




ACQUISITION, APPLICATION AND UTILIZATION OF KNOWLEDGE IN HIGHER EDUCATION COMMISSION (H.E.C) RECOGNISED UNIVERSITIES IN PAKISTAN



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ABSTRACT

Article History

Received: 10 December 2019
Revised: 16 January 2020
Accepted: 19 February 2020
Published: 30 March 2020

Keywords

Knowledge acquisition
Knowledge application
Knowledge utilization
Universities.

The purpose of this study is to investigate the effect of knowledge acquisition, application and its utilisation influences to enhance the institutional learning in Pakistan. As numerous Pakistani managers hesitant for the acquisition of technology-based knowledge management, its application and after that its utilization in their organizations (Saeed, Tayyab, Anis-Ul-Haque, Ahmad, & Chaudhry, 2010). In this quantitative study 418, close-ended structured questionnaires were distributed and 245 questionnaires were finalized for reliable primary data. The results of the current study showed that knowledge acquisition and utilization have a positive significant impact on institutional learning while knowledge application has a non-significant impact on institutional learning. In the light of results, it is being deduced that their need to devise strategies and methods so that, acquired knowledge could be applied in the institutions and could be utilised by the students and faculty members. In this way, new doors of knowledge would be open for institutional learning.

Contribution/ Originality: This study contributes to existing literature by investigating the effect of knowledge acquisition, application and its utilisation influences to enhance the institutional learning in Pakistan.

1. INTRODUCTION

Organizational evolution and competitiveness are considered to be affiliated with the knowledge management practices in the present world. Importance of knowledge management has been recognized in a developing country like Pakistan but there exist dearth of its practices in organizations (Pasha, 2012). Knowledge about the particular field of business prevails like an asset for any organization for its progress. Organizations in Pakistan are still in the early phase of understanding the knowledge management implications and a reasonable number of senior managers perceive knowledge management as an overstated management of information and business process re-engineering and they believe that business process re-engineering has to face failures do knowledge management will have the same fate.

Knowledge is actually a powerful force which drives through the 'economies of ideas. Basically, knowledge management implementation is complex in nature which causing failure of 84% of knowledge management ventures (BenMoussa, 2009). Such failure statistics has made hesitant the Pakistani managers to adopt technology-based knowledge management (Saeed et al., 2010). Knowledge management is ordered and explicit phenomenon linked

with the organizational exercise, policy making, day to day practices, launched projects and scheduled programs (Wiig, 2000). In other terms, knowledge management is the technology utilization by the organization's intellectual capital (Jones & Sallis, 2013).

The knowledge economy enhances the capacity of the social and economic system continuously. Moreover, it broadens the knowledge, skills, social responsiveness, engagement in knowledge creation, lays the foundation of the progressive educational system and yield quality graduate stuff (Asmal & Kahn, 2000). Proper implementation of knowledge in universities is important to attain attractiveness and to meet the expectations of global society (Mikulecký, Lodhi, & Mastorakis, 2009). Hussein, Mohamad, Noordin, and Ishak (2014) highlighted that to attain the academic excellence public institutions of higher education (PIHEs) must be the learning organization which facilitate its members and transform itself continuously (Pedler, Boydell, & Burgoyne, 1988).

By heading towards the competitive era, attainment of competitive advantage through knowledge management adoption may mitigate the troublesome in future and enable the learning organization to attain excellent interdisciplinary knowledge. In this perspective of organizational excellence, universities are perceived to be "cradles of innovative knowledge" (Cheng & Chen, 2008). So, acquisition of knowledge management practices and it's an application in the universities of developing countries like Pakistan and utilization can contribute to attaining world-class academic excellence.

2. LITERATURE REVIEW

Chen. and Burstein (2006) highlighted that the nature of the knowledge management process is complex and dynamic so, no any fix method and strategies can be devised for the implication of knowledge management. The research indicates that there is a need to observe three vital factors which are people, policies and technology. Pasha (2012) suggested, there is a need to provide, adequate training for employees, effective reward system, development in organizational structure and adequate management role for the implementation of knowledge management strategies phase wise.

