contribute to firms or business they expect a response of business an equivalent response (King & Marks, 2006:132,133). In this sense, working culture affects the vision of organization positively to the direction of appropriate working climate of the institution and the clear organization objectives (Lin, 2007:315). In this context, the presence of a positive social interaction culture make easier to share knowledge (Connelly & Kelloway, 2003: 295; Huotari & Iivonen, 2004:8). The relationship is a phenomenon in this context. The climate where people intimate each other the critical relationship is created by the critical relations creating an intimacy between sides rather than two strangers (King & Marks, 2006:132).

The other factor that affects knowledge sharing is organisational trust. According to the interests of various disciplines, trust is a means of economic processes, social structures, interpersonal and inter-organizational relations and individual expectations (Huotari & Iivonen, 2004:8). As matter of fact, trust is a desire to believe teams, employees and organization to share information (Renzl, 2008: 207). When trust is considered on the basis of shared knowledge among members of the team or organization means as an expectations of honour, co-operation and sharing (Fukuyama, 1996:26). So people learn how to understand the expectations of other people mutual interactions (Huotari & Iivonen, 2004:8). As with all cultural norms, like knowledge sharing culture must need a climate of trust between individuals and institutions within and outside the company (Akerlof & Dickens, 1982: 308; Renzl, 2008:207).

Hypothesis: 4. Non-coherent organizational relationships lack of trust and working culture is a risk for sharing knowledge.

Leaderships Attitude Role and Mentality: In order to realization of knowledge sharing in organizations, top managers must have a clear vision concerning the knowledge value. Because true leadership affects employees' cognitive abilities and creating maps enhance their mastery to create new ideas (Faniel & Majchrzak, 2007:1684). Ideally, technical and administrative mechanisms that employees affecting and providing different knowledge aspects is to be formed by top management. Therefore, the leadership of an organization not only in their business strategy by integrating knowledge directly, but also changing employees' attitudes and behaviour by encouraging them to develop to share knowledge (Lin, 2007:316) and protecting capabilities and holding knowledge in company (Nickerson & Zenger, 2004 :1), and effectiveness transforming activity (Nelson & Winter 1982:59-60). Facilitator roles of top managers (directors) who have different personal traits, experience and knowledge approach added value within the company's strategic acquisition of knowledge share. Therefore top management value is a key cornerstone of the work and the knowledge sharing (Connelly & Kelloway, 2003: 295). Leadership is one of the most important factors in this context. The more mismatch increasing among information technology, employees, relations, trust climate, motivation and top management, knowledge-sharing activities the more risky is becoming (Zhang et al, 2006:3).

Hypothesis: 5. Non-coherent top management leadership's attitude, role and mentality about knowledge are a risk for sharing knowledge.

3. Analyze

In this study is implemented "logistic regression model" that address at the dimension of the level of risk of knowledge-sharing processes. Logistic regression model is a method utilized in determining the cause-effect relationship between independent variables that as a categorical dependent variable, binary or multi-observed cases. Logistic regression analysis is a sensitive method for multicollinearity problem that is importance for reduced and ensured the independence of the choice of independent variables the reliability of the results. In this model Y^* is considered tends to be observed and not to be observed hidden event. Knowledge sharing variable that prepared and is ordered with a Likert scale in the model is designed as the dependent variable. Independent variables were determined as an x_1 = the importance of information, x_2 = Organizational information infrastructure and mechanisms, x_3 = Employee motivation, x_4 = Available in-house relationships, organizational culture and trust, x_5 = Top management's attitude, role and approach.

