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Knowledge Management Practice in Iranian Public Organizations

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Abstract: Evidence suggests that awareness of knowledge management in the public sector is low. Hence, this study investigated the level of knowledge management practice within the Iranian public organizations. The Amah (2013) KM questionnaire were used. KM processes studied in this research is, knowledge acquisition, knowledge storage, knowledge sharing, knowledge utilization. The study population consisted of 30 of the Iranian public organizations. By Morgan table 28 organizations chosen as a sample. 320 questionnaires were distributed among middle and senior managers of public organizations. 95% questionnaires were returned to the researcher and 85% examined from 28 organizations. It is found that the practices of knowledge management processes were modest. Therefore, organizations should pay moreattention to knowledge management.

Key words: Knowledge Management • Knowledge Management Processes • Knowledge acquisition • Knowledge storage • Knowledge sharing • Knowledge utilization

INTRODUCTION

Massingham [1] argues that many KM initiatives fail and, therefore, KM does not create value for the firm and that it's return on investment is unlikely. Evidence also suggests that awareness of knowledge management in the public sector is low. Lucier [2] states that face approximately 84 percent of knowledge management programs on fail. Storey and Barnet [3] also reported failure rate of over 80 percent. Several obstacles have occurred in the course of conducting knowledge that even advanced industrial societies are not immune from the harm they and also, great corporations have been victimized in this way. These obstacles can be classified into the following four areas: 1. Knowledge gap 2-Knowledge Transfer gap 3- Knowledge implementation gap 4- knowledge integrate gap. Salimi [4] explored four criteria of knowledge management's project failure as follow: information technology, culture, content and the project management were reasons for defeat. Edvardsson and Oskarsson, [5] stressed that we lack an understanding of how firms create knowledge and how this is translated into competitive advantages or enhanced customer relations. Therefore, the very important is to an organization that Knowledge management operations begin moment to understand the

concept of knowledge management. Because we of one hand limitation know our and on the other hand on our do not know. But overall weakness, lack of culture that is supportive knowledge management process and helpful to the development of and knowledge creation [6]. Also, Schein [7] argue that acts that done in public sector organizations in sets information and knowledge is political. In Iran also, unsuccessful many of organizations is not low knowledge, rather the problem is gap between know and doing.

However, the Organization of Economic Cooperation and Development (OECD) [8] in report, is examined importance and necessity of knowledge management in organizations. For some reason OECD, public organizations should move towards knowledge management including Knowledge has become a critical determinant of competitiveness for the public sector, private firms produce goods and services that are increasingly intensive in intangible capital, directly competing with the goods and services traditionally produced by the public sector, Ageing civil servants and faster staff turnover, Increasingly knowledgeable citizens require governments to be on top of newly created Knowledge, public policy goals (e.g. "fighting exclusion") have become more ambitious and complex than before. Liao and Wu [9] pointed that implementation knowledge

Corresponding Author: Hossein Yakhkeshi, Tarbiat Modares University, Tehran, Iran. Tel: +09112574907, Fax: +01134561309. management process in every organization is necessary for increase employee individual learning capacity, also employee grouping. Overview of our studies show that in public sector of Iran, knowledge management process focus on extraction of hidden knowledge and document management experience, While the implementation of knowledge management in great and multinational corporations has emphasized on knowledge use to produce new products or services. Albeit, received to each of purpose above, has a path separate and qualification particular itself. But, needy adherence of doctrine is that the implication knowledge management in finally redound to rivalry advantage and organizational develop.

Knowledge Management: The term exploded in popularity in the late 90s and early 2000s, becoming one of the main buzzwords of the time. Then, as with most buzzwords, the lofty promises and general euphoria began to be eclipsed by the reality that KM initiatives often resulted in outright failure. Some researchers indicate that the failure rate is 50%, but this number could be even higher if failure is defined more broadly so as to include all projects that did not live up to their expectations [10]. Several experts and specialists involved in the development of knowledge management concept that they some of the most famous are include Drucker, Strawsman and Senge. The biggest research done to today about knowledge management is related to Nonaka and Takeuchi [11] to title "The knowledge creating company: How Japanese companies create the dynamics of innovation". Book the Knowledge-Creating Company (1995) were not examples of designated KM initiatives but rather descriptions of actual knowledge processes of knowledge sharing, knowledge combination and so on. These were identified post hoc as examples of knowledge being managed.

