



Effect of Organizational Culture on the Knowledge Management Practices in Private Sector Universities of Pakistan: Mediating Role of Trust

Sadaf Alam^{1}*

Abstract

The research intended to study the effect of organizational culture on knowledge management practices in private universities of Pakistan and to identify the role of trust in mediating the association among organizational culture and knowledge management. The study is an explanatory study and followed quantitative design. A closed-ended questionnaire was used as research instrument using 5-points Likert scale. Organizational Culture was measured using Organizational Culture Assessment Instrument (OCAI) and knowledge management was measured by means of the Knowledge Management Assessment Instrument (KMAI) built on the theoretical model of the Competing Value Framework (CVF). From this study of organizational culture towards knowledge management, all outcomes show that supportive culture has significant impact on knowledge management in organizations. In this regard employees trust has also found significant in mediating the association amongst organizational culture and knowledge management. Organizations should create the atmosphere of trust and learning which facilitates the knowledge management process. University management should pay attention towards employee management relationships and technology upgradation as in literature they are found as few forms of trust employee pay attention to.

Keyword: Knowledge, Management, Organizational culture, Trust, Mediation.

1- Bahria University, Assistant Professor Bahria University Karachi Campus. email: sadafalam.bukc@bahria.edu.pk

INTRODUCTION

The concept of knowledge management (KM) has attained significant attention in modern organizational research (Gharakhani & Mousakhani, 2012; Heisig et al., 2016). Several organizations have begun to get concerned about a challenge that enforced them to consider new methods and practice that can benefit them to be competitive (Chua & Goh, 2008). This condition has hoisted the requirement for effectual results from the different programs that engage knowledge management in diverse organizations.

Managing knowledge is significant in all types of organizations, yet its active use is dominant in-service sector (Ali, 2016; Lin, 2013; Taherparvar et al., 2014). Use of technology has increased manifolds resulting in large amount of information and knowledge. Thus, making it essential to have an effective capability to manage the available knowledge for successful operations (Ali & Ahmad, 2006; Ali, 2016; Zaim et al., 2015).

Education sector is considered as one of the prime pillars of its economy (Rehman et al., 2011). The objectives of private higher education are to lessen the financial load of the government in the providing higher education and to expand the higher education network to satisfy the ever-growing demand for tertiary education, to enhance the effectiveness of the organizations and to safeguard the relevance of the courses to national labor requirements (Middlehurst & Woodfield, 2004). The effective management of knowledge important for successful performance of Pakistan's education sector yet it has not been extensively researched.

The market for higher education institutions has become global as universities endeavor to internationalize their programs and offer high value programs to pupils. Universities also face demands from business sector. Firms want supple and compliant knowledgeable workforces. Similarly, universities are likely to produce people who can lead, who can generate new knowledge, who can foresee new difficulties and envision new ways of impending old problems. Universities do play a role in preparing people to go outside the current and be able to retort to a future which cannot be imagined (Henry. W, 2001). Hence, knowledge management in education could be understood as an outline or a method which allows individuals in the organization to change a set of practices to gather information and then to share their knowledge leading to actions that improves services and results (Petrides & Nodine, 2003).

The total number of education institutes stood at 267.7 thousand during 2017-18 as compare to 252.8 thousand during last year. The total number of teachers during year 2017-18 is and showed an increase of 5.9 percent. (The Nation, Feb 9, 2019). Specifically talking about higher education institutions according to HEC there are total 195 recognized universities in Pakistan. Similarly, according to the Economic Survey the education-related expenditure increased by 5.4 percent and reached to Rs699.2 billion in financial year 2017 which shows that the provincial governments are spending considerable amount of their annual development plans on education.

For the economic development of a country, knowledge related activities are imperative. Those are knowledge imparted by the academes, administered by the organizations, and utilized by the society. Without processing into an operation knowledge produces nothing. It necessitates the utilization of knowledge to accelerate the economic growth, to form eloquent relation with the businesses, and to find new technologies by generating new ideas and framing new theories. These critical rudiments of knowledge-creating activities create an urge for modern management to convert knowledge from

social ornament into the true capital of any economy.

Classification of Knowledge

Knowledge management mainly defines two types of knowledge namely explicit and tacit. Explicit knowledge can be articulated and easy to share in the form of data, scientific formulae, manuals, universal principles and can be communicated through methodical and formal way. This type of knowledge is of the utmost popularity. There exists another form of knowledge that is tacit and requires a great deal of effort to turn out to be visible. It is more informal and is difficult to articulate and share with others. This knowledge remains cloistered for the individuals and is reflective of personal conducts and experiences of the individuals.