Inkpen (1998) Revealed that due to global competitions firms are forced to acquire the latest organizational knowledge but few of firm are enable to administer the knowledge acquisition process. However, there is a need to bring unique learning opportunities through an alliance with organizational cultures, possessive skills, and knowledge bases of different organizations. In order to acquire knowledge, the maintenance of the balance of cost, accessibility, capacity and availability of the system is mandatory. Lyles and Salk (1996) Exposed that, organizational qualities basic mechanisms and logical components influence knowledge acquisition. Social clashes can block knowledge acquisition up to some restriction. The relationship between knowledge acquisition and execution are critical indicators of performance. This study adds to advance knowledge about the relationship between organizational qualities and organizational knowledge acquisition, and the connections between knowledge acquisition and diverse measurements of a company's performance.

Zaim, Muhammed, and Tarim (2019) highlighted that knowledge utilization mediates the association between the knowledge management processes and organizational performance. Ibidunni, Olokundun, Falola, and Ogunnaike (2018) examined the effect of knowledge utilization on organizational performance. The study revealed that tacit knowledge of individual employees was low but their explicit knowledge was high and effective knowledge utilization inclined to enhance the strong organizational culture.

Moffett, McAdam, and Parkinson (2004) demonstrated that there is a need to consider various factors for effective technological reception and application in any organization. So, it requires an updated learning management system, user-centred correspondence system and flow of data streaming inside the organization. The variety of technological devices used for knowledge work support the working arrangements which can be used by the employees to bring innovation inside the organization. The utilization of the knowledge management system

contributes to the expert and successful decision making. The results indicate that for the application of knowledge management training must be provided to staff so that, they could be able to shift on web-based systems.

3. RESEARCH METHOD

3.1. Significance of Study

This study highlights the importance of knowledge acquisition, application, and utilization in the perspective of HEC recognized universities in Punjab Pakistan. The aim of this study is to acquire knowledge from a mostly human source and utilize that available knowledge to make day-to-day operations in HEC recognized universities so that efficiency of universities in terms of learning could enhance and students could get direct access to knowledge.

3.2. Objective of Study

Objectives to be attained in this study are provided as under:

- i. To help the institutions in course of changing their behaviour towards the adoption of knowledge management practices.
- ii. To highlight the importance of utilization which is being lacked by the institutions after acquiring and application of the knowledge.
- iii. To provide suggestions in the light of results.

3.3. Conceptual Framework

The management of knowledge assets is not coming under the domain of knowledge management but it also manages the knowledge activities. There are three interlinked knowledge management activities which are Knowledge acquisition, application and utilization (Chen. & Burstein, 2006) which may contribute to enhance the institutional learning. The knowledge either acquired inside or outside the organization is deemed to enhance the institutional learning (Cho & Korte, 2014). The acquisition of knowledge at appropriate time enhances the knowledge stock level which helps the institution to take proactive decisions to improve learning capabilities of institutions (Chen & Huang, 2007). The acquired knowledge is organized, integrated and presented as per institutional objective alignment to be implemented successfully (Reisi, Hoseini, Talebpour, & Nazari, 2013). The application of knowledge and its distribution where it is required in the organization improves its efficiency and effectiveness (Mills & Smith, 2011). Through the knowledge application process, the appropriate decisions are made and problems faced by the organization are solved (Gold, Malhotra, & Segars, 2001). So, by appropriate knowledge application in the organization, the acquired knowledge can be utilized appropriately (Madhoushi, Sadati, Delavari, Mehdivand, & Mihandost, 2011; Matin, Nakhchian, & Kashani, 2013). Since knowledge is a vital source for the creation of sustainable competitive advantage in modern businesses so, there is a need to pay close attention for the protection of knowledge to enhance the institutional learning.

3.4. Hypothesis of Study

The hypothesis proposed based on the literature review is provided below;

(H.1): Knowledge acquisition enhances institutional learning significantly.

(H.2): Application of acquired knowledge influences the learning of institutions in Pakistan.

(H.3): Institutional learning expands many folds in case of proper knowledge utilization.

3.5. Sample & Data Collection Method

This study involves a population of 10 HEC recognized universities in Punjab. For filling the questionnaire, Non-probability purposive sampling is used. Deans, head of the department, personnel of registrar and IT

department filled the questionnaires. Around 418 questionnaires were distributed, and 268 questionnaires received. Approximately 43 questionnaires discarded and 245 questionnaires utilized for data analysis.

3.6. Instrument

The questionnaire of this study consists of four variables, which are knowledge acquisition, application, utilization, and institutional learning. The internal consistency (Cronbach's Alphas) for the reliability of knowledge acquisition (0.845), knowledge application (0.722), knowledge utilization (0.818), and institutional learning (0.829). Responses made on a 5-point Likert-type scale and averaged to yield composite commitment scores for each respondent.

