

Proposing a Model for recognizing the method of the effect of knowledge sharing on creativity of employees

**Nazanin Pilevari
Zahra Amirhosseini
Soroush Motamedi Fard**

Abstract:

The aim for the current research is proposing a Model for recognizing the method of effect of knowledge sharing on creativity of employees. Accordingly, basic model of this research which was based on research literature is passed to the experts. After conducting some corrections based on experts' view, model indexes for research were finalized. For examining the relation between provided variables in model and their effect on each other, structural equation model was used by Lisrel software. Current research has application aim, and from the viewpoint of nature and method it is measurement and is correlation type. Totally, two types of questionnaire were used in this research, in which the first questionnaire was designed for validating the conceptual model including 9 questions, open and closed questions. Final questionnaire was studied in the organization for examining and describing the relation between observed variables and hidden variables, and the questionnaire including 16 questions was designed, distributed and gathered. Results show that there was a positive and direct effect of knowledge sharing with the creativity of employees. Also, it is recommended to invest more for supporting knowledge sharing in considered organization in social, organizational and technological fields.

Key words:

Knowledge Management, Knowledge sharing, Creativity, Structural equation model

Citation:

Pilevari, Nazanine; Amirhosseini, Zahra; Fard, Soroush Motamedi; Proposing a Model for recognizing the method of the effect of knowledge sharing on creativity of employees (2013) Journal of Business & Management (COES&RJ-JBM) Vol.2, No.3, pp.269-282.

Introduction:

Knowledge as one of the driving forces of today's critical business functions has become the way to success. Organizations are increasingly being given attention to students and they employ more brains than handworkers as a result, organizations act with the knowledge and behavior as well as their tangible resources and knowledge management as a tool for improving and maintaining their competitiveness have discovered by them (Klein, 2004) Knowledge Management comprises four process steps: Knowledge creation, storage, knowledge sharing and application of knowledge. Knowledge sharing has been propounded as an important and vital element for organizations to develop integrated services and the sharing of resources and also effort to promote organizational learning and creativity.(ZANGH,2004) Sharing knowledge is a process through which people share their knowledge with other bilateral deals and Individual knowledge converts into organizational knowledge and Potentially, by this process, the opportunity to learn new experiences And opportunities for training and implementation experience, skills and abilities will be provided .(yu,2004)

Targeted knowledge sharing in organizations leads to individual and organizational faster learning, Develops creativity and finally leads to improve individual and organizational performance simultaneity. Accordingly, organizations share knowledge and strengthen their staff to encourage this matter. (King, 2001) Open organizational culture in which creativity can be supported as a prerequisite for the development of tacit knowledge is considered. Contemporary organizations have found the main cause of complex compliance and compatibility with the current business environment is creativity. Culture and flexible tradition evolve thereby, establishment of Educational institutions in order to increase human capital, Productive quality of educational institutions and given attention to the values of society results in enriching individual creativity. (Yusuf, 2009)

In the current economic conditions which in increasing number of private banks and financial institutions and switch the states banks to Private ones has led to intense competition in attracting supply resources, customers and service projects rise in order to increase in deposits with banks. Old banks in IRAN have Skilled and experienced manpower which are a competitive advantage and if not used correctly, the knowledge of these people are attracted by competitors and newly established private banks and obviously Enhance the creativity increasing in private Banks. Due to the influence of banks on economic and industrial activities, creativity and innovation in banks causing economic development in the country. In order to present a proper platform, Knowledge sharing is the way to change the behavior and manners of the people and reducing barriers and consequently knowledge sharing culture occurs and expands in organizations. Now, given the importance of creativity and innovation in the present study we intend to identify and explain the relationship between variables impact on knowledge sharing and staff Creativity and also design a Model for understanding the impact of knowledge sharing on the staff creativity of TEJARAT bank in ARDEBIL branch.

Theoretical foundations:

Knowledge management is the process by which helps organizations to identify, select, organize, disseminate and transfer important information and skills which are part of the history of the organization and are generally unstructured (turban, 2003). While Knowledge and intellectual capital base and strategic core competence is for better performance, Knowledge plays a strategic role in the organization if it is able to use in the value creation activities and practice Knowledge tool to exploit the opportunities available in the competitive market. It is not possible for companies to maintain their competitive advantage by doing things faster and better but Competitive advantage it is possible when something is being done that cannot be imitated by others. Thus To achieve a sustainable competitive advantage, Due to the efficient use of the existing knowledge and creation of structural usage for new knowledge is important .Although organizations understand the importance of intellectual capital in achieving success But still there is no guarantee that obtained Knowledge will be

Shared and be distributed for maximizing the benefits of organizations Appropriately (Turban,2006).