"Knowledge Management is the explicit and systematic management of vital knowledge - and its associated processes of creation, organisation, diffusion, use and exploitation - in pursuit of business objectives". [12]. Knowledge Management is concerned with innovation and sharing behaviors, managing complexity and ambiguity through knowledge networks and connections, exploring smart processes and deploying appropriate tools and technologies [13]. Knowledge management, a bottom-up, ongoing process, finds value and use for raw information which is shared across organizational boundaries [14].

Thus the benefits of knowledge management depend had to motivate people, their aspirations, their ability to knowledge sharing and use of knowledge. Thus, the survey knowledge management equivalent on acquisition, transfer and application of knowledge, also, implicit knowledge management provided to improve the capacity of people to communicate and collaborate with each other [15]. Knowledge management on organizational activities such as problem solving, decision making, strategic planning and dynamic learning by capturing, select, organize, distribute and transmit important information and experience helps. The ultimate goal of knowledge management is the application of knowledge to improve organizational performance. Because knowledge when will be invaluable that applied. In fact, knowledge management not tool to earn money, but a way of life, because in of the individual vision and dreams and something that about the future we to it believe be shared and what that of myriad experiences in organizations achieved, knowledge management not need on tools more for gathering data and information, rather needy a perspective new for combine information separate is that vision individual preferment and acts propel.

The Importance of Knowledge Management: KM is important for a number of reasons. It is important because the rise of time-based competition as a marketing weapon requires organizations to learn quickly. It is important because of the globalization of operations and because of the growth in number of mergers and take-over where multiple organizations must share knowledge in a collaborative forum. KM has ability to convert the tacit knowledge of people into explicit knowledge. Understanding how organizations manage knowledge assets for improved innovations is important. KM is important in this context because it brings together diverse knowledge sources from different sections of the demand and supply chains, achieving cross-functional integration [16]. Drucker [17] also state that "The basic economic resource - the means of production - is no longer capital, nor natural resources, nor labor. It is and will be knowledge".

Knowledge can makes an enormous power of low force. As Christensen and Raynor [18] bluntly stated that "Resources are usually people or things – they can be hired and fired, bought and sold, depreciated and built". "The only irreplaceable capital an organization possesses is the knowledge and ability of its people. Knowledge also, There is within self human. Thus, human is the most important factor in gaining competitive advantage. Because human knowledge to produce and the application of resources. Wisdom also needful having is knowledge. Because you do not know everything and what you know may not always be applicable in a particular situation. Knowledge management also, most important of knowledge is, because want in organizations style complexity, conversion information and witting individual and organizational on knowledge and skills individual and grouping specifying.

Knowledge management focuses on people and organizational culture to stimulate and nurture the sharing and use of knowledge; on processes or methods to find, create, capture and share knowledge; and on technology to store and make knowledge accessible and to allow people to work together without being together. People are the most important component, because managing knowledge depends upon people's willingness to share and reuse knowledge [19].

Knowledge Management Maturity: The firms and organizations despite many investments that for use of knowledge creation in itself organizations pay very not success and investments hardware and software that done for implementation knowledge management, not achieved result acceptable. Organizations yet on this question are facing that on traverse what way and process can be utilize of knowledge creation in itself for new requirement and aims? And path maturity organization in productivity of knowledge itself what? And organization on what processes done investment until implementation knowledge management alignment to aims and requirements?

For meaning full use of knowledge as a rivalry and guideline advantage and also organizing phase development knowledge management in organization, cognition situation real organization in set knowledge management is necessary and vital. In other words, do indepth analysis of the level of maturity of the organization in the field of knowledge management is essential. Maturity of Organization in knowledge management, level of an organization's capabilities and abilities in different aspects is effective on knowledge management. Curtis *et al.* [20] state a capability maturity model, a model that is the roadmap for the implementation of successful experiences and vital provides according to organizational different processes.