In the context of scale was used a Likert scale that is one type of metric scale. The scale of this study was to represent 1 "Strongly disagree", 2 "Disagree", 3 "I have no idea", 4 "Agree", 5 "Strongly agree". A total of 61 questions were created containing the titles of the different factors. The survey questions of 1-4 are demographic questions to determine the participants' personal and professional qualities. Questions 5-15 contained the knowledge will determine the general and strategic perceptions regarding the nature and important. Questions 16-31 included the items that sharing of knowledge regarding the technological sub-structures and information-sharing mechanisms. Questions 32-37 included the items that employees own internal motivations that affect sharing knowledge. Questions 38-46 comprise items that affect share information in-house to determine the relationships and trust in-house. Questions 47-55 contain items about the pioneering role and attitude of top managers to share information. Questions 56-61 contained items regarding environmental impacts to share information. We sent 350 questionnaires to the responded but returned to 170 from 350 and only 150 questionnaires were evaluated. The package SPSS version 17.0 was used to analyze the data.

Aim of the Study: In reviewing the literature related to the sharing of knowledge most studies focus on the R & D and innovation-based knowledge sharing relationships between the processes while other focusing on the relations between the company achievement and the factors that makes it possible to share knowledge (Lin, 2007:316). However, researchers and practitioners not generate exploring integrative model that effectiveness of sharing knowledge. Some of these relationships are modeled partially very little empirical study. This study is to investigate the personnel who working in public and private health care sectors in Istanbul how to perceive knowledge share that affecting possible of capable enablement factors and is to examine risk level of these factors.

Contribution to the study: Knowledge sharing activities that compared with other countries is seen very few studies on this subject in Turkey. This working is to be intended to fill the partial gap in this field and contributed the new view of the issue. Furthermore the issue of knowledge sharing is quite new in Turkey because of that this study also that may contribute to giving a direction researcher for their studies.

Study of Universe Sampling and Boundaries: The universe of this study consists of active staff working in public and private hospitals in Istanbul. Doctors, nurses and administrative units' employee and managers is the sampling universe. Data collection method is "convenience sample" method that not based on the principles of probability. Spread over a wide area of the target group is one of the main limitations. Another limitation of the study is heavy working conditions of sector and the vast majority of staff did not want to participate in the survey data, this also spin data from the target mass. High expectation of being participation in the survey, unfortunately, not achieved and this was the other important constraint in this study.

Methodology of research: In this study is applied the model that was developed by Rajagopalan (1993) and colleagues. This model recommends a structure that contains enabling (actions), processes and outcomes or result (Lin, 2007:317). Enabling the action comprises the possible mechanisms that promote individual and organizational understanding factors that motivate employees to share knowledge in teams and across teams. Enabling the action of model study include the factors that cause effects. Possible knowledge sharing such as information and communication technologies serves the role of top management organizational content organizational support, trust and employee incentives. In the process perspective model contains employees who get into share on a voluntary basis their own knowledge, experience, expertise and also shares his thoughts with other colleagues learn from each other. On the size of the output shows the effect of knowledge sharing over the sustainability of the institution's capacity.

3.1 Model Study

At this study, a logistic regression model applied to determine the effectiveness of knowledge sharing factors and tried to determine which factors on the risk created by sharing knowledge. Knowledge sharing in this model for binary

variables as survey information (code = 1) and inactive (code = 0) was try to predicted by "advanced forward method". The overall context variables divided into five factors. This five factors is a good indication that the description of 87.8% of total change As a result of factoring, also provided the conceptual significance for the series, this factors will be used as independent variables.

3.2. Goodness of Fit Indicators for Logistic Regression Model

The logistic regression analysis is an indication of the model estimated suitability data. The "-2 log likelihood" value (-2LL) is a goodness of fit indicators for logistic regression model The Wald statistic put forth the coefficient whether or not reveal statistically significant If the chi-square value is statistically significant, the hypothesis is rejected that the argument is zero coefficients and fixed polynomial independent variables provides a good estimation than a model only fixed term. As can be seen from table: 1, the results of the model has value as "-2 Log likelihood value of" 404.523, "Cox & Snell R²" value of 86%, "Nagelkerke R²" 84%. These values are very high significant values that as a statistically can be expressed. Independent variables have very strong explanatory features on dependent variable of knowledge sharing. Furthermore the value of chi-square test statistic is 97.235 and "p" value is 0.0029 was realized that there is goodness of fit of the model.

