

Impact of Knowledge Management Practices And Organizational Culture On Organization Performance: A Study Of Public Sector Organizations Of Pakistan

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Abstract: Today's vibrant corporate environment emphasizes organization for speedy implementation of knowledge management practices (KMP). Public sector organizations in Pakistan are rich with tacit knowledge, diversified culture and these public sectors units are now being shifted from their conventional setups to knowledge captivating setups. The study explores the impact of KMP, organizational culture (OC) on organizational performance (OP). The target population was (N=160). The sample size (n=117) was determined by using Krejcie and Morgan table of 1970. McKinney et al. (2002) and DeLone and McLean (2003) questions were adapted for preparing questionnaire of sharing tacit knowledge. Rasula et al. (2008) questions for measuring information technology, organizational culture and performance were also used. A five point likert scale was used to measure the responses. Result indicated ($r=0.892$, $p<0.001$) significant relationship of Knowledge Management Practices and Organizational Culture on Organizational Performance. The research also suggested the implication and future research directions.

Keywords: Information Technology, Sharing Tacit Knowledge, Culture, and Performance.

Introduction

Along with so many technological advancements in recent times knowledge is turning into precious asset (added advantage for organizations) due to which diverse mode of generating, managing, disseminating and holding knowledge are being hunted (Joaquín, 2012). The 20th century was declared as a century of the industrial society, the last decade of this century belongs to century of the information society, but advent of 21st century arouse as a century of the knowledge society, where knowledge economy emerged as significant resource of achieving competitiveness and essential factor for enhancing organizational performance in competitive and dynamic economies. Knowledge is progressively becoming the most vital factor of production, next to labour, land and capital (Sher & Lee 2004). The only competitive advantage that an organization has is what it collectively knows, how efficiently uses it what it knows, and how rapidly it acquires and uses new knowledge (T.H. Davenport & Prusak 2000).

The most important ingredient of the modern corporate environment today is knowledge and its efficient and effective management. Organizations strategies based on the gathered data are used to enhance productivity. Successful organizations utilize its resources very delicately as compare to its competitors. This success is only due the implementation of knowledge management techniques which enhances its overall performance. Knowledge management now becomes integral for long-term survival of any business. Both public and private sector

must give their full attention to KMP to enhance OP. Knowledge management must be implemented in public sector organization to get its positive results (Syed-Ikhsan & Rowland 2004). Organizational objective can be earned through a well administered knowledge management process which has the capacity to utilize its optimum knowledge repository. Knowledge is disseminated when employees share their experiences with each other. The system which is capable of distribution of knowledge which is already available within organization is very crucial for successful organization (Prusak 2001).

Knowledge management is also a vital source for organizational change that may occur due to retirement, death or transfer of any available talent. It also helps in easy adaptation of latest technology to enhance output. There is a complete coordination among organizational goals and knowledge resources of a successful organization (Chen & Fong 2015). Role of social media in creating and disseminating knowledge within organization is crucial now a days (Sigala & Chalkiti 2015). Organizations are investing in installation of latest information technology tools to equip their workforce for better results.

The availability of tacit knowledge within public sector organization is very frequent. Public sector organizations in Pakistan are very rich due to large sum of experienced workers and their lifelong affiliation. Nonaka & Takeuchi (1995) suggested that the revival of tacit to explicit knowledge would increase organizational performance. Tacit knowledge is very difficult to replicate due to its deposit in one's mind. It is vanished or flew away when a knowledge worker leave or retired. Management must devise ways to implement, share and flourish knowledge within organization so that knowledge sharing process may not stopped (Kovačić et al. 2006). Knowledge management practices and organizational performance have not been studied with special focus on sharing tacit knowledge, information technology and organizational culture for Pakistani public sector organizations before. The study try to figure out how can public sector organizations in Pakistan can enhance its performance by implementing knowledge management practice in its true letter and spirit.

Research Objective

The objective of this study is to probe the relationship of KMP and OC with OP while giving special focus on sharing tacit knowledge, effective utilization of information technology, and organizational culture. This study also helps in establishing a model which further facilitates public sector organization the ways how to disseminate knowledge for better organizational performance. One of the important objectives of the study to measure the magnitude of impact of KMP on OP in public sector of Pakistan which may be used as foundation stone and opens wide avenues for future researchers interested in this area.