Sharing knowledge is a set of behaviors that involve the exchange of information and knowledge and helping others in this area. Sharing and distribution of knowledge is positively associated with knowledge management. Sharing knowledge occurs when a person willing to help and learn from others in the development of new competencies. The ultimate goal of sharing knowledge is the great endeavor to convey and transfer experience and knowledge assets and organizational resources to improve organizational effectiveness and its promotion (King, 2006).

The role of knowledge sharing in Knowledge Management is too important that some writers have stated that knowledge management is to support knowledge sharing (huyzman, 2006). Among the reasons for the importance of knowledge sharing may be such as: Reduce costs, improve performance, improve customer service, reduce new product development time, reduce delay in delivery of goods to customers, and ultimately the cost and availability of all kinds of valuable knowledge within the organization. (Skyrme, 2002). One of the main priorities for KM is creating incentives for people to share knowledge (King, 2006) .Although some believe that knowledge is power, but it seems that knowledge itself is not powerful but something that gives people the power is the share part of their knowledge with others. In some organizations, knowledge sharing is natural, but in some others there is still the old attitude that knowledge is power, and People do not share hardly gained knowledge. Table 1 presents an overview of the factors influencing knowledge sharing within and outside of the country .Table 2 also refers to these indices, the indices presented in Table 1.

Table 1: Factors influencing knowledge sharing

Reference Manufacturer	Index	Code
Glichlee 2009•Sohrabi 2009•Lin 2008•Hislop 2003•Pahlavani 2010 , Alvani 2007•Raesi 2011• Pilevari 2011•Ma 2008•Endres 2007 Karimi2010•khatamiyanfar2009 , Panahi 2012•	Social conditions	S
Pahlavani 2010•Alipoor 2012•Sohrabi 2009•Lin 2008•Hislop 2003 ,Alvani 2007•Raesi 2011• Pilevari 2011•Ma 2008•Endres 2007 ,Azad&Rashidi 2008 ,Khatamiyanfar 2009•Panahi 2012 Karimi 2010	Organizational conditions	O
Pahlavani 2010•Glichlee 2009•Sohrabi 2009•Lin 2008•Hislop 2003 , ,Raesi 2011• Pilevari 2011•Ma 2008•Endres 2007• Panahi2012 Karimi 2010•Mehregan 2011• Hasanali 2002• Turban2006	Technological conditions	T

Table2: The following factors influencing knowledge sharing

Reference Manufacturer	Sub index	Code
Raesi2011•Pahlavani 2010• Sohrabi 2009•Lin 2008• ,Ma 2008•Karimi 2010•Khatamiyanfar 2009•Endres 2007	Teaching and Learning	S1
Yu2004•Yang 2009 ,Raesi 2011 , Khatamiyanfar 2009•	Responsibility	S2
Alipoor 2012•Sohrabi 2009•Lin 2008•Hislop 2003 Pahlavani2010• Alvani 2007•Raesi 2011• Pilevari 2011•Ma 2008•Endres 2007 ,Panahi 2012•	Trust between employees	S3

Karimi2010 ,Azad&Rashidi 2008 ,Khatamiyanfar 2009 Hsu2007,		
,Raesi 2011 ,Ma 2008 ,Sohrabi 2009 , Pilevari2011 ,Young 2009 ,Gruber 2001 ,Khatamiyanfar 2009	Leadership and commitment of senior management	O1
,Lin 2008 , Pilevari 2011 ,Yu 2004 ,Endres 2007 Hislop 2003,2003 ,Karimi 2010 ,Mehregan 2011 , Hasanali 2002 Sohrabi2009	Participation- .oriented culture	O2
,Pahlavani 2010 , Sohrabi 2009 ,Lin 2008 ,Karimi 2010 ,Kim 2008 , ,Alvani 2007 ,Raesi 2011 , ,Endres 2007 ,Gruber 2001 ,Khatamiyanfar 2009	Reward system	O3
Gao2004 ,Hislop 2003 ,Khatamiyanfar 2009	Organizational climate	O4
Raesi2011 , Pilevari 2011 , Pahlavani 2010 ,Sohrabi2009 , ,Turban2006 ,Karimi 2010 ,Alvani 2007 , Kim 2008 ,	Communication technology	T1
Raesi 2011 , Turban2006 ,Karimi 02010 ,Yu 2004 ,	Technology cooperation	T2
Alipoor 2012 ,Sohrabi 2009 , Pahlavani 2010 , , ,Alvani 2007 ,Raesi 2011 , Mehregan 2011 , Karimi 2010 Kim 2008 , Turban2006	Storage technologies and marketing	T3

Organizational harmony with the complex and changing environment around them is crucial. This organizational change is achieved with creativity. Organizations need to seriously make efforts for their sustainable success and realize the goal of their job title by optimal operation of continuous change and transformation that is achieved through creativity. Having an innate talent and creativity of individuals, is an important foundation for the creative community. Most organizations are trying to recruit new employees with the ability to adapt to unforeseen changes and interaction with diverse individuals. However, recent developments have led to organizational leaders rather than attract people with similar characteristics to promote and increase their self-centered and creative staff, to eliminate their inability and to foster a favorable job characteristic. In the following Table 3 refers to indices and Table 4 refers to Parameters affecting sub indices of creativity (Moss, 2009).