Table 1 Goodness of Fit Indicators for Logistic Regression Model

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	404.523	.863	.849

The results obtained from the dependent variable knowledge sharing efficiency by the prediction model are shown in table 2. According to the conceptual significance of the five factors (variable) are named as follows: Factor (1) the nature of the knowledge and strategic properties. Factor (2) knowledge sharing mechanism and the sub structure. Factor (3) motivation of the employees. Factor (4) working relationship, confidence and organization's culture. Factor (5) top management behavior and role. Variables as a factor 1.2.3.4.5 are sorted and have the values is shown in Table 1.

Table 1 Estimation of the Logistic Regression Model Results

Variables	B	S.E.	Wald	df	Sig.	Exp (B)
Factor 1	.008	.377	.000	1	.983	1.008
Factor 2	.647	.287	5.092	1	.024	1.910
Factor 3	1.581	.744	4.511	1	.034	.206
Factor 4	.559	.271	4.255	1	.039	1.750
Factor 5	.946	.449	4.443	1	.035	2.575
Constant	.090	1.607	.003	1	.955	1.094

3.3. Evaluation of Results of Logistic Regression Model

The results of logistic regression model which interpret these values can be expressed as follows:

- The first factor which reflects the nature of knowledge and its strategic properties as a variable does not seem meaningful and has an important affect on the dependent variable knowledge sharing (see, sig 0.983 <0.05). This means that the participants who answered the questionnaire do not seem about the importance and different between knowledge and information. There is no serious value judgment. According to this result is not seen assigning a unique attitude of employees about the real value of knowledge. Between the strategic value of knowledge sharing and effectiveness of knowledge sharing is not found a significant relationship.
- However in-house technological infrastructures, information systems and information sharing mechanism is considered significant and impressive on the effectiveness of sharing of knowledge. See (sig 0.024<0.05). There is a significant relationship between Information infrastructure and technology and knowledge-sharing

mechanisms and knowledge sharing. In other words, there is a changing significant relationship between the knowledge share effectiveness and the communication technologies, sub-systems and knowledge-sharing mechanism depending on the effectiveness or inefficiencies. We can say to share knowledge that physical and technological infrastructures as effective as emotional and social atmosphere. When any investment is made in this area and sharing information mechanisms is developed and improved employees of perception knowledge sharing level is increasing.

- Similarly intrinsic and extrinsic motivation factor of employees are considered to be significant and impressive on the effectiveness of knowledge sharing. (See, sig 0.034 <0.05). When employees are motivated to share their knowledge and raises the inner motivations, the employee's perception of knowledge share is increased. Motivation is a belief in this regard. When emotional, social and physical environments created the revealing the employees' appropriate internal energies among employees the desire their sharing information. will increase. Otherwise these conditions will create a significant risk factor on sharing knowledge.
- Again, the factors that in-house such as working relationship, organizational culture and trust is seen that a significant and impressive effectiveness on knowledge-sharing (See, sig 0.039 <0.05). In other words, employees having increased sense of trusting about individuals, teams and events affected positive impact on knowledge sharing. Otherwise it affected negative impact. Moreover employees' expectation that they would also be honest with each other is increased knowledge sharing effectiveness. In particular, developing the relationship among interpersonal and cross-team, expectations of employees will be positively evaluated to increase knowledge sharing. Otherwise the risk level of knowledge share is increased.
- Attitude of top management and the role of facilitator is understood to be a significant factor on effectiveness of sharing of knowledge (See, sig 0.035 <0.05). In short, these relationships were statistically significant and important. The value of ($p < 0.05$) is to be shown increasing the effectiveness of information sharing that is also statistically significant and impressive. There is a link between top management perceptions and visions of knowledge and strategy.

Organizational knowledge sharing and learning are of a vitality situation to reach a sustainable level of competition. Share information on the criticality of organizational roles of governments. Top governments who believe in this high hill have very important organizational role of share knowledge. The role of top management in-house knowledge exchange may occur in both positive and negative as well as others.