Literature Review

The concept of knowledge management was introduced in 1990. This era was named as knowledge era due to drastic change in technology. The production, utilization and dissemination of knowledge need thorough investigation for implementation. The delivery of right information to right employee at right time is base tale of knowledge management. Davenport & Prusak (2000) explained that the sharing knowledge is the heart of knowledge management. According to Harrison & Leitch, (2000) organizations must continuously and increasingly keep up-to-date their knowledge source in order to survive in a dynamic and competitive environment . As organizations are becoming aware of knowledge as their core strategic asset and also consider obligatory to revise their strategies on how to effectively and efficiently capitalize that asset, not only to achieve competitive advantage but also for its sustainability and organizational performance as well.

Organizational definition of knowledge holds that Knowledge must entail an agent, who employ knowledge to execute actions essential to achieve organizational goals moreover it is not meant to replace individual knowledge but to compliment it by building it vigorous, more energetic and more generally applicative (T.H. Davenport & Prusak 2000). Various researchers in term of literature on 'Knowledge Management (KM)' have explained it many ways. According to Quintas et al., (2007) Knowledge management is the process of continuously managing knowledge of all forms to encounter obtainable and emerging needs, to identify and develop existing and acquired knowledge assets and to advance new opportunities. Alavi & Leidner (2001) Says KM practices entails confine, obtain, organize, and exchange of both tacit and explicit knowledge of employees enabling them to capitalize and more productive at workplace. Many other researchers have stressed the key role of the management of knowledge, particularly in establishing an internal Working environment that enhances creativity and improve organizational performance (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Soderquist, Chanaron, & Motwani, 1997). Creation of knowledge comprises of social process between individuals in which knowledge conversion is not simply a one way process but it is inner activity and spiral i.e. (a) socialization (tacit to tacit), (b) externalization (tacit to explicit), (c) combination (explicit to tacit), (d) internalization (explicit to tacit) (Nonaka & Takeuchi, 1995). So making personal knowledge available to other is the foundation of this model and this type of knowledge generation process persistently happens and takes place at all level of organization resulting in increased overall performance of the organization. Knowledge creation and sharing transpires through "knowledge spiral", which starts at personal level and then mounting its scope to communities of contact, cross sectional, departmental, divisional and organizational borders and even beyond.

According to Horwitch & Armacost, (2002) managing Knowledge can be viewed as a organized approach to administer the use of information in order to impart a continuous flow of knowledge to the right kind of people at the right time making them able to have efficient and effective decision making in support of the underlying business strategy & organizational performance. In 2004, Cummings explains Knowledge sharing as the provision of task information and know-how to help others and to collaborate with others to solve problem, develop new ideas or implement policies or procedures. Knowledge sharing can occurs via written correspondence or face to face communication or documenting, organizing and capturing knowledge for others (Cummings, 2004; Pulakos, Borman, & Hough, 1988). So if both practices of knowledge management i.e. knowledge creation and sharing are coordinated by the individuals in the organization in such a way that right person gets the right information at right time then of course there will be commitment by employees to perform better and more engagement toward achievement of individual and organization's objectives.

Sharing Tacit Knowledge

Nonaka & Takeuchi (1995) states that personal beliefs are inbuilt human process and human actions are influenced under this system. How employees share knowledge with one another is gauged under this concept. Tacit knowledge can be either knowledge personified or knowledge entrenched (Horvath 2000). The knowledge in human minds is personified while knowledge shown in goods, procedures or on papers is entrenched knowledge. According to (Pathirage et al. 2007) researchers shows their interest in investigating tacit knowledge on increase. Nonaka & Takeuchi (1995) tacit knowledge is treated as a competitive edge over other organizations. According to Wong & Radcliffe (2000) it is very difficult to convert tacit knowledge into explicit knowledge. The tacit knowledge existed in other human being can only be understood by other human mind only (Widén-Wulff & Suomi 2007). The repository of organizational knowledge consist of four modes i.e socialization, externalization, combination and internalization (Nonaka & Takeuchi 1995). According to van den Hooff et

al. (2003) and Nonaka & Takeuchi (1995) “Socialization (tacit to tacit) knowledge is shared during social interaction such as story telling that enable transfer of complex tacit knowledge from an technological to another”. Tacit knowledge sharing process is not visible it can only be observed while doing day to day business moves (Ryu et al. 2003). Chiu et al. (2006) explained that the relevant, plain, accurate and reliable knowledge sharing can bring vital change in organizations performance. An employee who is experienced may be treated as a source of energy that can light the whole organization with the rays of knowledge emitting from him. Management must arrange such ways which can bring knowledge seekers near to source so that organizational progress process may not be affected due to scarcity of knowledge gap. It is also mandatory for organizations to introduce attractive compensation plans for knowledge sources so that their confidence may be maintained.

