



RESEARCH PAPER

**Knowledge Management and Organizational Performance:
Mediating Role of Organizational Learning: A Study of Corporate
Sector in Pakistan**

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PAPER INFO	ABSTRACT
Received: April 25, 2020 Accepted: June 15, 2020 Online: June 30, 2020	The purpose of this paper is to observe the role of organizational learning and knowledge management in organizational performance of service sector in Pakistan. The key aim for carrying on this research is to acknowledge the growing importance of knowledge management and organizational learning for organizations working in this knowledge economy. In Pakistan, service sector is an important source of economic development and on the while, it is facing fierce competition in the marketplace because of the following factors such as the world has now changed to a global village thus industry boundaries are collapsing and regulatory organizations are becoming deregulatory resulting continual and abrupt changing environmental trends. The rate of learning should be parallel to the rate of change taking place. Thus, there is an immense need for organizations to manage their intangible asset <i>i.e.</i> human knowledge. For empirical analysis, a measurement scale was adapted and the questionnaires were distributed among 60 organizations working in Islamabad/Rawalpindi, Lahore, Multan, and Bahawalpur. The study employed SPSS and AMOS for analyses. The study found strongly positive correlations between knowledge management, organizational learning, and organizational performance
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Introduction

Knowledge management impacts the organizational performance in a number of ways and such an impact is made through certain procedures where organizational learning is among one of them (Bogner & Bansal, 2007). For an organization it is important to keep an eye on their internal and external aspects as

in what ways such as behaving knowledge management to enhance the performance, such information generated through knowledge management helps them in devising new parameters of goal achievement and orientation as well. Through organizational learning, companies can easily inculcate such among their employees (Grinsven & Visser, 2011). They suggest that if knowledge management and organizational learning are effectively implemented within corporate profiles, an organization would achieve higher growth and success and result in enhanced organizational performance. A growing stream of research has stipulated that knowledge management and organizational learning result in sustained competitive advantage, innovativeness, enhanced organizational performance (Brown & Duguid, 2000; Cantner, Joel, & Schmidt, 2009; Chen, Yeh, & Huang, 2012).

Schiuma (2012) found a positive association amongst knowledge management and organizational performance as well as financial performance. Schiuma *et. al.* (2012) revealed that knowledge is a tool to cope up with fast-paced business environment and hence, results in creativity and value innovation. Whereas, Wang and Ellinger (2011); Song *et. al.* (2011) have found a significant positive relationship between organizational learning and organizational performance. In addition, both applications have grasped the consideration of scholars and practitioners for the previous two eras but majorly the studies have been conducted in developed countries. Furthermore, the studies have analyzed the impact of either or both on corporate financial performance or on innovation. None such initiative has been taken to analyze the impact of these applications on organizational performance regarding organizational effectiveness, efficiency, and relevance. Additionally, no such study has been found to be conducted in Pakistani service sector thus, the current study is the pioneer in the field.

Literature Review

Knowledge Management

Research on knowledge management is increasing in literature for the reason due to its recognition and acknowledgment in setting up strategic guidelines for organizations. Davenport and Prusak (1998) argued that there are several perspectives which contribute to the field of knowledge management through which the discipline of knowledge management can be observed such as knowledge engineering, artificial intelligence, cognitive science, social science, philosophy, information science, economics, and management (Kakabadse *et. al.*, 2003). Though a lot of disciplines describe knowledge management and contribute in this field, thus there are a number of definitions based on the different philosophies (Daven & Prusak, 1998). Chatti (2012) acknowledged that because of the lack of a mutual agreement on knowledge management, knowledge management definition revolves around two core concepts:

1. Knowledge as a Thing

2. Knowledge as a Process

Knowledge as a Thing

In early 1990, there has been done a lot of work on knowledge management models and among one of them is Knowledge-as-a-Thing-Driven model which focused on technology-based view and represented knowledge as an object which is capable of being captured and stored and ultimately reused by others in a number of ways. Table 1 presents few definitions that dwells with knowledge as a thing perspectives.