3.4. Levels of Risk Knowledge Sharing Factors

Any organization does not have implementation of a business or organization knowledge sharing system, a normal growth of the organization decreases and the company's competing risk increases (O'Neill and Adya, 2007:1). At the same time, factors affecting the level of non-active sharing knowledge may perceive a signal of risks as the strategic context (Fang and Qu, 2007:577). In this context, when the analysis of employees sharing knowledge who perceived obstacles and level of risk is interpreted in terms of risk levels and reached the following conclusions: Table 2, exp (B) parameter shows the value of the level of risk related to these variables. Fig.1 shows the ranking of these risk factors. Statistically the highest value in this column is characterized the most important influencer or for that matter as the highest risk level (failure status).

The biggest influencer factor on knowledge sharing effectiveness in this analyze is evaluated the 5th factor that the top management's attitude and the facilitator role (See, Exp (b) = 2575). The participants indicated that top managers are the highest risk factor on sharing knowledge efficiency. According to the results of this study can be said the greatest risk about the knowledge sharing is the attitude of top management leadership role in sharing knowledge. Therefore the factors don't effective in-house knowledge share is assessed as risk factors at the same time.

The second biggest influencer factor on knowledge sharing effectiveness in this analyze is evaluated the 2th factor that the information systems and knowledge sharing mechanism. (See, Exp (b) = 1.910). In this study the mechanism of knowledge share and information technologies seem to have the highest second degree risk. Therefore, that are being used information and communication technologies and knowledge mechanisms are considered to be inadequate in terms of expectations employees. Existing knowledge technology and information systems and infrastructure can't be said to be very suitable in-house knowledge sharing. These emerging perceptions may be regarded as a significant risk factor in terms of these organizations if they are insufficient in use.