Since the implementation of knowledge management for achieve to perfection requires frequent and significant changes in processes, infrastructure and culture. Therefore, it is unlikely that in a sudden rise achieved. Hence, Maturity models via itself process and gradual structure, organization on continuum directing maturity. The knowledge management also not something that can able organizations on improvement sudden. Hence, Implementation maturity models in set improve the performance of knowledge management, is a good way to test. And in proportion to the increasing maturity of the organization, the more complex aspects of knowledge and indicators more diverse and more specialized for assessing and managing organizational knowledge will be needed. So, as that grown organizations and too complex these processes, the more knowledge-intensive processes to manage this complexity will be needed [21].

Capability Maturity Model (CMM) a model is that Most knowledge management maturity (KMM) models follow the five maturity levels defined in CMM, that this levels including: initial, repeatable, defined, managed and optimizing [22]. Although the CMM is used to describe software processes, the researchers believe that can in knowledge management maturity modeling be used both CMM and also models derived from it. Nevertheless, there is different between software management and knowledge management that must attending in conformity and design on regarding traits and features knowledge management.

The KMM Pyramid Model: According to holistic measurement framework of this model, develop a surveying table to take down the actual state of practiced activities of knowledge management. This surveying table is drawn from three dimension: knowledge management process and knowledge management enablers and knowledge management maturity model and represent the current state of specific practices and activities, generic practices and activities [22]. According to this framework, organizations as knowledge processes: (1) creation, (2) storage/retrieval, (3) transfer and (4) application.

Knowledge Management Maturity Model (KMMM) Karsten and Manfred [23]: KMMM? consists of an analysis model, a development model and a defined assessment process. The analysis model helps the KMMM? consultant to take account of all important aspects??of knowledge management and reveal ?which key areas and topics should be developed??in future. The development model provides information? to how the respective key areas? and topics can be best developed to reach next maturity levels. The assessment process? structures all relevant steps from assessment? definition to result interpretation.

The models suggest that development knowledge management via process learning substantiation and organization resource in this process improvement and converted on organization capability and aptness. Therefore, if an organization fails to fulfill this process, the investment has been wasted.

Reference	Knowledge management processes						
Delong [26]	Capture	transfer	application				
Miller [27]	creation	collection	storage	distribution	application		
Alavi and Linder [25]	creating	storage	transfer	application			
Darroch [28]	acquisition	dissemination	utilization				
Lawson [29]	creation	capture	organization	storage	dissemination	application	
Lee et al. [30]	creation	accumulation	sharing	utilization	internalization		
Fong and Choi [31]	acquisition	creation	storage	distribution	use	maintaining	
Omerzel [32]	acquisition	storage	transfer	use	measurement		
Ungaretti and Webb [33]	acquire	capture	share	use	create		
Umoh and Amah [15]	Acquisition	Storage	Sharing	utilization			

Table 1: Knowledge management processes

Knowledge Management Processes: Today's the most important processes in the organization the process of knowledge management. Similarly, the most important development in organization is evolution in knowledge innuendo innovation and production of new knowledge. Davenport and prusak [24] stated that the increase of knowledge power and deal with the cultural changes of the most challenging issues in the process of knowledge management. The purpose of process of knowledge management, collection and organize organization knowledge and the exploitation and protection of the assets of the acquired knowledge. Those who cannot remember the past are condemned to repeat. Therefore, the instruction individual of via learned, the barrier to rework a lot in the organization. Knowledge management processes a linkage continuum and purpose - oriented in statement human factors that doing participant factors to management other factors and activity constitutive knowledge process. The purpose help to create and maintain a system of organic is that undertake production, maintenance, upgrades, acquisition and transfer of knowledge is into organization. Many studies have been done on knowledge management processes (Table 1). Alavi and Linder [25] have stated that there is not a main difference between this taxonomy. The only difference is the name and number of process steps. In this study used four process of the study Umoh and Amah [15].