Table 1
Knowledge Management Definition: Knowledge as a thing

Author/s	KM Definition
Davenport and Prusak (1998)	Knowledge management is getting the right information to the right people at the right time.
Ives <i>et. al.</i> (1997)	Knowledge management is generally termed as organizational efforts put in extracting organizational information in order to provide it to others who, where, when, and in what form they need this knowledge.
Rosenberg (2006)	Knowledge management is the formulation and documentation insights, expertise, and valuable information and sharing of this information to employees with similar needs for a shared goal of achieving competitive advantage.
Wig (1997)	Knowledge management is the management and comprehension of systematic and explicit knowledge and the focus of which is its application and renewal.
Coulson-Thomas (1997)	Knowledge management is the acquisition of electronically stored data and information.

Source: Chatti (2012)

Knowledge as a Process

Recent literature takes knowledge into account as a process and it focuses on a dynamic knowledge representation rather than traditional and pre-defined knowledge representation. Knowledge as a process includes an ordinary set of activities that includes a series of steps which starts from acquisition of knowledge whereas ends at its application followed by creation and development as well as dissemination, transfer, and sharing of valuable knowledge. Table 2.2 presents some definitions of Knowledge as a process based on the reviewed literature.

Table 2
Knowledge Management Definition: Knowledge as a process

Author/s	KM Definition
Nonaka and Takeuchi (2005)	Knowledge management stems at the viewpoint that the creation and expansion of human knowledge can be made possible through a social interaction among them which includes the transfer of tacit knowledge to explicit knowledge.
Malhotra (2000)	Knowledge management includes a series of steps including acquisition, formation, regeneration, documentation, propagation, and application.
Alavi and Leidner (2001)	Knowledge management is a process which constitutes series of steps from creation to application of knowledge through storing and transferring
Angus <i>et. al.</i> (1998)	Knowledge management is the process through which information can be transformed into valuable knowledge for employees who need it.
Davenport <i>et. al.</i> (2008)	Knowledge management is the combined effort on how the knowledge can be made actionable

Source: Chatti (2012)

Focusing on a number of definitions provided by different researchers, it is found that knowledge as a thing revolves around the creation and dissemination of information for reuse by other employee. In contrast, knowledge as a process focuses on the organizational knowledge rather than information. Furthermore, knowledge as a process can be bifurcated into two dimensions. First knowledge management is the documentation of past practices and experts experiences; secondly, creation of new knowledge from these insights and exposures. The rationale is that past experiences cannot be used ever as the information or process may become obsolete so knowledge management is the management of knowledge in that way which not only can be reused for similar needs but can also be created and applied to fast-paced changes of new knowledge environment.

However, Tsai *et. al.* (2004) presented three major constructs for conceptualizing knowledge management. According to them knowledge management is the:

1. Learning and acquiring (detaining, comprehension, and reproducing current knowledge)
2. Sharing (through formal and informal ways; via electronic tools)
3. Generating and improving (for making it useable and valuable for new tasks or processes)

Thus, based on these constructs the current paper adopts the widely accepted definition of knowledge management presented by Davenport and

Prusak (1998): "Knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates in the minds of knowers. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes, practices and norms".

Extending the above-mentioned construct, it is stated that knowledge management is business strategy and practice that focuses on how to maximize the output of intangible asset *i.e.* human capital of an organization for enhanced organizational performance. Mills and Smith (2011) argued that organizations invest in knowledge management because of its pivotal importance in building and enhancing knowledge capability through effective flow of information and management of knowledge. Basically, knowledge management revolves around the viewpoint that how organizational human resource can be made a strategic resource in terms of working together efficiently and effectively in order to achieve the shared goals and objectives. Further, knowledge management is applying the organizational knowledge in order to enhance the efficiency of business processes and practices. Thus, the primacy accorded to knowledge management is circling around two main constructs *i.e.* people and processes.