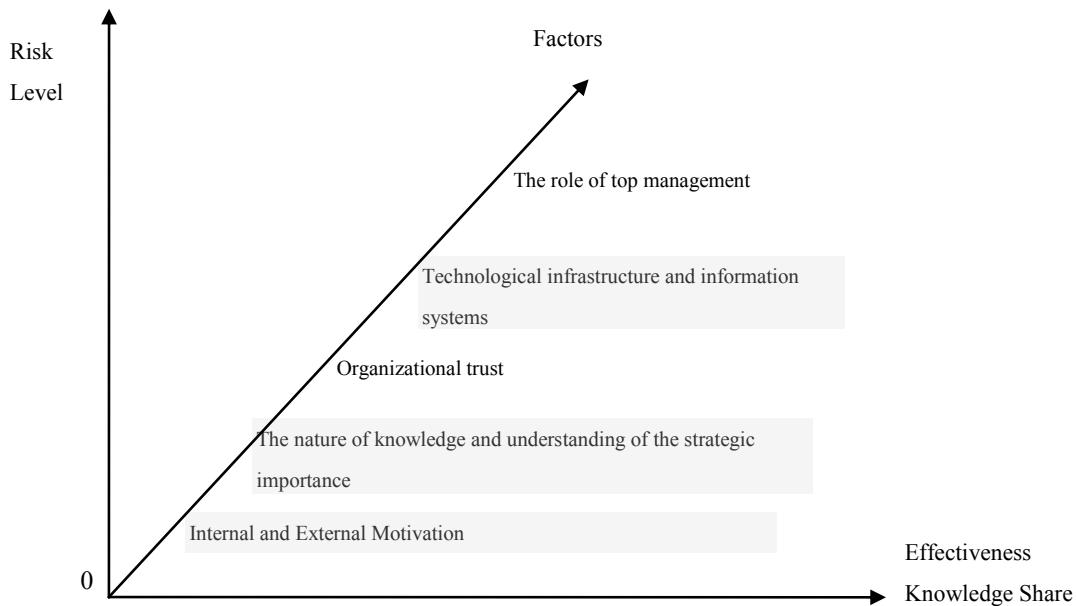


Figure 1. Risk levels on knowledge sharing effectiveness factors

The third biggest influencer factor on knowledge sharing effectiveness in this analyze is evaluated the 4th factor that has been as confidence, working relationships and organizational culture factors. (See, Exp (b) = 1750). Point of view of employees in-house relations within the company need to understand expectations of other people. In this regard, we can say individual and organizational learning disabilities and mutual interactions weak. In this context relationship is a critical phenomenon. At this stage, we can be expressed that employees do not enough trust each other, and is missing critical relations sincerity towards to each other. This phenomenon is an important risk on knowledge sharing. Sharing culture is an exchange of sociability between individuals. Employees are contribute to an organization expect this contribution corresponds to the equivalent.

The five biggest influencer factor on knowledge sharing effectiveness in this analyze is evaluated the 3th factor that is intrinsic motivation and extrinsic motivation. In this study, motivational factor, albeit is a small risk which ranks last in this survey (See, Exp (b) = .206). It is said that intrinsic motivation factor of employees on the effectiveness of knowledge sharing is not any risk factor. Because internal motivation for employees to share knowledge reflects the positive trends of individual beliefs are to be considered as a positive manner. However, lack of motivation in terms of organizational knowledge sharing is considered as a risk factor.

4. Conclusion

In a strategic sense, knowledge sharing in any organization is to approach understanding how to obtain an advantage difficult to imitate by competitors. This process refers to an organization focusing on differentiation from other organizations. For this sense, knowledge sharing is an activity performed by governments and institutions are encouraged to provide an important competitive advantage and developed human resources as a strategic capability. In this dimension knowledge sharing strategies is to provide important contribution both organizations and their employees for jointly learning, improving, progressing, innovating and the making future viability of organization. Knowledge sharing is considered as a success factor of a long term or failure factor in the absence in terms of both individuals and institutions. The findings of this study contain a small cross-section in the health service sector. This cross section especially examined levels of risk factors which contribute to the effectiveness of knowledge sharing. When the risk level is ranked in descending order on knowledge sharing affect are reached the following conclusions:

- The biggest influencer factor on knowledge sharing effectiveness is the role of top management's attitude and their facilitator role according to perceptions of participant. This finding on knowledge sharing may be interpreted top management not yet meet the responsibilities on their part. Because top management, in all management systems is

considered as a nature of the original decision-maker. There is no chance of implementation of the system in any organization without the approval of top management. Therefore, in this study also similar finding appears about the top managements not show necessary diligence to the share knowledge sharing activities. In addition in the health sector is said not to suffer any serious competition that taken into account the strategic importance of knowledge sharing

- The second high-level risk factors in front of knowledge sharing are the direction of IT or systems and knowledge share mechanisms. This means that the sharing of knowledge within the organization from employee's point of view is considered don't to be effective and not a desirable level of information technology, systems and knowledge sharing mechanisms. The creation of IT or technology sub-systems and knowledge sharing mechanisms in any organization also is needed to top management's decision and their authority. Therefore, the establishing and upgrading knowledge share systems and mechanism is also affected to the top management's lack of vision of knowledge. This situation is a risk for knowledge sharing. Another reason that is causing a risk may be higher costs and continuous upgrading of technology infrastructure and required new investments.
- The third high-level risk factors in front of knowledge sharing at this sector are determined as trust, working relationships and mutual confidence in the organization. Point of view of employees in-house relations within the organizations are assessed weak of internal bonds of trust, mutual trust on the relationships are relatively transient and working relations are considered to be missing. Because this is a significant risk on the basis of knowledge and information. This dimension can be said that in-house trust, working relationships and organizational culture are closely related top management leadership behavioural role. Employees would also perceive the benefit from the exchange of information is too weak. In this regard, we can say individual and organizational learning disabilities and mutual interactions are weak and these conditions create risk.
- The fourth high-level risk factors in front of knowledge sharing not to understand strategic features and the nature of knowledge. Results of findings both employees and management has not yet understood correctly the role of strategic context and the value of knowledge. In this respect the importance of sharing information is not yet considered sufficiently understood. In terms of employees both themselves and organizations cannot be said to comprehend that the assimilated knowledge is a learning factor as well as a development factor for themselves. Parties' predictions about the strategic value of knowledge also are weak. Not understanding the importance of knowledge in terms of both the employee and the organization is a risk.
- The 5th high-level risk factors in front of knowledge sharing are to lack of motivations. Motivations including internal and external is divided into two categories. It is said that intrinsic motivation factor of employees on the effectiveness of knowledge sharing is not any risky factor. Because internal motivation for employees to share knowledge reflects the positive trends of individual beliefs are to be considered as a positive manner. However, lack of external motivation in terms of organizational knowledge sharing is considered as a risk factor.