Knowledge Acquisition: Organizations in relation on self around environment, information on suction and these convert on knowledge. Then, merge knowledge on experiences, values and its internal rules until acquire base for its acts [26-34]. Knowledge acquisition if for organization being new and useful can use for knowledge create, also as a part of organization production. The organizations information that gathering of internal and external resource via organizational learning process converted on knowledge on compound past knowledge,

experience, values and organizational procedures, then, knowledge converted on part of base these organizational knowledge. This aboveboard explain that why knowledge acquired via these organizational processes that for organization new and exclusive [35]. Although both success and failure leads to learning, but the knowledge gained from the failure rate of less than knowledge gained from the success depreciate. Because Prior success also leads decision makers to be overconfident about the adequacy of their existing knowledge, does not lead organization members to entirely cease processing new information. But, failure challenges the status quo, it induces decision makers to engage in deep or mindful reflection involving complex thought processes [36]. When in organization growing culture support for the error, the culture spirit embrace and learning from failure reinforce in organization [37].

Knowledge Storage: May people knowledge that creating have forgotten. Therefore it is necessary this knowledge in organizational memory storing, organizing and retrieving. Organizational memory including different forms of written documents, databases and human knowledge encoded in the form of expert systems, documentation, organizational processes and procedures. Knowledge storage includes the retention, protection and maintenance of knowledge in various mediums such as individuals, documentation, computers and technology [38,39]. Knowledge storage may also be a tool used in knowledge transfer [40]. The developing organizational knowledge in answer on failure on more probability in analogy on answer on success storage in organization memory, because failure, decision makers enforce that discover their knowledge gap and begin formal endeavors development knowledge for answer on it. For example, Honda company recorded his plans failed, because it is believed that the same thoughts may of the future be successful.

Knowledge Sharing: Knowledge sharing has been considered as a key component of KM systems and the most important element of creative behaviors in any organizations [25]. Knowledge management deals with the questions of who should share what should be shared and how it should be shared. When knowledge is shared widely used value is achieved [19]. When people share their thoughts and ideas, more likely new knowledge and ideas are to receive them. Perception vantage and more acquire of their knowledge, evaluation work and knowledge of them, incomplete understanding and realization of them also obvious. Accordingly, it is assumed that the sharing of knowledge, affect the organization's strategic renewal. But Lee and Choi [41] conducted a study in public agencies and found most people unwilling knowledge that they own are to share with others. They knowledge keep in itself until on power that received gradation. Li-An, Ho [42] in their study found that trust in the workplace can increase the sharing of knowledge. Riege [43] suggested that factors influencing knowledge sharing may include individual factors (e.g., trust, power and leadership), organizational factors (e.g., social network, reward system and sharing opportunities) and technological factors (e.g., information technology systems and member training).

Knowledge Application: The application refers to the ultimate goal of every knowledge management systems. Nowadays, organizations are successful and can survive in the competitive world that constantly new ideas are applied in the organization. This implies that the effectiveness knowledge application of the organization is to stimulate competition. For this reason, it is argued that the success of knowledge management is more related to how apply efficiently and effectively knowledge. Pfeffer and Sutton [44] stated that this is occurring within the organizations that use knowledge the best, not to those that have the best knowledge. Also there are a number of ways through which an organization can employ its knowledge resources. For example, it could repackage available knowledge in a different context, raise the internal measurement standard, train and motivate its people to think creatively and use their understanding in the company's products, processes, or services [45].

The implementation of KM needs three factors, knowledge organization, knowledge worker and information technology [46]. Knowledge organization relates by an organization's infrastructure readiness to create KM. It manages the five KM unit roles, chief knowledge officer (to ensure the KM activities are sufficient), knowledge manager (to coordinate), knowledge analyst (to analyze and develop KM result), knowledge information (promote KM activities and publish KM result) and the knowledge steward (to assist knowledge information and knowledge analyst). The second factor is knowledge worker; they are sources of knowledge such as customer service and the innovative employee. They contribute to add/update knowledge. The last factor is information technology. The factor is a mean to fasten, store, manage and search knowledge processes [47].