Use of Information Technology

By using latest information technology gadgets organizations can be able to share knowledge without any delay (Stoddart 2001). Video conferencing, Skype, Viber, and Whatsapp etc bring global community close enough to make timely and robust decision. Managers of knowledge organizations are getting fruits of technology by installing these applications for smooth running of their day to day tasks. Many financial applications bring innovations in compiling financial calculation and analysis. So these tools can be named as knowledge transferring tools. A lot of innovative knowledge tools are available in market for knowledge seekers (Lee & Al-Hawamdeh 2002). The role of technology in developing knowledge is very crucial and it is now become an integral part of their strategies and it is the main variable of change in organization (Orlikowski 1992) and it is no doubt a fundamental obligation for every organization (Lee & Al-Hawamdeh 2002). According to Stoddart (2001) information technology and data management are the key processes of knowledge assembly, deployment, and sharing. The scarcity of technical resources may results in failure of organization. Fountain (2001) clarified the effect of external and internal communication due to lack of coordination activities among several important units of organizations. Computers plays very important role in performance of any organization. Every organization equips their employee with best technology available in the market so that organizational performance may be enhanced. A strong infrastructure of information technology brings visible change in performance level of any organization.

Organizational Culture

The organizational culture are the shared values which have been infused in employees when they interact with each other or outside world (Park et al. 2004). Cultural differences are very clear and repeatedly observed in the global society of workforce. Culture progressively grows in organization with the time (Al Alawi et al. 2007). Issa & Haddad (2008) states that trust is the key element of knowledge sharing among employee which normally based on same cultural attributes. The nations which are close enough culturally finds themselves comfortable to share knowledge. Sanchez (2004) illustrated that the organizational culture is composed of business plan, employees, method, and arrangements. Organizational culture is very important for developing knowledge seeking organization (Gumbley 1998). If the organizational culture is supportive enough to digest knowledge it can only be implemented otherwise failure is fate (Abass et al. 2011).

The most important hurdle in implementing knowledge management practices is organizational culture (Rezgui 2007). Many researched shows that the trust is very important factor in sharing knowledge if it is found in the organization the knowledge sharing process is smooth otherwise organization can face trouble in sharing knowledge (Al Alawi et al. 2007; Andrews & Delahaye 2000). The ratio to share knowledge is dependable on the trust level if deficit sharing process may be affected badly (Thomas H. Davenport & Prusak 2000).

Managers help employees to get benefits from organizational culture by sharing knowledge. Top management role in balancing organizational culture for boosting sharing knowledge activities is very important (Ling et al. 2009). Culture is main source of obstruction in KMP setup. So, if the culture is not encouraging toward KMP implementation it will become complicated to produce knowledge management culture in the organization. Walczak (2005) explained that organizational culture is the variable of focus for KMP researchers.

Organizational Performance

Zack et al. (2009) found that there is a relationship exist between KMP and OP. Organizations must facilitate knowledge sharing process so that performance may be enhanced (Tseng 2010). Politis (2002) stated that organizational performance is the ultimate concern for any researcher. The regrettable organizational performance of public sector organization in Pakistan associated with poor knowledge sharing among various business units. According to Campbell, (1990) organizational performance is attached with the degree of sincerity of knowledge sharing process within organization. In observation of (Borman & Motowidlo 1993) organizational performance is delineated in two dimensions i.e. contextual performance and task performance. Task performance is determined when the individual employee at workplace meets its targets or job related work assignment efficiently and effectively according to requirements of the organization under the control system of the organization. Moreover task performance is a sort of internal impulse in the employees that motivates and enhances organizational performance significantly.

