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Survey and investigation impact of Knowledge Management and Organizational Learning (Case Study Schools in Lahore)

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Abstract

Suring past decades, organizations broadly got aware of knowledge management value and many studies were conducted on knowledge management. Knowledge management is one of the most important organizational components which need to establish a system for learning, gathering, stocking and distributing the knowledge inside an organization. In addition to disseminating organizational learning, this system should be able to prevent necessary and fruitful knowledge forgetting on the one hand and to put aside unfruitful knowledge (organizational forgetting) on the other hand. Despite of needs to develop organizational learning capabilities, studies indicate that organizations do not learn easily. In the present study we examined the influence of knowledge management on organizational learning. For this purpose, a questionnaire among 194 students and teachers has been distributed in the city of Lahore. Data LISREL software and then were analyzed. The results showed that knowledge management has a positive impact on organizational learning in schools.

Keywords: Knowledge Management, Organizational Learning, School.

Introduction:

A very large proportion of the literature on KM and organizational learning is developed by, and aimed at, commercial businesses and firms. Many organizations in the corporate sector look to KM as a solution to the new challenges of the information age. Knowledge and information are becoming crucial core assets for businesses, who have to learn to handle these assets in new ways. Traditional accounting and monitoring systems designed to deal with tangible inputs and outputs are no longer adequate. Instead, organisations now find that they have to share information internally more efficiently and learn to adapt more quickly to external circumstances in order to retain their competitive advantage. In response to this situation, the ‘first generation’ of KM strategies aimed to improve knowledge sharing within organisations (McElroy, 2000). The first generation of KM was very focused on information technology and systems; technical tools were used to collect and codify existing knowledge in order to make the organisation run more smoothly. A ‘second generation’ of KM strategies has now emerged, which focuses more on organisational processes and the creation of new knowledge in order to keep the organisation one step ahead of its competitors. For example, the most successful organisations are shifting from strategies based on prediction to strategies based on anticipation of surprises (Savage, 2000). They are shifting from management based on compliance to management based on self-control and self-organisation. They are also shifting from utilisation of already known knowledge to the creation of new knowledge, from pure ‘technology’ KM applications to also include ‘process’ applications (Binney, 2001). When and how these shifts should be undertaken depends on the type of organisation in question. Accenture’s (2002) presentation of a typology of work settings distinguishes between four different types of organisations – ‘process’, ‘systems’, ‘network’ and ‘competence’ – based on the different levels of interdependence and complexity that are required in different work situations. For example, the ‘competence’ model describes a workplace that is highly reliant on individual expertise (low level of interdependence) in order to carry out evaluation and judgement-oriented work (high level of interpretation). The ‘network’ model denotes a workplace that depends on fluid deployment of flexible teams (high level of interdependence) in order to improvise and meet new challenges as they arise (high level of interpretation). Different work settings require different ways of handling and processing information to create the necessary knowledge.

For centuries, scientists, philosophers and intelligent laymen have been concerned about creating, acquiring, and communicating knowledge and improving the re-utilization of knowledge. However, it is only in the last 15–20 years or so that a distinct field called “knowledge management” (KM) has emerged. KM is based on the premise that, just as human beings are unable to draw on the full potential of their brains, organizations are generally not able to fully utilize the knowledge that they possess. Through KM, organizations seek to acquire or create potentially useful knowledge and to make it available to those who can use it at a time and place that is appropriate for them to achieve maximum

effective usage in order to positively influence organizational performance. It is generally believed that if an organization can increase its effective knowledge utilization by only a small percentage, great benefits will result. Organizational learning (OL) is complementary to KM. An early view of OL was "...encoding inferences from history into routines that guide behavior" (Levitt and March, 1988 , p. 319). So, OL has to do with embedding what has been learned into the fabric of the organization.