MATERIALS AND METHODS

This study used the quantitative approach to assess the level of knowledge management practice within Iranian public organizations. The research variables that represent knowledge management processes were obtained from the analysis of the previous knowledge management models. The knowledge management processes and the questionnaire were adopted from a study conducted by Umoh and Amah [15]. knowledge management questionnaire consists of 16 items, questions1-4 is related to knowledge acquisition, 5-8 related to knowledge storage, 9-12 related to knowledge sharing and 13-16 related to knowledge utilization. The response mode followed a five-point Likert type scale with 5= 'agree strongly', 4= 'agree slightly', 3= 'neither agree nor disagree', 2= 'disagree slightly' and 1= 'disagree strongly'.

The questionnaires were distributed among middle and senior managers in a number of 28 public organizations that were selected randomly among public organizations in Iran. 320 questionnaires distributed and collected among samples within 34 days. 307 copies were returned to the researcher. 28 questionnaires were excluded because they lacked the concurrent validity. The managers that they not time had to fill out questionnaires and answers to rushed to the questionnaires, they questionnaires were removed. 9 questionnaires were excluded because they were incomplete. Finally, the data 270 questionnaires were analyzed. The distribute questionnaires presence researcher personally in more than half of the organizations. In other organizations, assists with her friends and relatives. The obtained data were analyzed using SPSS version 20. In this study, was tested renew the reliability of the questionnaires. For this purpose, were distributed an initial sample of 30 questionnaires among the studied sample. Then, using data obtained from the questionnaires were calculated Cronbach's alpha reliability coefficient and the descriptive analysis using the mean and the standard deviation to assess the level of each knowledge management processes practice [48].

Indicator	Cronbach Alpha	No. of Items	Rule (George and Mallery)[48]	
Knowledge acquisition	0.791	4	acceptable	
Knowledge storage	0.819	4	good	
Knowledge sharing	0.845	4	good	
Knowledge utilization	0.922	4	excellent	

Table 2: Reliability Analysis Results

KM Processes	Ν	Min	Max	Mean	SD
Knowledge acquisition	270	2.25	4.5	2.75	1.225
Knowledge storage	270	2.5	4.75	2.9	1.239
Knowledge sharing	270	2.00	4.25	2.6	1.279
Knowledge utilization	270	2.25	4.5	2.73	1.159

RESULTS AND DISCUSSION

The reliability analysis was conducted using Cronbach's Alpha. George and Mallery [48] stated that the value of Cronbach alpha less than 0.5 is unacceptable, greater than or equal 0.5 is poor, greater than or equal 0.6 is questionable, greater than or equal 0.7 is acceptable, greater than or equal 0.8 is good and greater than or equal 0.9 is excellent. As shown in Table 2, the overall value of Cronbach's alpha for Knowledge Management processes were: knowledge acquisition= 0.791, knowledge storage= 0.819, knowledge sharing=0.845 and knowledge utilization = 0.922.

Table 3 illustrates the results of the descriptive analysis of knowledge management processes. The results showed that the mean score of knowledge management was 2.74 with a standard deviation at 1.227. The overall mean score for knowledge management, including the four sub-constructs were calculated by computing new variables in SPSS for the mean scores of all items of the sub-constructs. Among the four sub-constructs of knowledge management, knowledge storage the highest mean score (M=2.90, SD=1.239), knowledge acquisition (M=2.75, SD=1.225), knowledge utilization (M=2.73, SD=1.159) and knowledge sharing (M=2.60, SD=1.279).

CONCLUSION

This study found that the practice of knowledge management is modest in Iranian public organizations. The findings showed that the practice of knowledge storage was the highest, however, the practice knowledge utilization that are the ultimate goal of knowledge management system in third place was that the expression is relatively low. These findings suggest the fact that public organizations in knowledge acquisition, knowledge storage, knowledge sharing and knowledge utilization do not attempt. Responds at the time of completing the questionnaire frequently stated that they do not pay particular attention to knowledge management. The only existing legislation has led to a number of factors to be considered. The organization does not encourage people to think globally. They are not encouraged to join the social networking websites. Resources that people need to do their jobs are not readily available. Also, pay attention to organizational learning. Because exist organizational learning in essence knowledge management and role effective had in the organization's long-term performance.