The service sector is actually required a leadership approach that is based on a knowledge management style. Knowledge sharing should be required to become a business vision. However, the attitude of top management in-house knowledge sharing in this study is perceived as the biggest obstacle and risk element. Knowledge sharing is an important source of strategic advantage in health units as forward-looking organizations. In short, in-house knowledge sharing should be taken into account seriously and strategically in this service sector. This understanding must have an appropriate understanding of knowledge management for information-age is more than the classical notion of a knowledge management. If knowledge sharing vision is missing organizations and then in-house knowledge sharing is to be considered as an important risk factor.

References

- AGRESTI, A. (1996), *Categorical Data Analysis*, John Wiley and Sons Inc., New York.
- AKDEDE Sacit Hadi ve Aykut Hamit TURAN, (2008), "Bilişim Sistemlerinin Kobi'lerin Performansına Etkileri: Kaynak Temelli Yaklaşım İle Denizli İlinde Ampirik Bir Uygulama", *Ankara Üniversitesi SBF Dergisi*, Sayı:63-4 (1-28).
- AKERLOF Gerge A and William T DICKENS, (1982) "The Economic Consequences of Cognitive Dissonance", *The American Economic Review*, Vol:73 (3). (307-319).
- BAKER Kathryn A. and Ghuzal M. BADAMSHINA,(2002), "Knowledge Management", *Science Policy; Strategy; Change Management; Competencies; Innovation*.2002,<http://www.wren-network.net/resources/benchmark/05 KnowledgeManagement.pdf> (28/04/2008).