Organizational Learning

Along a related dimension, knowledge management enables the organizational learning of employees in order to achieve higher organizational performance. Too often, knowledge management is positioned as a stand-alone process. The expectation perceived of knowledge management since the last two decades is that it must contribute to enhanced organizational performance. Despite of its worthiness, it must be noted that knowledge management initiatives have not provided enough competitive advantages to organizations who have invested in it (Davenport *et. al.*, 2008; Malhotra, 2004). There is an immense need of linking knowledge management and organizational learning together in order to achieve the desired outcomes. Knowledge all alone is of no use unless and until it is instilled in organizational processes and systems through organizational learning. Thus, there is a need to creating a well-planned organizational system in which individuals' knowledge is taken as a collective and translated into missions and visions that co-align individuals' outcomes with organizational goals and objectives. A number of studies including Kumaraswamy and Chitale (2011); Kohtamaki *et. al.*, (2011) demonstrated that learning is associated with individuals, which needs to be transformed and incorporated in business processes and procedures through collective learning, thus enabling knowledge management more functional in achieving higher organizational performance through organizational learning. Further for this piece of writing, there is a need of distinguishing individual learning and organizational learning for a better envisioning. Individual learning is the learning of individuals whereas organizational learning is the collective learning of every members of organization.

It may be noted that learning is a continuous activity that incorporates past insights and experiences and molds it in a way that can be used as a problem solving and/or performance enhancement tool. Historically, it has been found that Cyert and March were the pioneers in presenting the concept of learning by putting learning and organization together and contributed in organizational literature by creating organizational learning phrase (Nemeth, 1997). In addition, Nemeth (1997) based on the growing body of literature extended the idea that learning is not only a perspective of individuals rather it may happen on group levels through organizational support and climate. With the growing acknowledgement of the concept and the shift from individuals learning to organizational learning, organizational learning has grasped the attention of researchers and practitioners for the last two decades (Jyothibabu and Farooq (2010). Nevertheless, individual learning provides the basis for organizational learning (Kim, 1993) ultimately enhancing organizational performance. Similarly, Senge (1990) argued that organizational learning can only be taken place through individuals learning. Further, he stated that individual learning cannot provide any authenticity for effective organizational learning, but organizational learning stems at individuals learning. The focal is that there is a need to expand our understanding beyond individual learning to organizational learning taken into account the individual learning perspective (Kumaraswamy and Chitale, 2011) in order to transform organizational competence in the way towards achieving organizational goals.

Lee *et. al.*, (2012) defined organizational learning as the extent to which existing knowledge can be updated and upgraded to new knowledge collectively by organizational members to enhance their intellectual capacity of new environmental trends. In addition, Pace *et. al.*, (1998) presented four major factors for evaluating organizational learning strategies, such as;

1. Information-sharing patterns (the extent to which information is being shared and the methods of its sharing);
2. Inquiry climate (employees' willingness and attitudes towards organizational learning);
3. Learning practices (number of individuals who learn and make it collective learning);
4. Achievement mindset (extent to which employees are self-realized).

The importance placed on organizational learning as driven by knowledge management is grounded at the fact that organizational performance stems at the input/efforts exerted by organizational employees on developing organizational learning profile in order to inculcate organizational human capital on the way through by achieving a continual excellence in their performances both in the short and long runs. The argument is that organizational performance is tied to the participation of every individual human body in pursuing organizational goals and objectives through their collective involvement. This is an important piece of

writing, as it attempts to answer the question that has both conceptual and practical implications: Does knowledge management and organizational learning profiles result in increased organizational performance?" The ensuing body of literature and the subsequent section thus provides rich perspectives based on theoretical and empirical considerations on the significance of knowledge management and organizational learning on enhanced organizational performance.

Knowledge Management, Organizational Learning, and Organizational Performance

Knowledge management popular in large organizations as discussed by Serenko *et. al.*, (2007) can be implemented more effectively through social networking in teams by linking them intra-organizationally. Cantner *et. al.*, (2009) extended the application and implementation of knowledge management and argued that not only large organizations or those whose business is knowledge need the execution of knowledge management but also every organization that has become the part of this knowledge economy necessitates the utmost implementation of knowledge management in order to gain the competitive advantage over long runs. Both knowledge management and organizational learning are the strategic tools, need to be exercised and implemented fully in order to cope up this fast-paced business era. There is an extraordinary connection among both fields as knowledge is an attribute associated to individuals, and organization is a structured platform where they operate. Thus, linking knowledge management to organizational learning is at the heart of this replica as discussed above.