Contextual performance exhibits that when employees of the organization perform the organizational activates at par and in true spirit without any regulatory or internal control system. Borman and Motowidlo (1993) is of the view that individuals have the compliance to achieve organizational objective, that are necessary to continue and informally regulative in the fulfilment of organizational activates along with friendly attachment and cooperation with co-workers to attain better performance. So if there is a strong linkage between KM practice practices and organizational performance then both task and contextual performances are exhibited resulting in overall performance of the organization.

According to (Blumberg & Pringle 1982) organizational performance has three stimulus that are prospect to perform, ability to perform and preparedness to perform. So if the individual possesses blend of these characteristics then overall performance of the organization also enhances. in the study of (Korman, 2007) organizational performance is a combination of Individual's talent and competencies, impetus and enthusiasm and insight & awareness at workplace. So in order to achieve organizational overall performance in competitive society an employee must have abilities and skills to acquire and share useful amount of knowledge, have strong commitment & motivation to achieve organizational objectives through better commitments and willingness and capacity to better perform in complex and dynamic situation. Borman & Motowidlo (1993) explains that organizational performance is evaluated through end results in pursuits of organizational objectives. Further they articulate that organizational performance is the end result which is better explained in terms of personal involvement, magnitude and excellence at workplace. When output is considerable or high then overall organizational performance will boost. So if individual in an organization is committed to share the right practice of knowledge then he can perform better on organizational performance both in task and contextual performance, resulting in over all enhanced organizational performance.

Problem Statement

Sustainable competitive advantage in future will be the creation of organizational knowledge and its proper management (Drucker, 1993; Grant, 1996). According to (Hansen et al. 1999)

research revealed that organizations disinclined to adopt a standardized approach to knowledge management. Tangible assets of the organization are transferable while Intangible assets are not. Even some forms of intellectual capital are also transferable but internal knowledge in the minds of its employee is not easily copied. So if the employee leaves the organization the knowledge anchored in his mind is also drained and lost forever(Kovačić et al., 2006). Most of the time KM practices are out of focus from top management because decentralized activities seem not to have much potential to convince senior managers of the impact of KM practices on organizational performance (Reinhardt 2012).

Many previous models of knowledge management failed because their focus was primarily on technology rather than human capital. As technology has no capability to analyze the information provided to it, while human has that ability (Bhatti et al. 2011). Researchers have made eminent progress in ascertaining correlates of commitment (e.g., Harter, Schmidt, & Hayes, 2002; Schaufeli, Bakker, & Salanova, 2006) but trivial empirical study and theories explain functions of commitment as a gist due to which organization can craft competitive edge. Despite abundance of studies have been conducted to investigate the impact of knowledge management practices and organizational performance with various other factors yet little or no evidence is available on association of knowledge management practices and organizational performance with effect of tacit knowledge in public sector. So the GAP exist that from the basis of this study to analyze weather organizational performance can be increased or not with better utilization of Knowledge Management practices with the help of better knowledge management.