- BÜYÜKÖZTÜRK, Ş, (2011) *Sosyal Bilimler için Veri Analizi El Kitabı İstatistik, Araştırma Deseni SPSS Uygulamaları ve Yorum*, Pegem Akademi Yayıncılık, Ankara.
- CALDEIRA Mário M. and John M. WARD (2001) “Using Resource-Based Theory To Interpret The Successful Adoption and Use of Information Systems and Technology in Manufacturing Small and Medium Sized Enterprises” *Global Co-Operation in the New Millennium The 9th European Conference on Information Systems Bled*, Slovenia, June 27-29, 2001 (1159-1169).
- CALDER B.J. and B.M. STAW, (1975), “ The Self Perception of Intrinsic and Extrinsic Motivation”, *Journal of Personality and Social Psychology*, Vol: 31 (599-605).
- CANTNER Uwe, Kristin JOEL and Tobias SCHMIDT, (2009), “The Use Of Knowledge Management By German Innovators” *Journal of Knowledge Management*, Vol:13 (4) (187–203).
- COATES J.F. and J.JARRAT,(1992), “The Future: Trends Into The Twenty-First Century”, *Annals of The American Academy of Political and Social Sciences*, Vol:522 (8-11).
- CONNELLY Catherine E and E. Kevin KELLOWAY, (2003), “Predictors of Employees Perceptions Knowledge Sharing Culture “, *Leadership and Organization Development Journal*, Vol:24 (5), (294-301).
- DAVENPORT Thomas H. and Lawrence PRUSAK,(1998), *Working Knowledge How Organizations Manager What They Know*, Harvard Business School Press (paperback), Boston.
- DUFFY Jan, (2000) “Knowledge Management: What Every Information Professional Should Know” *Information Management Journal* Vol:28 No:4.
- EISENBERGER R .R HUNHINGTON, S. HUTCHISON and D. SOWA, (1986), “Perceived Organizational Support”, *Journal of Applied Psychology*, Vol:71, No:3. (500-507).
- FAHAY L and L.PRUSAK, (1998), “The Eleven Deadliest Sins of Knowledge Management” *California Management Review*, Vol: 40 (265-276). 31.
- FANG Yong Heng and Qu WEI (2007), “The Application of Fuzzy Neural Networks in Knowledge Sharing Risk Analysis of the Virtual Enterprise”, [www.seiofbluemountain.com/.../detail.php?\(576-579\)](http://www.seiofbluemountain.com/.../detail.php?(576-579).). (12/12/201).
- FANIEL Ixchel M. and Ann MAJCHRZAK, (2007), “Innovating by Accessing Knowledge Across Departments”, *Decision Support Systems* , Vol: 43 (1684–1691).
- FUKUYAMA, Francis (1996) *Güven: Sosyal Erdemler ve Refahın Yararılması*, Çev: Ahmet Buğdaycı Türkiye İş Bankası Yayınları. Ankara.
- GROVER Varun and Thomas H. DAVENPORT, (2001),“General Perspectives on Knowledge Management: Fostering A Research Agenda”, *Journal of Management Information System*, Vol: 18. No: I. (5-21).
- HALL, R. and P. ANDRIANI (2003). “Managing Knowledge Associated with Innovation”. *Journal of Business Research*, Vol. 56: 145-152.
- HISLOP, Donald (2002), “Mission Impossible? Communicating and Sharing Knowledge via Information Technology” *Journal of Information Technology* Vol: 17, (165–177)
- HOSMER, D.W. and S LEMESHOW, (2000), *Applied Logistic Regression*, Second Edition, John Wiley and Sons Inc, New York.
- HSU I-Chieh,(2007) “Knowledge Sharing Practices as A Facilitating Factor for Improving Organizational Performance Through Human Capital: A Preliminary Test”, *Expert Systems with Applications* xxx) xxx-xxx www.elsevier.com/locate/eswa (1-11).
- HUOTARI Maija-Leena and Mirja IIVONEN (2004), “Managing Knowledge- Based Organizations Through Trust”, *Idea Group Inc.Finland* (1-29).
- ITAMI, H. (1987). *Mobilizing Invisible Assets*, MA: Harvard University Press. Cambridge.
- KING William R and Peter V. MARKS Jr, (2006), “Motivating Knowledge Sharing Through A Knowledge System” , *The International Journal of Management Science*, 2006, Vol: 36 (2008) (131-146).
- KİM Seonghee, (2000), “The Roles of Knowledge Professionals for Knowledge Management”, *INSPEL* , Vol:34, No:1, (1-8). <http://www.ifla.org/VII/d2/inspel/00-1kise.pdf> (28/04/2008).
- KROGH George Von, Kazio ICHIJO and Ikujiro NONAKA,(2002) *Bilginin Üretimi* (Enabling Knowledge Creation), Çev: Günhan GÜNAY, Rota Yayın Yapım Tanıtım Tic. Ltd. Şti 2002, İstanbul.
- LAIRD Charlton, (1985), *Webster’s New World Thesaurus* Updatet by Williams D. LUTZ, Prentice Hall Pres Revised Edition, Newyork.
- LEE Jae- Nam, (2001), “The Impact of Knowledge Sharing, Organizational Capability and Partnership Quality on IS Outsourcing Success”, *Information and Management*, Vol:38 (323-335).
- LI Jing, Richard PIKE and Ross HANIFFA (2006), “Intellectual Capital Disclosures in Corporate Annual Reports: A European Comparison”, *Working Paper*, July 2006. No 06/24 Bradford University School of Management.