Numerous such initiatives on knowledge management & organizational learning have already been undertaken since 1990's. For the present study in order to link and build the rationale on the stated construct to be applicable for Pakistani service sector, the researcher went through a number of studies conducted in different countries from developed to developing and also conducted in Pakistan and found a strong positive relationship between knowledge management, organizational learning and organizational performance. For instance, Mahesh and Suresh (2009) concluded that organizations operating in this modern business where the key factor of production is knowledge, they need to manage the exchange of knowledge in order to maintain organizational effectiveness for enhanced performance. Significantly, Pandey and Dutta (2013) in their research on a medium-sized, global IT solutions company in India found a positive relationship between organizational capabilities to manage knowledge through knowledge capability infrastructure on the knowledge management excellence. Similarly, another study conducted on banking sector in Pakistan by Hassan (2013) revealed a positive correlation between organizational learning and long term success of banking sector. Furthermore, Danish (2012) in his research on Pakistani corporate industry, found the steering role of organizational learning along with organizational change and knowledge sharing on knowledge management, thus

enabling knowledge management in resulting increased organizational performance.

It is portrayed in business literature that knowledge management delivers strategic results regarding capacity enhancement, effective decision-making, competitiveness, and profitability (Oluikpe, 2012). Osborne (2004) advocated that the focus of knowledge management strategy is on business processes as business strategy is tied to business processes. A growing body of literature including Donate and Canales (2011); Ferraresi *et. al.*, (2012); Schiuma (2012); Schiuma *et. al.*, (2012) emphasized on the significance of knowledge management for sustainable organizational performance. Knowledge exchange is essential among employees for maintaining organizational effectiveness in this knowledge economy (Gold *et. al.* 2001)

In addition, Carrillo *et. al.*, (2003) in their research provided justification for organizations to adopt knowledge management strategy by linking organizational performance to knowledge management. In this respect, the strategic value of knowledge management is critical to organizational competitive success (Whelan and Carcary, 2011). They further argued that effective management of top performing knowledge workers, their insights and experiences that is embedded in individuals' know-how and actions is necessary for increased organizational performance.

Given the widening possibilities, improved organizational performance depends not only on other organizational resources or tangible assets but also on effective management of knowledge (Lee and Sukoco, 2007), hence enabling organizational learning. Cabrera *et. al.*(2006) stated that individual knowledge becomes group knowledge, ultimately results in organizational knowledge that steers organizational learning through knowledge sharing. This knowledge subsequently becomes an eminent source of competitive advantage (Lin, 2011). On the whole, the role of knowledge sharing based on shared organizational vision becomes part of organizational strategy and then it may be perceived as a process known as organizational learning. Nonaka and Takeuchi (1995) supported the argument that setting organizational vision is not enough unless and until it is effectively communicated throughout the organization.

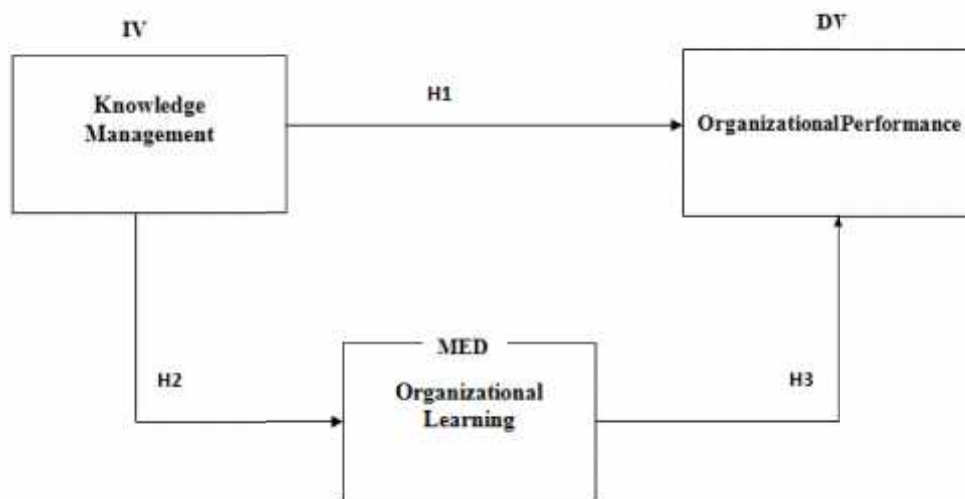
Bogner and Bansal (2007) pointed out that how organizational learning is related to important organizational outcomes. Many researchers including Grinsven and Visser (2011); Kuo (2011); Rasmussen and Nielsen (2011); Song *et. al.*, (2011); Wang and Ellinger (2011) supported the construct of organizational learning and endorsed that organizational learning results in increased effectiveness and efficiency in business processes through collective utilization of employees' insights and experiences for better visioning of routine business practices. Furthermore, Zellmer-Bruhn and Gibson (2006) argued that organizational learning at teams' level positively influence task performance ultimately results in increasing organizational performance at large.