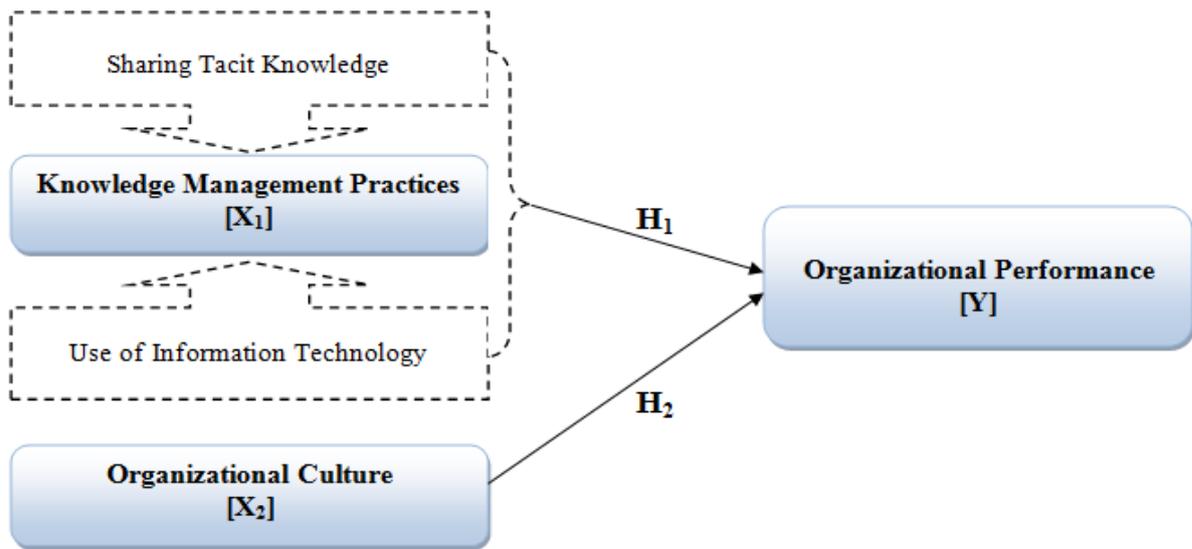
Research Question

1. What is the role of knowledge management practices in enriching organizational performance?
2. What is the significance of culture to reinforce organizational performance?

Hypothesis

- H1:** Knowledge management practices have positive impact on organizational performance.
- H2:** Organizational culture has positive impact on organizational performance.

Figure 1: Conceptual Framework



Methodology

The aim of this study is to explain the relationship between the Knowledge Management practices and organizational performance. The research design for testing the conceptual framework of this research is quantitative and explanatory. The target population of the study was N=160 and the sample size n=117 was determined by using Krejcie and Morgan table of 1970. Stratified random sampling technique was used to collect requisite data with complete confidentiality of the respondents. Part “A” comprises of demographic characteristics i.e gender, age, qualification, marital status, experience and position in the organization. Part “B” contains the questions regarding knowledge management practices, organizational performance.

Procedure

Questionnaires were distributed among respondents by using non probability random sampling with assurance of confidentiality of respondents responses. In the first part demographic information regarding their gender, age, qualification, experience, level were asked. While second part contain questions regarding independent and dependent variables. For this, a five point likert scale technique was used to get responses.

Measures

McKinney et al. (2002) and DeLone and McLean (2003) question were used to get responses for sharing tacit knowledge. Rasula et al. (2008) questions regarding information technology organizational culture and performance were used to get responses. Five point likert scale was used in questionnaires to get responses.

Demographic Characteristics of Respondents:

The study results indicated that 94 % respondents were male. 29.1% were from age group 41 and above, while 26.5% were from 26-30 age brackets and 24.8% were from 31-35. 54% respondents have completed master level and are from officer cadre (62%) they have completed 10 years service. 36.8% were from income level of 50,000 and above. Detailed analysis is presented at table-1 to 6.

Table-1
Sample Demographics (Age)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21 to 25	5	4.3	4.3
	26 to 30	31	26.5	30.8
	31 to 35	29	24.8	55.6
	36 to 40	18	15.4	70.9
	41+	34	29.1	100.0
	Total	117	100.0	100.0

Table-2
Sample Demographics (Gender)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	110	94.0	94.0
	Female	7	6.0	100.0
	Total	117	100.0	100.0

Table-3
Sample Demographics (Highest Level of Education)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors	51	43.6	43.6
	Masters	52	44.4	88.0
	MS/M.Phill	14	12.0	100.0
	Total	117	100.0	100.0

Table-4
Sample Demographics (Cadre)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Officer	62	53.0	53.0
	Staff	53	45.3	98.3
	Other	2	1.7	100.0
	Total	117	100.0	100.0

Table-5
Sample Demographics (Income Level)

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11,000 to 20,000	11	9.4	9.4
	21,000 to 30,000	29	24.8	34.2
	31,000 to 40,000	16	13.7	47.9
	41,000 to 50,000	18	15.4	63.2

50,000+	43	36.8	36.8	100.0
Total	117	100.0	100.0	

Analysis and Discussion

Effective knowledge management practices drives and motivates employees in an organization, toward inclination of strong employee commitment at workplace that will encourage its employee to share and apply that knowledge when required that results in increased organizational performance & some time to go above & beyond what is expected from them in the organization resulting in overall organization performance and success.

Due to minor focus on employee performance by organizations there is always difference on what organizations require from their employees to contribute in order to achieve organizational performance and what employees expect from organization in return. It is observed that employees working in public sector organizations do not think that their method of working will enhance organizational performance instead they engage themselves in following priorities and procedures by default, that exhibits low level of commitments so Knowledge should be readily available to its employees where they have access to retrieve it when required and they should update this knowledge accordingly that will lead toward more employees' engagement at workplace resulting in enhanced organizational performance of employees.