Literature review

- Definition of knowledge management

Nowadays, knowledge is considered as a major source of work performance in organizations (Yusefi, 2012). According to Thomas Stewart, knowledge in organizations is more important than financial resources, market situation, technology or other assets. Various definitions of knowledge management are presented till now (Varol, 2013). Knowledge management is based on the processes in which knowledge flow in a society is guided continually and increasingly (Matayong and Kamil, 2013). Knowledge management is the process of identification of intelligent asset and creation of information culture and infrastructures encouraging participation and learning. This process look for creation of intelligent capital by achieving, growing and using all employees know (Amani, 2008).

- Knowledge management process

Knowledge management process provides a useful method for thought organizing on knowledge management in organization. This process is as following:

- Knowledge acquisition

The organizations achieve knowledge via immediate learning, searching internal and external environment and using new employees or purchasing the organizations with required knowledge of external resources (Yusefi, 2012). It should be noted that creating a creative and innovative environment leading to the development of capabilities of organization members is one of the ways of knowledge creation and development in organization.

- Knowledge transfer

Knowledge transfer is knowledge dissemination to activity point and beyond it to outside organization. One of the factors helping knowledge transfer process is communicative facilities and organizational culture (Yusefi, 2012). 3- Knowledge utilization: It is effective use of knowledge. Knowledge utilization is activation and linking existing knowledge in increasing the values (Elahi, 2008). 4- Knowledge record: Useful knowledge is stored logically as all members of the organization can have access to it. Knowledge storage is the process creating a reliable, comprehensible and easy acquisition source of information and capabilities and holds them (ibid).

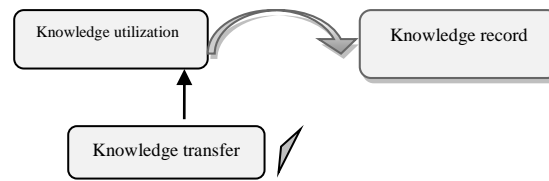


Figure 1: Process of knowledge management in organization

- **Knowledge management models**

Various models are proposed on knowledge management with different processes (Elahi, 2008). Kakabadse et al. referred to four groups of models:

Network models: Here, the focus is on connections, acquisition, sharing, transfers via horizontal exchanges. Important knowledge resides in a network of actors connected by various tools and awareness of insights and information outside formal teams and groups is a key factor. 2- Cognitive models: In these models, knowledge is asset that requires careful capture, representation, storage, measurement, preservation and dissemination. Value comes from repetitive application of captured best practices and avoiding pitfalls documented as lessons learned (ibid).3- Community models: in these models, it is discussed about the features of work groups with capabilities as self-organization, continuous learning and informal exchanges. Knowledge is founded in the thinking that circulates in a community (Hosseini, 2013). 4- Philosophical models: In these models, markets and internal processes are based on mutual discussion in a strategic field, question of assumptions and inquiry into behavior of competitors, markets. This approach values personalization over codification and uses very little technology (Elahi, 2008). Based on the experiences of advanced organizations in knowledge management, combining network, philosophical and community models with using cognitive model is a good composition for knowledge management in each organization (Hosseini, 2013).

Organizational learning

Organizational learning is the process of creating, retaining, and transferring knowledge within an organization. An organization improves over time as it gains experience. From this experience, it is able to create knowledge. This knowledge is broad, covering any topic that could better an organization. Examples may include ways to increase production efficiency or to develop beneficial investor relations. Knowledge is created at four different units: individual, group, organizational, and inter-organizational.

An organization learns successfully when it is able to retain this knowledge and transfer it to, or spread it throughout, the various divisions within an organization. Organizational learning can be measured in different ways; however one common measurement used is a learning curve.

Units of Learning

Organizational learning is one of the four organizational units of learning: individual, team, organizational, and inter-organizational. Organizational learning "involves the process through which organizational units (e.g. groups, departments, and divisions) change as a result of experience." An example of organizational learning is a hospital surgical team learning to use new technology that will increase efficiency.