Based on the above-discussed arguments it can be extracted that knowledge management and organizational learning enhance organizational performance and result in sustainable competitive advantage, thus both should be considered and taken together as eminent strategies in the business dialects.

Hypotheses

- H1. Knowledge management has a substantial positive effect in organizational performance
- H2. Knowledge management has a substantial positive effect in organizational learning
- H3. Organizational learning is positively related with organizational performance

Research Model



Material and Methods

Measurement and Instrument

Independent Variable

The study is conducted to examine the role of knowledge management on organizational learning and organizational performance. Instrument to measure knowledge management consisted of nine items ranked on 5-point Likert scale.

Dependent Variable

Organizational performances is the only dependent variable used in this study. The tool to enumerate organizational performance comprised of 7 items placed on 5-point Likert scales.

Mediating Variable

The study analyzes the role of knowledge management on organizational performance through organizational learning as a mediating variable. The instrument to measure organizational learning comprised of 7 items placed on 5 point Likert scales.

**Table 1
Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Std. Error
KM	213	1.22	3.78	2.1160	.54663	.533	.227	.302	.451
OL	213	1.00	3.57	2.1429	.56791	.163	.227	-.418	.451
OP	213	1.14	4.00	2.1745	.72661	.696	.227	-.539	.451
Valid N (list wise)	213								

Descriptive statistics are used to check the representation of sample with respect to population. In this approach, quantitative analysis is conducted and Skewness and Kurtosis are found to confirm the normal distribution of data. The result discloses data is in conformity with that of generated in pilot research. The values of kurtosis and skewness are between -3 to +3. Therefore in this investigation all the variables are seemed to be normally distributed. Organizational performance has a mean value of 2.17, organizational learning has a mean value of 2.14, and knowledge management has a mean value of 2.12.

**Table 3
Reliability of Variables**

Variables	No. of Items	Cronbach's Alpha
Knowledge Management	9	0.776
Organizational Learning	7	0.739
Organizational Performance	7	0.868
Total	23	0.909

Cronbach's Alpha is presented in Table 3. This table demonstrates the reliability of each item of the measurement scale. There are 9 items adapted to measure knowledge management. The Cronbach's Alpha of all the 9 items is 0.776.

Cronbach’s Alpha for organizational learning with 7 items is 0.739 and for organizational performance, the Cronbach’s Alpha is 0.868 with 7 variables. Reliability index for the instrument as a whole with 23 items is 0.909. Results are highly significant in terms of reliability of the measurement instrument.