Table3: Factors influencing creativity of staffs

Reference Manufacturer	Index	Code
,Esternberg 1991 , Amabile 1996 ,Samkhanyan 2008 Conelly2001 , Sadeghi Mal amiri2009	Motivation	M
Amabile 1998 , Samdani2005 ,Khosravani2005 ,Torrance 1998 Jahani 2011 ,Pandy2005 ,SadeghiMal amiri2009 Conelly 2001 , Poortahmasebi2010 , Samadani2006 ,	Personality/Characteristics	P

‘ Samdani2005•Khosravani 2005•Bukingham 2001 Amabile 1996 Jahani 2011•Pandy 2005•Sadeghi Mal amiri 2009 Poortahmasebi2010• Baba ali 2005 ,Agahi 2002•Kirton 1999•Conelly1991 Nokar 2008•	Cognitive Skills	N
---	------------------	---

Table4: Sub indices that influencing creativity

Reference Manufacturer	Index	Code
Jahani2011 ,Stton 2001•Sadeghi Mal amiri 2009 Shalley 2004	Tends to success	M1
Jahani2011 ,Barbara 2003•Sadeghi Mal amiri 2009	Taking the challenge	M2
‘ Amabile 1998 ‘ Jahani2011•Barbara 2003•Sadeghi Mal amiri 2009	Uncertainty estimates	P1
Amabil 19981998 ,Shalley 2004 ,Sadeghi Mal amiri 2009 , ,	Risk Taking	P2
Torrance1988 , Sadeghi Mal amiri 2009•Amabil 1998 ,Runco 2007•	Talent and Intelligence	N1
Amabil 1998 ,Sadeghi Mal amiri 2009•Runco 2007 Conelly 2001 ,Jahani2011 , 1998	Knowledge and Expertise	N2

So far we focused on examining the factors influencing knowledge sharing and creativity .In continue we are going To discuss and evaluate the effect of each of these parameters on each other in order to develop a model for understanding the impact of knowledge sharing on creativity of staffs in TEJARAT bank ARDEBIL branch.

Research background

Several studies on factors affecting knowledge sharing within their organizations and communities has been performed to facilitate this important part of knowledge management cycle that the most important points in this section are: In-depth survey have been conducted in research and development unit of a top technology company by Gruber and Duxbury and While examining the relationship between organizational culture and knowledge sharing, and conclude that openness of communication, reward systems are of the greatest importance in this field .(Gruber and Duxbury,2001) LIN investigated the influencing factors of knowledge sharing in technology companies in Taiwan and stated that Concentration and complexity of the organizational structure have negative effects on motivation and reward system in these organizations have a positive relationship with knowledge sharing(Lin,2007) The research by YU and LIU on parameters affecting the knowledge sharing in the field of web loges states that Openness and openness of communication, satisfaction of helping others, as well as benefit sharing culture knowledge sharing, knowledge sharing behavior leads to a strong link with their users(LU,YU and LIU,2009) Hong Chen, Lin's research on the determinants of knowledge sharing in virtual communities is carried out, shows that the effectiveness of shared knowledge, the advantage of this knowledge and so this knowledge by matching the values learned and experiences people have had the most influence on knowledge sharing in these communities (LIN HUNG and CHEN,2009).

Sally and Gilson found in the research that risk factors may increase your creativity. Studies show that people usually tend to avoid risk and prefer more specific outcomes and ensure. Therefore, staff motivation toward creativity of ensuring that people feel safe to risk taking

and breaking the common methods and are encouraged to do things is the key issue (SALLY and GILSON, 2004). In 2002 AGAHI determined the relation of cognitive styles, independence, field dependence and creativity of school students in Isfahan. The results of the Pearson correlation coefficient showed that there is a significant positive relationship between the cognitive styles, independence, field dependence and creativity of students Scores. Multiple correlation coefficients indicated that there is a significant positive correlation between Cognitive style scores, independence, field dependence in students subscales expansion and innovation, Evaluating the results of analysis of covariance stated that there are significant differences in Male and female students' scores on the cognitive style questionnaire and a test of creativity. KHOSRAVANI in 2005 investigated about the relationship between creativity and mental health and five-factors of personality. Overall, these findings indicate that there is significant positive relationship among five factors of personality, creativity with extraversion dimensions; agreeableness and openness to experience, and also meaning of the relationship between creativity and mental health were confirmed, That is, those who had higher levels of creativity, Suffer less from anxiety, depression and stress and In addition, they give more value to themselves accordingly. In addition to the mentioned studies further researches in this area has been done that Table 5, shows studies in recent years:

Table 5: Conducted researches on factors that affecting knowledge sharing in communities and various organizations

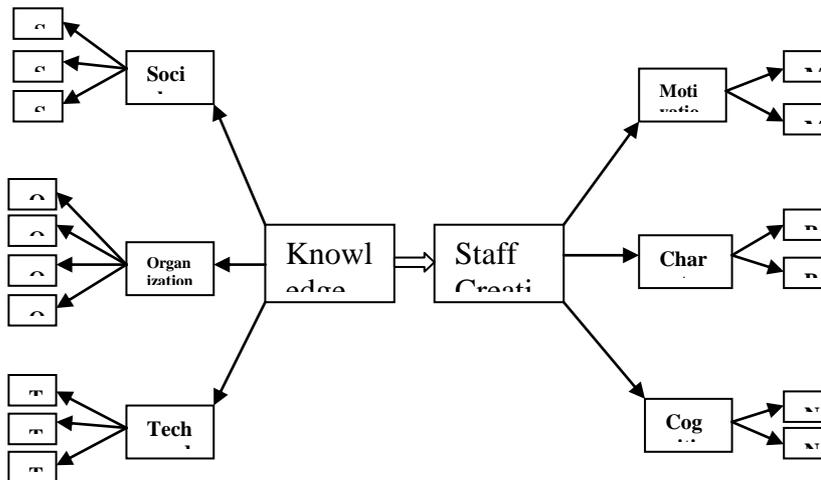
Year of research	Organization studied	Factors studied	Researcher
2002	Public and private organizations	Organizational Culture	Simons
2006	Virtual Communities	Reliability and effectiveness of shared knowledge	SU and Colleagues
2007	IT organizations in the United States	Use of technology and its availability, management support, along with the incentive structure and competition	Huan and Ananta Temula
2007	Tech companies in Taiwan	Motivation and reward systems, organizational structure	Lin
2008	Taiwan the Large organization	Personal: Knowledge sharing effectiveness and satisfaction of helping others Organizational :Senior management support and organizational reward Technology, Information and Communication Technology	Lin

2009	International hotel located in Taiwan	Senior management support and advocacy organization, Staff adherence to share knowledge	Yang
2009	R&D team	Trust	Huang

Methods:

The aim of the present study is in functional term and Methods of collecting and analyzing information are Descriptive and a correlation type because it also describes the relationship between the variables and their addresses. Simultaneous relationships between variables can be tested and explained using correlation analysis and structural equation modeling. In this paper by investigating the literature of effective ways of knowledge sharing and staff creativity were identified by library methodology, and then to evaluate the relationship between these two factors, structural equation modeling SEM is used. The statistical approach to early 1970 began by Mr. Case - Ling (1972), Wiley (1973) and Jour-SKOOG (1973) using LISREL software based on the (structural equation modeling). The method to evaluate the conceptual framework of the study and research experience in the realm of study flows logically. According to the presented definitions and previous studies, researchers illustrate the conceptual model of Figure 1 for the relationship between knowledge sharing and employee creativity.

Figure1, Conceptual model of the effect of knowledge sharing on employees' creativity



The statistical population of this study include all employees of TEJARAT Bank ARDEBIL branch that Using judgmental sampling, 180 students were taken as a sample case study. In this study, Cronbach's alpha was used to determine the reliability of the test method. In order to calculate Alpha coefficient of variance, scores of each sub-question of questionnaire (under test) was considered and the total variance was calculated and then the alpha coefficient was calculated using the following formula:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum \delta_i^2}{\delta^2} \right)$$

k: The number of questionnaires

δ_i^2 : ANOVA test on the j item

δ^2 : The total variance

More closer to a hundred percent, indicating the greater Capability. Calculating the measurements tool reliability, the initial sample including 32 questionnaires was pre-tested. Using data obtained from the questionnaire via SPSS software through Cronbach's alpha the Level of reliability for the instrument was observed through which the value of 0.887 was calculated for the whole questionnaire. Validity of a measurement tool depends on the question of its constituent. If the questionnaire is representative features and special skills that researchers have measured them, a test has content validity (KHAKI, 2007).