REFERENCES

- Massingham, P., 2014. An evaluation of knowledge management tools: Part 1 – managing knowledge resources, Journal of Knowledge Management, 18(6): 1075-1100.
- Lucier, C., 2003. When knowledge adds up to nothing: Why knowledge management fails and what you can do about it. Development and Learning in Organizations, 17(1): 32-35.
- Storey, J. and E. Barnett, 2000. Knowledge management initiatives: Learning from failure. Journal of Knowledge Management, 4(2): 145-156.
- Salimi, E., V. VahdatZad and F. Abdi, 2012. Key dimensions to deploy a knowledge management system in an Iranian firm, a case study. Procedia Technology, 1: 268-274.
- Edvardsson, I.R. and G.K. Oskarsson, 2011. Knowledge management and value creation in service firms. Measuring Business Excellence, 15(4): 7-15.

- King, W. and P. Marks, 2008. Motivating knoledge sharing through aknowledge management systems. Omega, 36: 131-146.
- 7. Schein, E.H., 1988. Organizational Psychology, NJ: Prentice Hall, Englewood cliffs.
- OECD, 2003. Conclusions from the results of the survey of knowledge management practices for ministries/departments/agencies of central government in OECD member countries.
- Liao, S.H. and C.C. Wu, 2010. System perspective of knowledge management, organizational learning and organizational innovation, Expert Systems with Applications, 37: 1096-1103.
- Akhavan, P., M. Jafari and M. Fathian, 2005. Exploring Failure-Factors of Implementing Knowledge Management Systems in Organizations, Journal of Knowledge Management Practice, 6: 1-8.
- Nonaka, I. and H. Takeuchi, 1995. The knowledge creating company: How Japanese companies create the dynamics of innovation; New York: Oxford University Press.
- 12. Frost, A., 2014. A Synthesis of Knowledge Management Failure Factors, www.knowledgemanagement-tools.net.
- Standards Australia, 2005. Australian Standard, Knowledge management-a guide AS 5037-2005, Standards Australia, Sydney.
- Bonner, D., 2000. The knowledge management challenge: new roles and responsibilities for chief knowledge officers and chief learning officers, in J.J. Phillips and D. Bonner, (Eds), Leading Knowledge Management and Learning, American Society for Training and Development, Alexandria, VA, pp: 3-19.
- Umoh, G. and E. Amah, 2013. Knowledge Management and Organizational Resilience in Nigerian Manufacturing Organizations, Journal of Developing Country Studies, 3(9): 104-120.
- Anumba, C.J., C.O. Egbu and P.M. Carrillo, 2005. Knowledge Management in Construction. Blackwell Publishing Ltd.
- 17. Drucker, P., 1993. Postcapitalist society. New York, NY: Harper Business.
- Christensen, C.M. and M.E. Rarnor, 2003. The Innovators Solution: Creating and Sustaining Successful Growth. Harvard Business School Press, Cambridge, MA.
- CIO Council, 2001. Managing Knowledge @ Work, an Overview of Knowledge Management. Knowledge Management Working Group of the Federal Chief Information Officers Council August.