- LIN Hsiu-Fen (2007), Knowledge Sharing and Firm Innovation Capability: An Empirical Study”, *International Journal of Manpower*, Vol:28 No:3/4, (315-332)
- MANLY, B. F.(2005), *Multivariate Statistical Methods*, Chapman and Hall Pbc., 2005, London.
- MEHLINGER, H. D, (1995), “School Reform in The Information Age. Bloomington,”, *Center for Excellence in Education*, Indiana University. U.S.A
- MÜLLER, Roland M. Myra SPILIOPOULOU and Hans J. LENZ, (2005), “The Influence of Incentives and Culture on Knowledge Sharing”, *Proceedings of the 38th Hawaii International Conference on System Sciences* (1-10).
- NICKERSON Jack A and Todd R. ZENGER, (2004), “A Knowledge-Based Theory of the Firm-The Problem-Solving Perspective”, *Organization Science*, Vol: 00(0) (1-16).
- NOOTEBOOM, Bart, (1996), “Towards A Cognitive Theory of The Firm Issues and A Logic of Change”, Third Version, June. 1996 <http://som.eldoc.ub.rug.nl/FILES/reports/1995.1999/themeB/1997/97B05/97b05.pdf//01/06/2008>.
- O'NEILL Bonnie S. and Monica ADYA, (2007), “Knowledge Sharing and the Psychological Contract: Managing Knowledge Workers Across Different Stages of Employment”, *Marquette University Business Administration, College of Management Faculty Research and Publications* (1-44).
- QUINN, J. B,P.ANDERSON and S.FINKELSTEIN, (1996),“Leveraging Intellect”*Academy of Management Executive*, Vol:10, No:3, (7–26).
- RAJAGOPALAN, N. A.M.A. RASHEED and D.K. DATTA, (1993), “Strategic Decision Processes: Critical Review and Future Directions”, *Journal of Management*, Vol:19 No:2, (349-384).
- RENZL Birgit, (2008), “Trust in Management and Knowledge Sharing: The Mediating Effects of Fear and Knowledge Documentation”, *Omega*, Vol: 36 (206-220).
- SCARBROUGH, H. and J SWAN, J. (2001) “Explaining The Diffusion of Knowledge Management: The Role of Fashion” *British Journal of Management*, Vol:12, (3-12).
- ŞİMŞEK M. Şerif, *Yönetim ve Organizasyon*, 7. Baskı, Günay Ofset, 2002, Konya.
- TEKİN Mahmut, Hasan K. GÜLEŞ ve Tom BURGESS, *Dünyadaki Teknoloji Yönetimi Bilişim Teknolojileri*, Damla Ofset, 2000. Konya.
- TOP Seyfi (2008) *İşletmelerde Yenilik ve Yaratıcılık Yönetimi*, Beta Yayınları, İstanbul.
- TUTAR Hasan (2000) *Küreselleşme Sürecinde İşletme Yönetimi*, Hayat Yayınları, İstanbul.
- ÜLGEN Hayri (1990) *İşletme Yönetiminde Bilgisayarlar*, 2. Baskı, İstanbul Üniversitesi İşletme Fakültesi Yayınları Yay, No:225, İstanbul.
- YAMAN Habil Ruhi, (2000), “A Conceptual Model of Knowledge Acquisition and Utilisation Through Marketing Research in Tourism: Development and An Empirical Assessment“, The Degree of Doctor of Philosophy School of Hospitality, Tourism and Marketing Faculty of Business and Law Victoria University, <http://eprints.vu.edu.au/archive/00000212/01/02whole.pdf> (15/06/2007).
- ZHANG, Jing, Sue R. FAERMAN and Anthony M. CRESSWELL, (2006),”The Effect of Organizational Technological Factors and The Nature of Knowledge on Knowledge Sharing” *Proceedings of the 39th Hawaii International Conference on System Sciences*.