Tacit knowledge has two dimensions; one is technical that is the skills or crafts generally recognized as “know-how” it usually comes after years of experience. Another is cognitive consisting of opinions, discernments, sentiments and cerebral models so embedded in human beings that are usually taken for granted.

Nonaka & Takeuchi (1995), contended that human knowledge is formed and extended by social contact between tacit and explicit knowledge. This social exchange is the basis of “Knowledge conversion”. Thus, implicit and explicit forms of knowledge interact and swap with each other in creative actions of individuals.

Founded on the work of Nonaka & Takeuchi (1995), the subsequent four processes have been identified that are used by organizations for knowledge conversion:

1. Socialization: sharing of experiences through opinion sharing and replication through seminars, workshops, consultations and similar events.
2. Capture: the transformation of tacit knowledge into explicit form.
3. Dissemination: the replicating and distributing explicit knowledge
4. Internalization: procedure of experiencing knowledge by an explicit source where an individual can link his/her current experiences with his/her past experiences.

Knowledge management is concerned with the stern issues of organizational adoption, endurance and competence influenced by the environmental change. Important sections of knowledge management contain such organizational procedure wherein information and data received through the support of technologies are shared through the innovative and inventive capacities of man to get an output bearing benefits of the both.

It is believed by the academicians and researchers that effective knowledge is the righteous way to creation of opulence. Knowledge is among the utmost considerable asset for the accomplishment of an organization (Alshekaili & Boerhannoeddin, 2011), and knowledge management has gradually become a stimulating subject for the growth of organizations. The scholars consider that knowledge management is the administration of organizational knowledge. This school of thought pays contemplation on case management, knowledge base, data storeroom, data quarrying, idea and prominence on the formation of organizational knowledge management structure (Amidon, 2006; Yazhoul & Jian, 2013).

Knowledge management is a multifaceted process by various factors inducing its execution. There are many enablers of knowledge management including; people, corporate culture, rewards,

leadership, information technology etc. These factors should be stout in an organization, as they not only produce knowledge but prompt individuals to share their knowledge and skills with others (Yeh, Lai & Ho, 2006).

Organizational culture is important in creating conducive environment for learning in this way the learning culture organization creates an atmosphere where knowledge and skills achievement not solely regarded as an important obligation of all employees, but members of organizations also support and encourage this by interaction. (Norman, 2004; Wei, 2005; Alavi et al., 2006).

Therefore, the study is intended to examine the connection amid organizational culture and knowledge management process capabilities. It is also focused to give a general picture of the knowledge management process of private universities of Pakistan. The goal of this research is also to shed light on different components of organizational culture during knowledge management process.

Research Objectives

The study intends

- To investigate the effect of organizational culture on knowledge management practices in private universities of Pakistan.
- To identify the role of trust in mediating the association among organizational culture and knowledge management.

LITERATURE REVIEW

Knowledge is a crucial factor that helps organizations to make ingenious products and services when applied successfully. In terms of epistemology, knowledge and knowing are respectively defined as social sciences and psychology.

Most important element of success of knowledge management is knowledge acquisition that is the capability of an organization to obtain new knowledge internally and externally for addressing problems, innovation and gaining competitive advantage (Gold et al., 2001; Haas & Hansen, 2005; Nonaka, 1994). One of the most significant result of knowledge acquisition is new knowledge generation that is considered as a vital resource for every organization as its results in innovation and subsequent competitive edge (Tseng, 2014; Zaied, 2012). Knowledge application is the capability of an organization to implement knowledge sources, that are generated from knowledge acquisition process, where required to get the desired results (Gold et al., 2001; Lee & Choi, 2003; Singh et al., 2006; Zack et al., 2009; Zaied et al., 2012). Creating new knowledge is of no use until it is successfully applied for creating positive organizational results. (Nghah et al., 2016).

In well reputed organizations, when people are appointed, the managers exploit the skills and knowledge of these people and use it to the benefit of effective management. Organizations are now focusing their attention on this facet in a more organized and proper way.

Many scholars (Alavi & Leidner 2001; Pentland 1995) recognize organizations as “knowledge systems”, comprising of four components of knowledge process:

- i. Knowledge Creation: creating new content or substituting prevailing content inside the organization’s tacit and explicit knowledge.

- ii. Knowledge Storage: also recognized as organizational memory. It is the storage, organization and reclamation of organization knowledge.
- iii. Knowledge Transfer: knowledge transfer between individuals, from individuals to groups, amongst groups, and by the group to the organization.
- iv. Knowledge Application: This includes the application of knowledge in diverse situations.