3.7. Data Analysis

The data analyzed by implementing, co-relation, and multiple regressions through SPSS20.

4. RESULTS AND DISCUSSION

4.1. Bi-Variate Co-Relation

Pearson Correlation was implemented to estimate the relationship between knowledge acquisition, application, utilization and institutional learning. The range of correlation between +1 to -1 was anticipated to estimate the strength of the relationship between knowledge management and organizational learning.

Table-1. Co-relation.

The correlation table indicates the relationship between the independent and dependent variables;

Co-relation	K. acquisition	K. application	K. utilization	Institutional learning
Knowledge Acquisition	1			
Knowledge Application	0.508	1		
Knowledge Utilization	0.324	0.431	1	
Institutional Learning	0.396	0.264	0.383	1

On the bases of results, it has been observing that knowledge acquisition; knowledge application and knowledge utilization has a relationship with institutional learning. In the case of knowledge acquisition and knowledge application, there is a moderate relationship ($r=0.508$). Similarly, knowledge acquisition has a small but definite relationship with knowledge utilization ($r=0.324$) while knowledge acquisition to has a moderate positive relationship with institutional learning. In the case of knowledge application and knowledge utilization, there is a moderate but positive relationship ($r=0.431$) while knowledge application has a small but definite relationship with institutional learning ($r=0.264$). Moreover, knowledge utilization too has a moderate and positive relationship with institutional learning ($r=0.383$). The results show that the increase in knowledge acquisition, application, and utilization enhances day-to-day decision-making and efficiency in operations of universities.

Table-2. Multiple regression.

Independent variable	Beta	t-value	Sig.
Constant, Kiesler, and Sproull (1994)	1.673	8.316	0.000
Knowledge acquisition	0.312	5.310	0.000
Knowledge Application	-0.020	-0.319	0.750
Knowledge Utilization	0.291	5.180	0.000
R		0.479	
R ²		0.230	
F		30.453	

4.2. Multiple Regression Model

The regression table determines the strength and effect of knowledge acquisition, application, and utilization on the institutional learning.

In the above Table 2, the 'R' value shows there is a moderate relationship ($r=0.479$) between the knowledge acquisition, application, utilization and institutional learning in this model. The R square value ($R^2=0.230$) shows there is 23% variance among the responses of respondents. The value $F=30.453$ indicates the fitness of the proposed model.

4.3. Model Equation

Predicted institutional learning = $1.673 + (0.312 \times \text{knowledge acquisition}) + (-0.020 \times \text{knowledge Application}) + (.291 \times \text{knowledge Utilization})$.

Knowledge acquisition $b=.312$, $t(310) = 5.310$ and $P = .000$. The result of knowledge acquisition shows the sig value ($p < 0.05$) is less than .05. Thus, (H_{11}): Knowledge acquisition enhances institutional learning significantly is accepted. The results of this study are aligned with the results (Perry & Rainey, 1988) as they concluded that, acquisition of knowledge is dependent on the IT infrastructure acquired by the universities which provide the high-quality education. So, higher the acquisition, higher the level of institutional learning.

Knowledge application $b=-0.020$, $t(310) = -0.319$ and $P = .750$. The result of knowledge application the sig value ($p < 0.05$) is more than .05. Thus, (H_{12}): Application of acquired knowledge influences the learning of institutions in Pakistan is rejected. The results of this study are also aligned with Marshall, Prusak, and Shpilberg (1996); Parikh (2001); Lawson (2003) as they highlighted that, due to functional structure of the higher education institutions it is difficult to apply the acquired knowledge. However, corporate organizations are a reliable source of knowledge application as they can sort to implement knowledge in a normal way.

Knowledge utilization $b=0.291$ $t(310) = 5.180$ and $P = .000$. The result of knowledge Utilization shows the sig value ($p < 0.05$) is less than .05. Thus, (H_{13}): Institutional learning expands many folds in case of proper knowledge utilization is accepted. The results show that acquired knowledge used for tackling problems, developing new services and deal with the unfamiliar situation in universities increases institutional learning. Therefore, for knowledge utilization in universities, it is mandatory that acquired knowledge assessed from the repository.