Individual Learning is the smallest unit at which learning can occur. An individual learns new skills or ideas, and his productivity at work may increase as he gains expertise. The individual can decide whether or not to share his knowledge with the rest of the group. If the individual leaves the group and doesn't share his knowledge before leaving, the group loses this knowledge. In their study of software development, Boh, Slaughter and Espinosa (2007) found that individuals were more productive the more specialized experience they had with a certain system.

Group Learning is the next largest unit at which learning can occur. Group learning happens when individuals within a group "acquire, share, and combine knowledge through experience with one another". There are conflicting definitions of group learning among researchers studying it. One belief is that group learning is a process in which a group takes action, gets feedback, and uses this feedback to modify their future action. Another belief is that group learning happens when a member shares his or her individual knowledge with other group members. Once this happens, individual learning turns into group learning. Reagans, Argote, and Brooks (2005) studied group learning by examining joint-replacement surgery in teaching hospitals. They concluded that "increased experience working together in a team promoted better coordination and teamwork." Working together in a team also allowed members to share their knowledge with others and learn from other members.

Organizational Learning is the way in which an organization creates and organizes knowledge relating to their functions and culture. Organizational learning happens in all of the organization's activities, and it happens in different speeds. The goal of organizational learning is to successfully adapt to changing environments, to adjust under uncertain conditions, and to increase efficiency. According to Argote (1993), managers in manufacturing plants saw organization learning occur when they found ways to make individual workers more proficient, improve the organization's "technology, tooling, and layout," improve the organization's structure, and determine the organization's strengths.

Inter-organizational Learning is the way in which different organizations in an alliance collaborate, share knowledge, and learn from one another. An organization is able to improve their "processes and products by integrating new insights and knowledge" from another organization. By learning from another organization, an organization is able to cut time costs, decrease the risks associated with problem solving, and learn faster. Learning from another organization can mean either applying the same ideas used by that organization or modifying these ideas, thereby creating innovation. Inter organizational learning occurs frequently in

fixed business models, such as franchising. The franchisee looking to use the franchisor's brand has to learn how to use the organization's business model before starting a franchise.

Methodology

Research tool includes two questionnaires devised by advices of research scholars and past studies. One questionnaire was devised to assess knowledge management process while the other one was devised to assess Organizational Learning among managers and employees School. Considering theoretical basics and conducted studies, a structured questionnaire was used concerning knowledge management process and Organizational Learning. To measure the validity, the first questionnaire was submitted to instructors and relevant modifications were made according to their opinions. To determine the reliability, Chronbach's alpha ratio by SPSS software was used. Chronbach's alpha value is 0.84 for organizational forgetting questionnaire and 0.93 for knowledge management process questionnaire which indicates acceptable validity. By using descriptive statistics, all demographical questions were studied and then all data were analyzed by using statistical tests including Kolmogorov – Smirnov test and Spearman correlation by SPSS and LISREL software packages.

Finding

In this part of the study, collection and summarization of data using software Lisrel 8.5 and Spss 16 through descriptive and inferential statistical indicators to analyze the data described above. Then after checking the normality of distribution using SPSS statistical correlation between dependent and independent variables are examined. At the end of the path analysis, the relationships between research hypotheses are tested. After determining the measurement model to evaluate the conceptual model and also to ensure the presence or absence of the causal relationship between the variables studied fit the observed data with the conceptual model, using structural equation modeling to test research hypotheses respectively. Hypothesis test results have been reflected in the chart.