The successful completion of knowledge management depends upon engaging workers in various parts of the above KM processes (Alavi & Leidner, 2001) and at all aspect, they may be antagonized with certain KM complications for instance, junior employees might face problems in creating new knowledge that would be acceptable to their peers and seniors, and storing that knowledge in a form easily reachable and re-contextualizable by others. As knowledge recipients, they would require to recontextualize the knowledge produced by others, frequently with modest support or training, and then apply it in their own situation. Hence, there comes the role of management of the organization to identify and provide solution to knowledge management issues.

Organizational Culture and Knowledge Management

Organizational culture is the collective standards, opinions and practice of individuals in an organization (McDermott & O'Dell, 2001). Culture is imitated in the noticeable features of the organization, like its mission and adopted standards. Culture is entrenched in organizations in the manner people act, what they anticipate and how they make sense of each other's actions. Hence, culture is deep-rooted in the organization's fundamental values and norms. These are not solitary implicit, but so taken for granted that they are difficult to articulate and indiscernible to organizational members. (Chan, 2007).

Many studies have been conducted regarding the significance of organizational culture for the achievement or adversity of knowledge management in organizations they also signify that culture might support or destroy the attempts to manage knowledge effectually in an organization (Choo & Bontis, 2002). In defining the importance of impact of culture on knowledge related activities, Delong and Fahey (2000) recognized few ways a culture effects knowledge-related performance. Primary, culture, and predominantly subcultures, severely effects what is professed as beneficial, significant, or effective knowledge in an organization. Culture forms what a group describes as applicable knowledge, and this will affect the form of knowledge a unit emphasis on. Another, culture intercede the association among tiers of knowledge. It decrees what knowledge fits to the organization and what knowledge vestiges in control of individuals. Additionally, culture produces an atmosphere for societal contacts and has a main influence on knowledge formation, sharing, and usage. Lastly, culture support conception and implementation of new-fangled knowledge.

Various culture types were identified to be utmost importance to the implementation of actual knowledge management performance. Lesser & Storck (2001) determined that groups of practice offered value to an organization and can be exploited to expand performance win a company. Similarly, as the organization share more knowledge, the newer knowledge would be created; therefore, the organization could develop itself as more significant competitor (Berman-Brown & Woodland, 1999).

In defining the link between types of organizational culture and knowledge management initiatives, Lawson (2004) concluded that process abilities of knowledge acquisition, conversion, application, and fortification are completely associated to organizational effectiveness and they form an effective outline for managed knowledge. Lawson's study by using OCAI by Cameron & Quinn's, 1999 and

KMAI revealed the variety of situations and culture that are essential for the active application of knowledge management. The culture dimensions or values those are recognized as important for the application of knowledge management are: sharing, trust, flexibility, learning, collaboration, and invention (Lawson, 2004).

The knowledge sharing in organization and the effectiveness of knowledge management are generally related with organizational culture as organizational culture has more positive contributing impact on knowledge management. (Chang & Lee, 2007; Zheng, Yang & Mclean 2010). Henceforth, fruitful knowledge management essentially depends on the coordination of level of culture and organization. Fostering knowledge application by incentives and rewards does not work until the environment of essential cultural exist that rewards, rejoice, and value knowledge application through shaping employee's behaviors towards knowledge management (Markus et al., 2002 and Orlikowski, 2002). Furthermore, organizational culture is significant in assisting knowledge creation, storage, transfer, and use (Gupta et al., 2000; Bhatt, 2001; Leidner & Kayworth, 2006 and Ajmal & Koskinen, 2008).

H1: Organizational culture significantly affects knowledge management in an organization

Organizational Culture and Employee Trust

Various studies have advocated the potential association between culture and employee trust. According to Tuan (2012) upward-influence policies tend to cultivate trust. Two main factors those are affected by organizational culture are trust on top management (Issa & Haddad, 2008) and career satisfaction (Joo & Ready, 2012).

Suliman & Al-Junaibi (2010) proposed that it is imperative to produce an organizational environment that leads to form trust, better fulfilment and lesser turnover. Comprehending both trust and career satisfaction is thus imperative for organization pursuing to develop encouraging and commitment based work setting (Gattiker & Larwood, 1988; Martins et al., 2002).