In this study, two variables of knowledge sharing and creativity have been considered as a latent variable. Knowledge sharing variable is investigated by three indicators of social conditions, environmental conditions and technological conditions, and creativity variable is assessed by three indicators of motivation, personality characteristics and cognitive skills. This method is one of the strongest and most appropriate methods of multivariate analysis. The analysis of covariance structures or structural equation model is one of the main methods for the analysis of complex data structures and means to analyze the different variables that in Theory based structure shows the simultaneous effect of variables. In the structural equation modeling methodology, it is first necessary to study the Structures validity to determine indicators for measuring the desired constructs are accurate. In this section, the results of confirmatory factor analysis of each of the study variables using software (LISREL) listed separately for each of the sharing knowledge and creativity variables. Two outputs of the software that shows the model Fitting, Significant coefficient output mode and output mode in the standard estimate mode. Figure 2 shows the output in Standard mode for the indices of model:

Figure2, the model Confirmatory factor analysis in the standard mode estimation

Figure2, the model Confirmatory factor analysis in the standard mode estimation

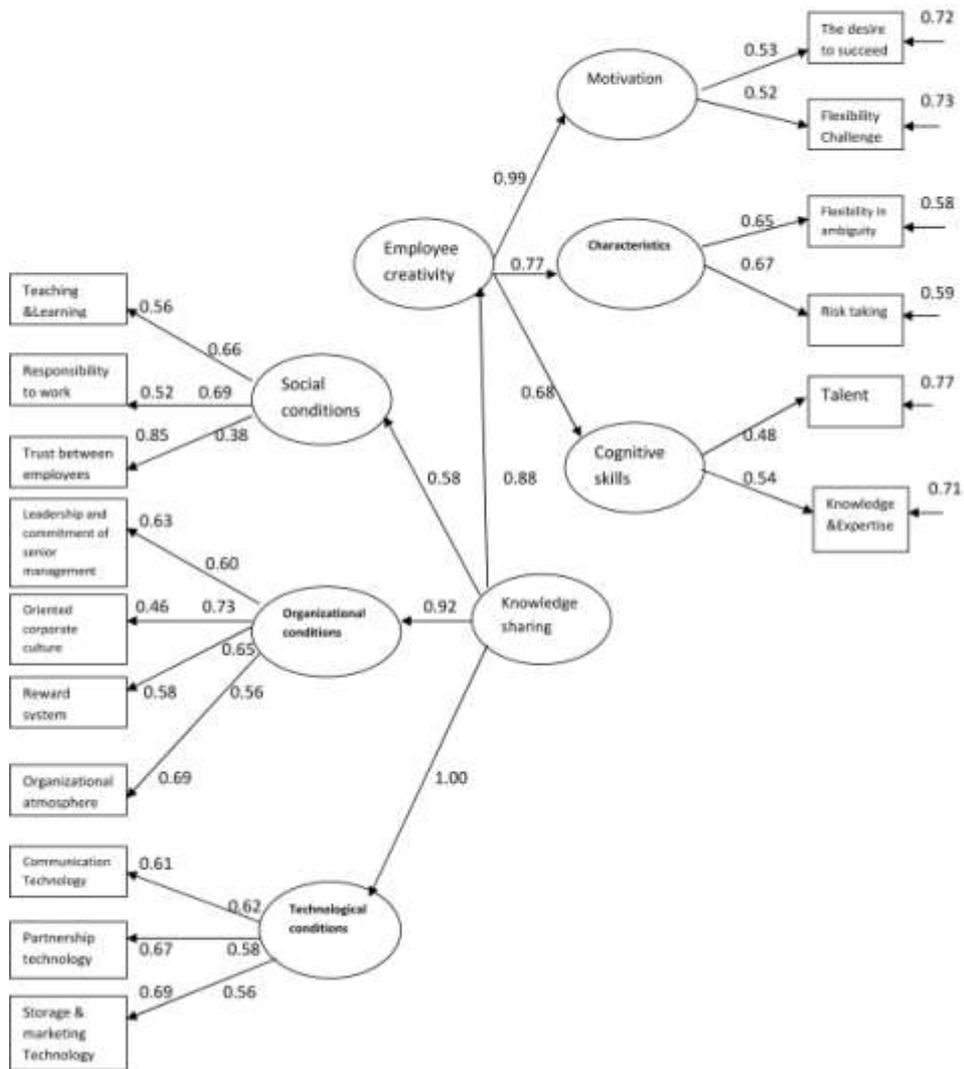


Figure3, factor analysis model in the significant coefficients mode

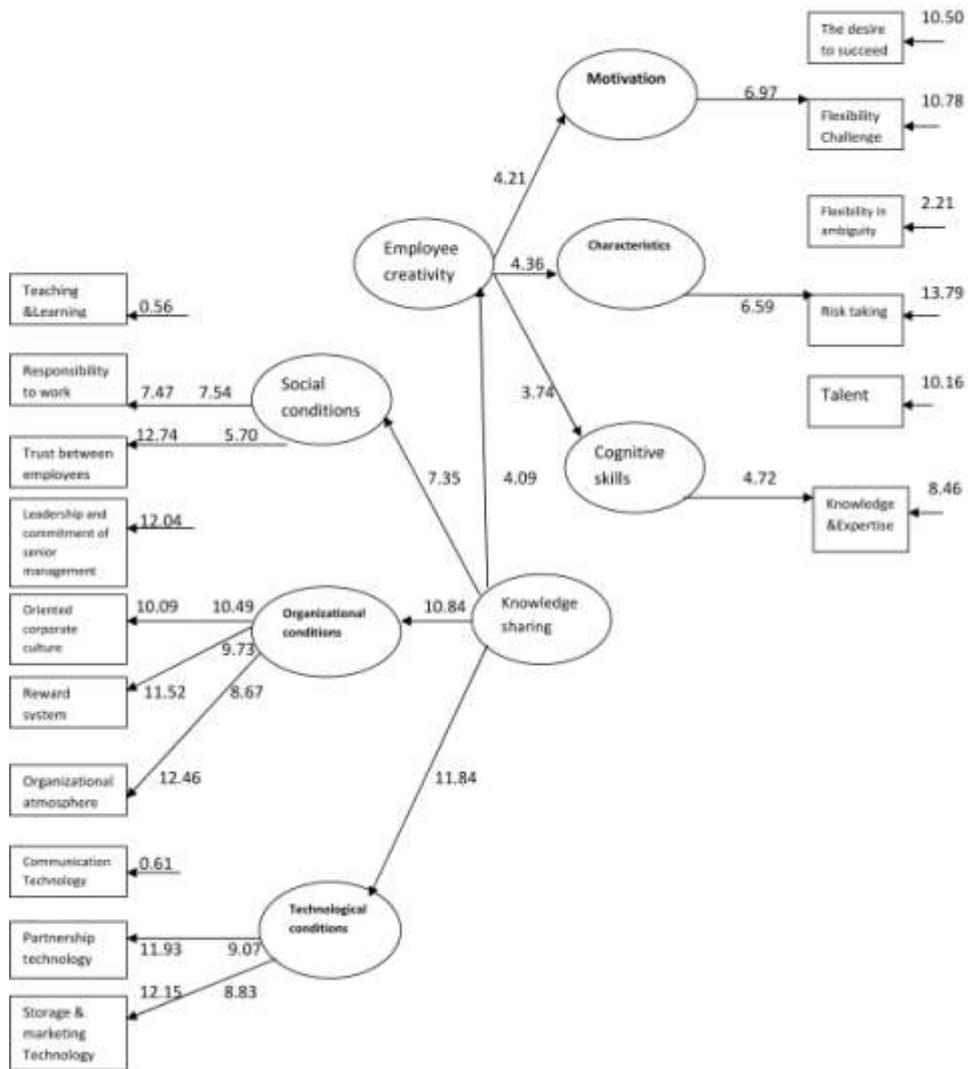


Figure 3 shows the significant downstream output that value greater than 1.96 indicates a significant test of meaningful relationships and it is clear that all the coefficients are significant. Table 7 summarizes the confirmatory of the entire model. Table 6: Results of confirmatory factor analysis model