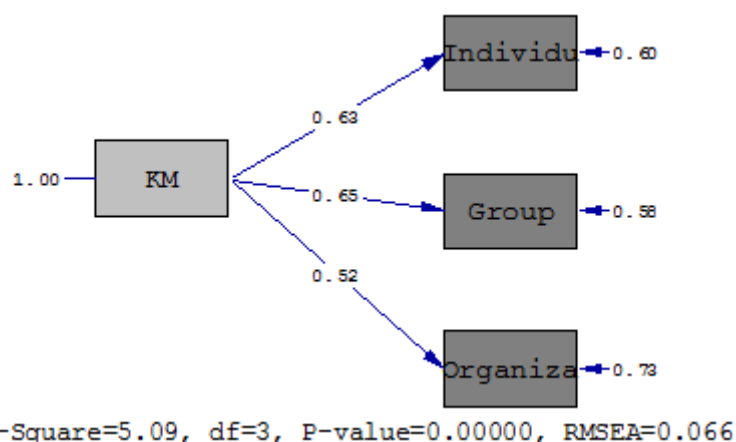
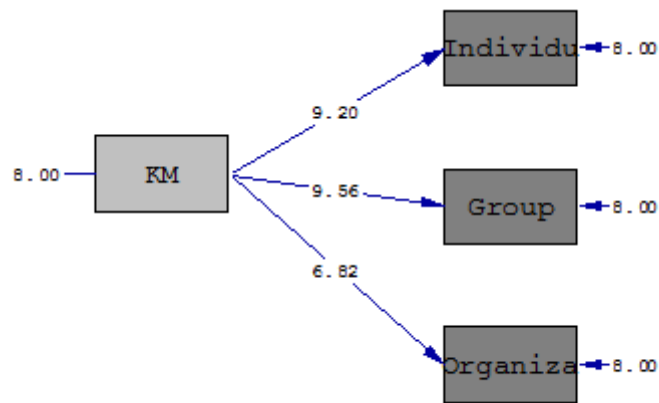


Figure 1: to measure the overall model results and assumptions in standard mode



Chi-Square=5.09, df=3, P-value=0.00000, RMSEA=0.066

Figure 2: measure the overall model results in significant assumptions

As we have proved in the previous section, since our distribution was diagnosed normal (Kolmogorov-Smirnov test) using LISREL software, test the correlation between variables. To investigate the causal relationship between independent and dependent variables and path analysis were used to confirm the model. In this study, using path analysis software LISREL8.5 Done. Results from the LISREL output shows that less than three degrees of freedom of the chi-square and other indicators confirmed the fitness model. Significant factors and assumptions discussed below summarize the results show.

Table 1: Assumptions Results

Assumptions	Standard	Significant	Result
Knowledge management is a significant and positive impact on individual innovation.	0.63	9.20	Confirmation
Knowledge management is a significant and positive impact on collaborative innovation.	0.65	9.56	Confirmation
Knowledge management is a significant and positive impact on organizational innovation.	0.52	6.82	Confirmation

Conclusion

Knowledge management is a set of relatively new organizational activities that are aimed at improving knowledge, knowledge-related practices, organizational behaviors and decisions and organizational performance. KM focuses on knowledge processes – knowledge creation, acquisition, refinement, storage, transfer, sharing and utilization. These processes support organizational processes involving innovation, individual learning, collective learning and collaborative decision-making. The “intermediate outcomes” of KM are improved organizational behaviors, decisions, products, services, processes and relationships that enable the organization to improve its overall performance.

If our analysis is correct, the relationship of OL and KM is close enough to be termed intimate. The terminology may vary somewhat, but the concerns of both fields are largely the same. Why, then, are the two fields so often viewed as traveling on separate paths? We attribute this to a fairly narrow form of KM that we refer to as first-generation KM. First-generation schemes are largely IT-based and are mostly about knowledge capture, delivery, and use. If they relate to OL at all, it is only in their obsession with single-loop learning, or the re-use of existing knowledge. We practice a broader form of KM – second-generation KM – according to which epistemic gaps do occur, and which takes on the corresponding and more challenging questions of how knowledge is produced, tested, evaluated, and integrated as a precursor to use. It is second-generation KM, not its more familiar first-generation form that takes KM squarely into the realm of double-loop learning. Further, this more recent and new variety of KM is advancing in ways that we think should be of considerable interest to the OL community. The most effective strategies, to date, for creating high-performance learning organizations could very well be coming out of this school of KM theory and practice, and more specifically out of the variant of second-generation KM that we call “The new KM”.

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