Our finding suggests that if an organization has right kind of knowledge management practices, then there will be more organizational performance and employee of that organization will perform the work with full involvement. Research carried out by West (2005) suggests that when individuals experience a positive emotions, then they are capable of thinking in a more broadminded , accommodating and permissive way and are prone to manage more effectively, coping with more self-control, and be flexible and unfettered in the workplace and results in enhanced individual organizational performance. Results of partial mediation reveals that If you want to engage your employees for better organizational performance then it is must for them to have good job related knowledge management practices and right knowledge management practices are capitalized only if an organization has proper commitment in which employees are fully involved and engaged in knowledge sharing and utilization activities.(Suzana & Kasim 2008) also revealed the significant role of Knowledge management practices in improving the organizational performance.

Table-8 shows the reliability coefficient Alpha for dependent variable (DV) and independent variable (IV). The value .776 shows a high reliability and consistency of the scale used for this study to measure OP. The scale used to measure STK has value .778 while use of information technology scale got value .761 followed by .664 value for organizational culture scale, which shows that the reliability and consistency of the scale is good. It is evident from table-8 that the construct used in this study are very well explaining the reliability and consistency to measure for DV and IV.

Reliability Statistic

Table-7
Reliability Statistic

Variables	Cronbach's Alpha Value	N of Items
Shearing Tacit Knowledge (STK)	.778	6

Use of Information Technology (UIT)	.761	5
Organizational Culture (OC)	.664	9
Organizational Performance (OP)	.776	9

Correlation Analysis

According to Pallant (2010) Pearson correlation can take value from -1 to +1 which shows negative and positive relationship. Moreover if value of r is below .33 it is insignificant relationship. if value of r between .34 to .66 it is mild relationship while if r is .67 to .99 then it is a significantly strong relationship (Somekh & Lewin 2005). Table-8 shows that there is a significant relationship exists between KMP and OC with OP of public sector organization of Pakistan.

Table-8
Correlations Analysis

		OP	STK	UIT	OC
OP	Pearson Correlation	1	.098	.191*	.881**
	Sig. (2-tailed)		.296	.039	.000
	N	117	117	117	117
STK	Pearson Correlation	.098	1	.287**	.256**
	Sig. (2-tailed)	.296		.002	.005
	N	117	117	117	117
UIT	Pearson Correlation	.191*	.287**	1	.287**
	Sig. (2-tailed)	.039	.002		.002
	N	117	117	117	117
OC	Pearson Correlation	.881**	.256**	.287**	1
	Sig. (2-tailed)	.000	.005	.002	
	N	117	117	117	117

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Regression Analysis

According to Maarel & Sykes (1993) regression analysis with a single explanatory variable is named as simple regression. Pearson correlation shows a value of r .892 which shows strong positive correlation between KMP & OC with OP. ANOVA table shows F-ratio 146.565 $p < .001$ which is significant so the model is a good fit.

Table-9
Regression Analysis (Model Summary and ANOVAa)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.892 ^a	.796	.790	3.01766

a. Predictors: (Constant), OC, STK, UIT

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4003.981	3	1334.660	146.565	.000 ^b
	Residual	1029.011	113	9.106		
	Total	5032.991	116			

a. Dependent Variable: OP

Conclusion

The results of this study reveal that KMP has significant positive impact on OP of public sector organization of Pakistan. So if GoP needs to enhance the performance it must implement KMP in all its department with letter and spirit. Moreover, it is evident from the results that the importance of KMP is vital for survival of the organization in modern corporate environment.

Implications: The finding of this study will help researcher and managers:

- To utilize tacit knowledge sharing in their organizations.
- To install latest IT tools to achieve valuable results.
- To devise such culture to absorb change abruptly.
- To remove internal barriers against technological change.

Limitations and Future Indications: Following are the limitations of the study

- The population for this study is public sector organization of Pakistan but the sample was from (Islamabad, Rawalpindi, and Wah Cantt) some cities of Pakistan.
- The difference in pay structure may influence decision about KMP and OP.
- The research may be conducted in purely GoP departments having same pay scales for better results.

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