5. CONCLUSION

Knowledge has attained an imperative position in the prevailing global economy and the adoption of knowledge management practices have become mandatory for the success of the organization. So, knowledge management implementation in Pakistan's universities can bring revolution in the educational field.

The result of this study shows that HEC recognized universities are capable of acquiring knowledge through means of professionals having expertise in that specific field and can utilize that knowledge for the betterment of universities. Unfortunately, universities in Pakistan are still lacking, 'the application of knowledge in universities' like the rest of organizations in Pakistan. Like, numerous Pakistani managers are hesitant about the application of technology-based knowledge management in their organizations (Saeed et al., 2010).

Literature shows that universities are knowledge-intensive organizations, which are facing conflicts regarding the implementation of knowledge management. There are many models for knowledge management contributed in recent decades (Inma & Debowski, 2006; Steckler, 2002). Attention towards the implementation of knowledge management in learning institutions can bring a revolution in the education system of Pakistan.

5.1. Implication of the Study

Universities create knowledge by gathering information from the internal and external sources. The most reliable source available to universities is competent professors who have the knowledge and vast experiences in their fields. There is need to acquire knowledge from particular personnel and get help from the IT department of the university for the purpose of application of acquired knowledge so that acquired knowledge could utilize more efficiently and effectively in HEC recognized universities. Internet availability, prevailing intranet cultures, one to one knowledge sharing forums, formal reliable communication sources among staff or informal communication forums contribute to knowledge utilization in institutions.

5.2. Recommendation of Study

The students and faculty members of universities must be provided access to their own customized portal and personal data reservation space. The faculty member must be encouraged to attain knowledge for their personal development and they should take constructive initiatives for the improvement in the capabilities of students and the university's image. The application of knowledge management practices is limited to Pakistan's institutions. So, there is a need to hire experts present in the institution or outside the institution to overcome the deficiencies and personnel would get a chance to learn. The personnel working at any level of the institutional hierarchy should take their time out for various knowledge management conferences and workshops.

5.3. Limitation of Study

Every study has a limitation, so like was this study has as well. In the current university, only eleven universities were considered for data collection. However, there is a need to collect data from more universities situated in rest of the provinces of Pakistan. Data must be collected from the private universities so that, the results of this study could be compared.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Acknowledgement: Both authors contributed equally to the conception and design of the study.

REFERENCES

- Asmal, K., & Kahn, M. (2000). The knowledge economy—fact or faction. *South African Journal of Business Management*, 31(4), 131-136. Available at: <https://doi.org/10.4102/sajbm.v31i4.1734>.
- BenMoussa, C. (2009). Barriers to knowledge management: A theoretical framework and a review of industrial cases. *World Academy of Science, Engineering and Technology*, 30(30), 901-911.
- Chen, C.-J., & Huang, J.-W. (2007). How organizational climate and structure affect knowledge management—The social interaction perspective. *International Journal of Information Management*, 27(2), 104-118. Available at: <https://doi.org/10.1016/j.ijinfomgt.2006.11.001>.
- Chen., F., & Burstein, F. (2006). *A dynamic model of knowledge management for higher education development*. Paper presented at the 2006 7th International Conference on Information Technology Based Higher Education and Training. IEEE.
- Cheng, K.-W., & Chen, Y.-F. (2008). The process of integrating" Knowledge Management" into teacher's" teaching resources"—A case study on the hospitality college. *Journal of Instructional Psychology*, 35(4), 380-387.
- Cho, T., & Korte, R. (2014). Managing knowledge performance: Testing the components of a knowledge management system on organizational performance. *Asia Pacific Education Review*, 15(2), 313-327. Available at: <https://doi.org/10.1007/s12564-014-9333-x>.
- Constant, D., Kiesler, S., & Sproull, L. (1994). What's mine is ours, or is it? A study of attitudes about information sharing. *Information systems research*, 5(4), 400-421.

- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of management information systems*, 18(1), 185-214.
- Hussein, N., Mohamad, A., Noordin, F., & Ishak, N. A. (2014). Learning organization and its effect on organizational performance and organizational innovativeness: A proposed framework for Malaysian public institutions of higher education. *Procedia-Social and Behavioral Sciences*, 130(2014), 299-304. Available at: <https://doi.org/10.1016/j.sbspro.2014.04.035>.
- Ibidunni, A. S., Olokundun, A. M., Falola, H. O., & Ogunnaike, O. (2018). Descriptive analysis of organisational knowledge utilization in Nigeria's telecommunication industry: A focus on managerial implications. *Academy of Strategic Management Journal*, 17(2), 1-7.
- Inkpen, A. C. (1998). Learning and knowledge acquisition through international strategic alliances. *Academy of Management Perspectives*, 12(4), 69-80. Available at: <https://doi.org/10.5465/ame.1998.1333953>.
- Inma, C., & Debowski, S. (2006). Analysis of franchise performance through use of a typology: An Australian investigation. *Singapore Management Review*, 28(2), 1-31.
- Jones, G., & Sallis, E. (2013). *Knowledge management in education: Enhancing learning & education*: Routledge.
- Lawson, S. (2003). *Examining the relationship between organizational culture and knowledge management*: Nova Southeastern University.
- Lyles, M. A., & Salk, J. E. (1996). Knowledge acquisition from foreign parents in international joint ventures: An empirical examination in the Hungarian context. *Journal of International Business Studies*, 27(5), 877-903. Available at: <https://doi.org/10.1057/palgrave.jibs.8490155>.
- Madhoushi, M., Sadati, A., Delavari, H., Mehdivand, M., & Mihandost, R. (2011). Entrepreneurial orientation and innovation performance: The mediating role of knowledge management. *Asian Journal of Business Management*, 3(4), 310-316.
- Marshall, C., Prusak, L., & Shpilberg, D. (1996). Financial risk and the need for superior knowledge management. *California Management Review*, 38(3), 77-101. Available at: <https://doi.org/10.2307/41165844>.
- Matin, E. K., Nakhchian, A., & Kashani, B. H. (2013). Effect of employees' entrepreneurial orientations on knowledge management in small and medium enterprises in Iran. *Journal of Basic and Applied Scientific Research*, 3(3), 608-617.
- Mikulecký, P., Lodhi, M. S., & Mastorakis, N. (2009). *Knowledge management at educational institutions: case of Pakistan*. Paper presented at the 10th proceedings of the WSEAS Int. Conference on mathematics and computers in business and economics.
- Mills, A. M., & Smith, T. A. (2011). Knowledge management and organizational performance: A decomposed view. *Journal of Knowledge Management*, 15(1), 156-171.
- Moffett, S., McAdam, R., & Parkinson, S. (2004). Technological utilization for knowledge management. *Knowledge and Process Management*, 11(3), 175-184. Available at: <https://doi.org/10.1002/kpm.201>.
- Parikh, M. (2001). Knowledge management framework for high-tech research and development. *Engineering Management Journal*, 13(3), 27-34. Available at: <https://doi.org/10.1080/10429247.2001.11415124>.
- Pasha, S. (2012). A pragmatic approach for implementing knowledge management in Pakistani organizations using open source technologies. *International Journal of Computer Applications*, 49(7), 10-18. Available at: <https://doi.org/10.5120/7638-0721>.
- Pedler, P., Boydell, T., & Burgoyne, J. (1988). *Learning Company: Project Report Training Agency*: New York: Mc. Graw-Hill Maiden Head.
- Perry, J. L., & Rainey, H. G. (1988). The public-private distinction in organization theory: A critique and research strategy. *Academy of Management Review*, 13(2), 182-201. Available at: <https://doi.org/10.2307/258571>.
- Reisi, M., Hoseini, S. E., Talebpour, M., & Nazari, V. (2013). Regression equation fitted to knowledge management and organizational effectiveness in the selected sport organizations of Iran. *African Journal of Business Management*, 7(39), 4159-4167.

- Saeed, T., Tayyab, B., Anis-Ul-Haque, M., Ahmad, H. M., & Chaudhry, A. U. (2010). Knowledge management practices: Role of organizational culture. *Proceedings of ASBBS*, 17(1), 1027-1036.
- Steckler, N. (2002). *Mental models and knowledge management for government organizations*. Paper presented at the Proceedings of the 2002 Annual National Conference on Digital Government Research: Digital Government Society of North America.
- Wiig, K. M. (2000). Knowledge management: an emerging discipline rooted in a long history. *Knowledge horizons: the present and the promise of knowledge management*, 3, 26.
- Zaim, H., Muhammed, S., & Tarim, M. (2019). Relationship between knowledge management processes and performance: Critical role of knowledge utilization in organizations. *Knowledge Management Research & Practice*, 17(1), 24-38. Available at: <https://doi.org/10.1080/14778238.2018.1538669>.

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