Figure 3 shows the significant downstream output that value greater than 1,96 indicates a significant test of meaningful relationships and it is clear that all the coefficients are significant. Table 7 summarizes the confirmatory of the entire model.

Table 6: Results of confirmatory factor analysis model

Results	Level of significance	circumstantial evidence T	Standardized coefficients	Observed variables	Hidden variables	Confirmatory factor analysis
Is significant	< 0/01	Fixed	0.53	intend to succeed	Motivation	The first order
Is significant	< 0/01	6/97	0.52	Taking the challenge		
Is significant	< 0/01	Fixed	0.65	Uncertainty estimates	Characteristics	
Is significant	< 0/01	6/95	0.67	Risk		
Is significant	< 0/01	Fixed	0.48	Talent	Cognitive Skills	
Is significant	< 0/01	4/72	0.54	Knowledge and Expertise		
Is significant	< 0/01	Fixed	0.66	Teaching and Learning	Social conditions	
Is significant	< 0/01	7/54	0.69	Responsibility to work		
Is significant	< 0/01	5/70	0.38	Trust between employees		
Is significant	< 0/01	Fixed	0.60	Leadership and commitment of senior managers	Organizational conditions	
Is significant	< 0/01	10/49	0.73	Participation-oriented culture		
Is significant	< 0/01	9/73	0.65	Reward system		
Is significant	< 0/01	8/67	0.56	Organizational Atmosphere		
Is significant	< 0/01	Fixed	0.62	Information Technology	Technological conditions	
Is significant	< 0/01	9/07	0.58	cooperation Technologies		
Is significant	< 0/01	8/83	0.56	Storage technology and marketing		
Is significant	< 0/01	4/21	0.99	Motivation	Staff Creativity	Second order
Is significant	< 0/01	4/36	0.77	Characteristics		
Is significant	< 0/01	3/74	0.68	Cognitive Skills		
Is significant	< 0/01	7/35	0.58	Social conditions	Knowledge sharing	
Is significant	< 0/01	10/84	0.92	Organizational conditions		
Is significant	< 0/01	11/84	1.00	Technological conditions		