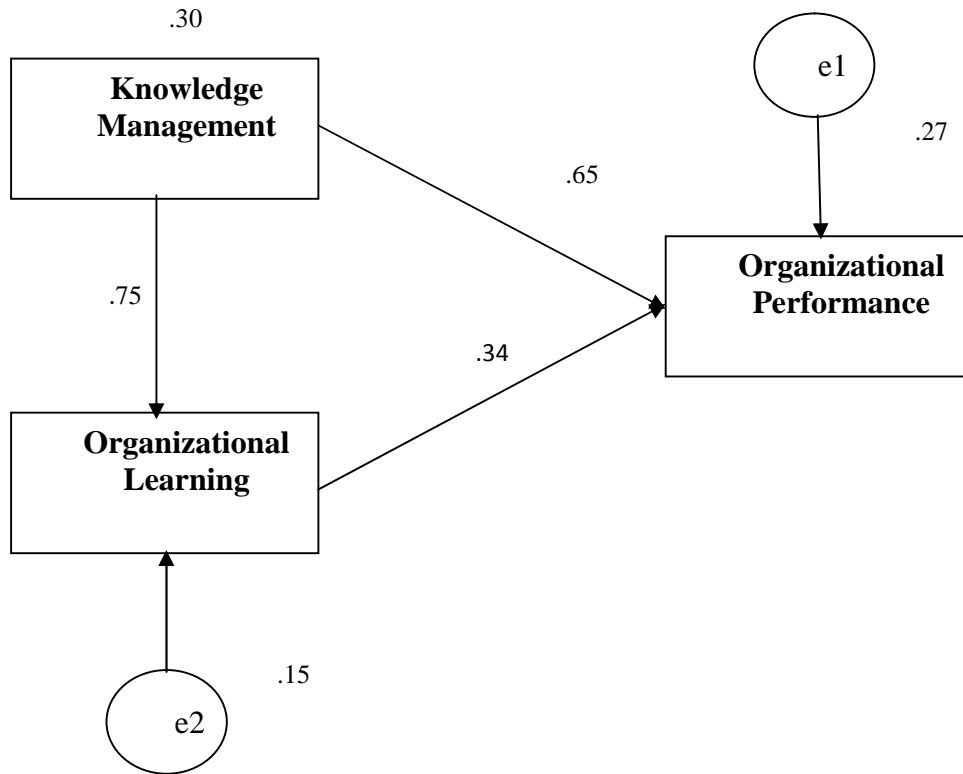


Figure 2 Structural Equation Model

Table 4
The Regression Weights

Hypotheses	Estimates	S. E.	C. R.	P	values
H1 OP < --- KM Accept	0.647	.068	11.022	.000	
H2 OL < --- KM Accept	0.749	.129	5.010	.000	
H3 OP < --- OL Accept	0.338	.124	2.721	.007	

Regression weights of analysis are produced by using AMOS 18.0 and are presented in Table 4. Results of this analysis reveal that the model is recursive. In addition, the results indicate that when knowledge management goes up by 1,

organizational performance goes up by 0.647. This justifies that higher the knowledge management practice, more will be organizational performance. Estimates for knowledge management and organizational learning and organizational learning and organizational performance are 0.749 and 0.338. Organizational learning and organizational performance goes up in a positive way as if knowledge management and organizational learning strategies are being employed and practiced in organizations. S.E. represents standard error for all possible values. Standard error values are 0.068, 0.129, and 0.124 respectively. The values of P represent the probability of getting the C.R. Critical ratio as large as 11.022 for H1, 5.010 for H2, and 2.721 for H3. For any examination, the valuation of P should be less than 0.01 (2-tailed). All the statements in this study are approximately correct for this size of sample under suitable assumptions. H1 represents the positive association between knowledge management and organizational performance. This is proved by this analysis. Since, the value of P is 0.00 for H1, and knowledge management has a significant positive effect on organizational performance. Thus, hypothesis H1 is accepted. Likewise, H2 represents the positive impact of knowledge management on organizational learning. This is also proved by this analysis. Finally, H3 is also accepted and proved by this analysis that organizational learning is positively related with the organizational performance.

Conclusion and Recommendations

This study is conducted to analyze the impact of knowledge management on organizational performance through mediating role of organizational learning in service sector in Pakistan. On the basis of theoretical framework and empirical investigation, following suggestions are presented hereby in order to improve the knowledge management system in organizations. Firstly, as mentioned above, whenever we talk about knowledge management and organizational learning, we are talking about strategy. There must be high degree of relevance of knowledge management and organizational learning strategy with organizational visualization. During the survey, it was found and seemed worth enough to be mentioned here that most of the knowledge management strategies fail because of poorer infrastructure or lack of financial resources or lower management commitment. The need is to understand here is that the proposed strategies should not be supposed to be executed at CEO's level or it's the responsibility of top managers. Even every local team leader at junior levels is required to execute these strategies. Nevertheless, it is the obligation of top administration to enforce the execution knowledge management and organizational learning.

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