- Curtis, B., W.E. Hefley and S.A. Miller, 2001. People Capability Maturity Model (P-CMM)-Version 2.0. Software Engineering Institute (SEI), Carnegie Mellon University.
- Wiig and Karl, M., 2004. People-Focused Knowledge Management: How Effective Decision Making Leads to Corporate Success. Elsevier Inc, pp: 213-237.
- Paulzen, O. and P. Perc, 2002. A Maturity Model for Quality Improvement in Knowledge Management. Proceedings of The 13th Australasian Conference on Information Systems (ACIS2002).
- 23. Karsten Ehms and Dr. L. Manfred, 2002. Holistic Development of Knowledge Management, with KMMM Siemens AG / Corporate Technology Knowledge Management and Business Transformation.
- Davenport, T.H. and L. Prusak, 2000. Working Knowledge: How Organizations Manage What They Know, Harvard Business School Press, Boston, MA.
- Alavi, M. and D.E. Leidner, 2001. Review: Knowledge Management and Knowledge Management Systems. MISQuarterly, 25(1): 107-136.
- 26. Delong, D., 1997. Building the knowledge-based organization: How culture drives knowledge behaviors. Center for business innovation.
- 27. Miller, W., 1999. Building the ultimate resource. Management review, 1(1): 42-45.
- Darroch, J., 2003. Developing a measure of knowledge management behaviors and practices. Journal of Knowledge Management, 7(5): 41-54.
- Lawson, S., 2003. Examining the relationship between organizational culture and knowledge management. Doctoral dissertation, Nova Southeastern University.
- Lee, K.C., S. Lee and I.W. Kang, 2005. KMPI: measuring knowledge management performance. Information and Management, 42(3): 469-482.
- Fong, P.S.W. and S.K.Y. Choi, 2009. The processes of knowledge management in professional services firms in the construction industry: a critical assessment of both theory and practice, Journal of Knowledge Management, 13(2): 110-126.
- 32. Omerzel, D.G., 2010. The impact of knowledge management on SME growth and profitability: A structural equation modelling study, Africa Journal of Business Management, 4(16): 3417-3432.
- 33. Ungaretti, A.S. and H.K. Tillberg-Webb, 2011. Assurance of learning: Demonstrating the organizational impact of knowledge management and e-learniang. In J. Liebowitz, and M.S. Frank (Eds.), Knowledge management and e-learning (pp: 41-60). Boca Raton, FL: Auerbach Publications.

- Davenport, T. and L. prusak, 1998. Working knowledge: how organization manage what thay know. Harvard Business School Press, Boston, Massachusetts.
- 35. Hong, J., 1999. Structuring for organizational learning, The Learning Organization, 6(4): 173-185.
- 36. Madsen, P.M. and V. Desai, 2010. Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry, Academy of Management Journal, 53(3): 451-476.
- Van Dyck, C., M. Frese, M. Baer and S. Sonnentag, 2005. Organizational error management culture and its impact on performance: a two-study replication, Journal of Applied Psychology, 90(6): 1228-1240.
- Anand, A. and M.D. Singh, 2011. Understanding Knowledge Management: A literature review. International Journal of Engineering Science and Technology, 3(2): 926-939.
- Kraaijenbrink, J., 2012. Integrating knowledge and knowledge processes: A critical incident study of product development projects. Journal of Product Innovation Management, 29(6): 1082-1096.
- 40. Jasimuddin, S.M., 2012. Knowledge management: An interdisciplinary perspective. New Jersey, NY: World Scientific Publishing Co Pte Ltd.
- Lee, H. and B. choi, 2003. Knowledge Management Enablers, Process and Organizational Performance: An Integrative View and Empirical Examination, Journal of Management Information Systems, 20(1).

- Li-An, Ho., K. Tsung-Hsien and L. Binshan, 2012. How Social Identification and Trust Iinfluence Organizational Online Knowledge Sharing, Internet Research, 22(1): 4.
- Riege, A., 2005. Three-dozen knowledge-sharing barriers managers must consider. Journal of Knowledge Management, 9(3): 18-35.
- Pfeffer, J. and R.I. Sutton, 2000. The Knowing-Doing Gap: How Smart Companies Turn Knowledge into Action. Administrative Science Quarterly Boston: Harvard Business School Press, 46: 558.
- 45. Bhatt, G., 2001. Knowledge Management in Organizations: Examining the Interaction Between Technologies, Thechniques and People, Journal of Knowledge Management, 5(1): 75-98.
- 46. Bryan, B., 2003. Essentials of knowledge management. USA: John Wiley and Sons, Inc.
- Novianto, O. and D. Puspasari, 2012. Knowledge Management System Implementation in a Company with Different Generations: A Case Study. Procedia-Social and Behavioral Sciences, 65: 942-947.
- George, G. and P. Mallery, 2003. SPSS for Windows Step by Step: A Simple Guide and Reference, 11.0 Update. Boston, MA: Allyn and Bacon.