The above table shows the results of a questionnaire that intended to be measured by researchers have been achieved by these tools .Hence this relationship is attributable to the hidden variables. Generally work with LISREL program, suggests each of the obtained indicators for the model is not alone the fitness or not fitness reasons of it. Rather, these indicators should be interpreted together with each other. However, if t_values be at 99% significant out off base range between - 2.58 to + 2.58 , shows Relationships among the variables or assumptions And considering LISREL software, uses the systemic estimator to estimate specified parameters, This means that estimates all of the equations simultaneously and simultaneously performs multiple regression, Table 8 summarizes the given system estimator information

Table 7: Fitness or suitability indices of model

Limit	Estimation of the model	Index
Less than 3	2/390	(The degree of freedom chi-square)
Higher than 0.9	0.90	(Goodness of fit)GFI
Less than 0.1	0.06	Root mean square error of (the estimate)RMSEA
Higher than 0.9	0.95	(Modified fitness)CFI
Higher than 0.9	0.92	(Norm fitness)NFI
Higher than 0.9	0.94	(Non norm fitness)NNFI

Chi index of the degree of freedom is one of the main indicators that is 39/2 which is less than 3 and is in the limit and confirms the fitness of the model. Fitness adjusted index values between 0.9 and / or 0.95 is acceptable, and is higher than 0.95 is excellent, In the final model, which is equal to 0.92 that is good, Comparative fitness index or modified which in this model is equal to 0.95 and like the norm index of fitness and is acceptable, the next index is the root mean square error that is estimated to be 0.06 which has been sets in the acceptable range for the fitness model, Not norm fitness model that is equal to 0.94 sets in the acceptable range. Goodness of fit index which is equal to 0.90 sets within limit range. Therefore, concerning the entire calculated fitness indices it could be acknowledged that the model is in appropriate fitness.

Results and Discussion

In the present study, to accept or reject the hypothesis it was used of structural equation modeling and specifically path analysis. To perform data analysis we used LISREL software. The path analysis method is the study of the pattern of relationships among several variables while neither confirmed nor denied the possible relationship between them. In order to decide whether to accept or reject the hypotheses we used the output of the software, Therefore, before judgment in this regard should be sure about the model fitness after which Are two important output will be extracted from the software, Based on this, hypothesis and the relationships among variables can be confirmed or denied, The two outputs are the standard estimate and output in significant coefficients mode. The output obtained in the standard estimates, the number on each line is the correlation between the two variables. The second output at coefficients significant shows the t-statistic for each of these pathways. Considering $\alpha = 0.05$ If the numbers shown on each line in the output, is numerically larger than 1.96 or smaller than -1.96, correlation between the two variables will be significant otherwise the dependent variable cannot represent the change in the independent variable significantly. After data processing by means of structural equation modeling software, and evaluation of the conceptual model to examine the main hypothesis the obtained sub-results are as the following:

1. There is a significant positive relationship between The (social situation), and (sharing knowledge)in TEJARAT Bank. This hypothesis states that the more suitable social conditions the more effective in raising the level of knowledge sharing. As can be seen in Table 6, knowledge sharing with intensity of 0.58 is influenced by the social situation. Other findings from the survey are as hereunder but avoiding excessive we mentioned the Analysis of corollary just in case No. 1.
2. There is a significant positive relationship between the (Organizational conditions), and (sharing knowledge) in TEJARAT Bank.
3. There is a significant positive relationship between the (technological conditions), and (sharing knowledge) in TEJARAT Bank.
4. There is a significant positive relationship between the (Motivation), and (employees creativity) in TEJARAT Bank.

5. There is a significant positive relationship between the (characteristics), and (employees creativity) in TEJARAT Bank.

6. There is a significant positive relationship between the (Cognitive Skills), and (employees creativity) in TEJARAT Bank.

Also the study carried out on the main hypothesis of this study indicate that There is a significant positive relationship between the (knowledge sharing), and (employees creativity) in TEJARAT Bank.

According to Figure 2 the knowledge sharing with the intensity of 0.88 can affect employees' creativity.

This hypothesis states that there is a significant and substantial and direct relationship between knowledge sharing and employees' creativity. Also the path positive coefficient indicates the direction of alignment in changes.

The more knowledge sharing the more effective in raising the level employees' creativity.

Suggestions :According to the results of research to enhance employees' creativity in TEJARAT Bank, recommendations are presented as below:

Increasing knowledge sharing in the context of social, organizational and technological TEJARAT bank needs more investment.

Bank managers should pay more attention to partnership-oriented culture.

Organization should be applied to the kind of information and communication technology that can facilitate the process of discovery and knowledge sharing.

References:

Agahi, B.(2002).relationship between cognitive style independence – fied dependence and creativity in middle school students in Isfahan ,M.A.Unpublished Thesis ,Isfahan University.

Endres ,M.L, Endres S . P., Chowdhury ,S.k, ALAM,I.(2007) . Tacit knowledge sharing,self –efficacy theory,and application to the open Source community ,journal of Knowledge Management ,Vol.11 Iss:3 pp .92-103

Gruber,H,and L.Duxbury .2001.Does organization culture affect the sharing of knowledge ?peresentation Health Canada,available from

http://www.hc-sc.gc.ca/iacb-dgiac/km-gs/English /Duxbury_en.pdf(accessed 20 Nov .2009)

Hislop,D.(2003). Linking human resource management and knomledge management via commitment:A review and research agenda ,Employee Relations,Vol .25pp.182-202

Huang,Chi.(2009).Knowledge sharing and group cohesiveness on performance :An empirical study of technology R&D teams in Taiwan <journal of Tehnovation ,Vol20:786-797

Huysman ,M.& de Wit ,D.(2000)knowledge Management in practice ..IN Edwards ,j.(Eds) knowledge Management Conference(KMAC2000)Birmingham,UK.

Kosravani ,s.(2005). The relationship between creativity and the five factors of personality and mental health , M.A unpublished Thesis Tehran University.

Kim ,S and Ju,B.(2008).An analysis of faculty perceptions:Attittudes toward knowledge sharing and collaboration in an academic institution .journal of Library & Information Science Research, Vol30:282-290

King ,Marie Jennifer .(2001).Employee participation in organizationally –Maintained Knowledge Sharing Activities .Master s Thesis .University of Toronto.Retrieved September,2006,from www.collectionscanada.ca/obj/s4/f2/dsk3/ftp05/mq62883.pdf

Klein ,Jonathan.H.,Some directions for research in knowledge shring . knowledge Management Research & practice.2008. Vol.6,pp.41-46

Mc Dermott,R.and Odell,C.(2001).Overcoming culture barriers to sharing knowledge,journal of knowledge Management,Vol.5 No.1,pp.76-85

Moss ,simon A,dowling NICKI,Callanan,John (2009)Towards an integrated model of leadership and self regulation The Leadership Quarterly .Volume 20,Isse2,162-176.

Panahi,Sirous,Waston ,Jason ,partridge ,Helen(2012).Social Media and Tacit Knowledge Sharing :Developing a Canceptual Model World Academy of Sience ,Engineering and Technology ,64 NO.PP.1095-1102

Pilevari,N.(2011),Assessing Knowledge sharing in Iranian SMEs using fuzzy logic inference.
Samdani , M .(2006), Investigating The relationship between personality characteristics of creativity in an area education managers Kerman . Kerman University .Faculty of Literatureand and Humanities.M .A.Unpublished Thesis Kerman University.
Skyrme,D.J.(2002) The 3Cs of knowledge sharing :Culture,competition and commitment(online)
Sveiby,K and R.Simons.(2002).Collaborative Climate and effectiveness of Knowledge work:an empirical study .Journal of knowledge Management,6(5):420-433
Turban E(2006)., Information thechnology for management transforming organization in the digital econmy,5 ed.c.
Willem ,A and Buelens ,M.(2009). knowledge sharing in inter_unit cooperative episodes :The impact of organizational structure dimensions. Journal of Information Management ,Vol 29:151-160
Yu , Yuecheng (2004).Motivation Foundation of Individual knowledge sharing.Master s Thesis .The Hong Kong University of Science &Technology .Retrived Aguust ,2006,from [http ://1bxm1.ust.th_imgo/b834875.pdf](http://1bxm1.ust.th_imgo/b834875.pdf)
Zhang,Jin,&Faerman ,Sue R.(2004).The Nature of knowledge and Its Influence on Knowledge Sharing Practice:Experiences from Building the MACROS system in:proceedings of the 38th Annual Hawaii International Conference on System Sciences .April,2006,from <http://csdl2.computer.org/comp/proceedings/hicss/2004/2056/08/205680249b.pdf>

XXXXXXXXXXXXXXXXXXXXXXXXXXXX