Study of Issa & Haddad, (2008) shows that if organizational culture promotes openness and inspiration, trust between member of the organizations organizational members increases. Therefore, organizational culture helps in shaping the extent of employee trust on management. (Morgan & Zeffane, 2003). Especially various types of cultures are being identified by various authors those can affect trust in an organization. Wiewiora et al. (2014) has found clan culture as an enabler of trust in organization that shapes knowledge sharing behaviour. Similarly, Bock et al., 2005; Kim & Lee, 2006; and Suppiah & Sandhu, 2011) also confirms the positive association between clan culture and high employee trust. Therefore, the study hypothesizes that:

H2: Organizational culture significantly affects employee trust activities in an organization

Trust and Knowledge Management

Trust can be observed as manifestation of assurance amongst few parties in exchange, in which it will carry risk over the deeds of other parties, or assurance that would not be oppressed by some other party. Trust is perceived as individuals' inclination to take menace with the purpose of the other partner would not create any impairment. Jones & George (1998). It is also referred to as set of precise beliefs mainly affecting the veracity and compassion. (Chiu et al., 2006).

Trust is vital for the social exchange process (Blau, 1964). When trust occurs between the parties, they are more eager to involve in obliging collaboration (Nahapiet & Ghoshal, 1998). A significant

characteristic of familiar exchanges is that individuals' contributions are difficult to assess. Hence, trust is predominantly significant in volitional activities such as knowledge sharing (Chiu et al., 2006).

An environment of trust and protection is necessary to reassure invention, investigation and risk taking in order to advance knowledge and use prevailing knowledge. (Lopez et al., 2004). Trust has been demarcated as a belief that occurs in a community of constant, truthful and supportive conduct, grounded on frequently shared norms, on the part of other members of that community (Fukuyama, 1996). Trust amongst people is related with professional relations rather than personal associations (Wang, Ashleigh & Meyer, 2006). Trust is measured as important predictor of knowledge creation (Lee & Choi, 2003) and relational trust is empirically found directly related to knowledge attainment (Politis, 2003). Knowledge sharing is defined as a practice where employee usually share tacit and explicit knowledge both to conjointly produce a new knowledge. (RiveraVazquez et al, 2009). This research proposes that individual would share their knowledge and participate in KM when they recognize the receiver to be truthful, honest, and steadfast. Many studies like Balu (1964); Nonaka (1994); Dyer and Singh (1998); Kalantzis and Cope (2003) suggested that trust maintains exchange relationships therefore can affect knowledge sharing behaviour thus affect KM activities in the organization. Furthermore, an employee acquiring and sharing knowledge must have trust that the management will see it and reward him for the personnel transference of important information through social collaboration that could be competently sustained by information technologies. Accordingly, the researchers developed a process approach of knowledge in organization which is created on social contribution and shared trust. Resultingly, knowledge is communally erected and shared in a setting of teamwork and trust. (Serenko et al. 2016)

Trust may take many forms in an organization i.e. trust in management and in the instantaneous superior as well as trust in colleagues. Knowledge sharing during KM can be improved when people exchange data, best practices, lessons learned and insights. In persuading employees' choice to share knowledge trust on management is considered as most important issue. (Renzl 2008; Pervaiz 2016). Trust also permits to focus workers on the chore to be supported in order to produce the value for the organization. (Renzl, 2008). Summing up the assertions by numerous authors, a positive association is obvious that trust in management is trust in caring and reliable intents of the supervisors that affect behaviour in the work.

Trust in co-workers or teams along with trust in management leads to improved knowledge management. Rosendaal & Bijlsma-Frankema (2015) inferred that the wish to recognize themselves by a group endorses knowledge sharing inside it. The concentration of knowledge sharing rises with the growing trust within the group (Pinjani & Palvia, 2013). From the knowledge management standpoint, a trusting individual would be more probable to offer valuable knowledge to others as trust enables actual knowledge sharing. It should be noted that trust is not only comprised of people's trust in others, but moreover of their behavior and readiness to utilize knowledge to affect upcoming activities (Chowdhury, 2005). Grounded on the trust and knowledge sharing theory, two key arrangements of trust are prominent: knowledge-built trust, which is instituted on a one's thought for trust in others, and effect-built trust, which is erected on the emotive link amongst individuals those are connected over shared caring (Renzl, 2008).

The trust on technologies for knowledge management is being conferred broadly in current literature where the most significant base is trust on correct working of technology. (Kuo, 2013) and the trust that technology is clear (Stuermer et al., 2016). With respect to technological advancement,

trust in technologies also signifies the confidence that knowledge is innocuous. Thus, the study contends that people with high trust are expected to contribute extra in knowledge management actions. Dirks & Ferrin, (2002) disclosed diverse connotation amongst diverse trust antecedents and trust consequences. Indication from the literature presented that trust can perform an intervening part in sharing, gaining, and transferring knowledge (Levin & Cross, 2004; Niu, 2010). Hence, organizational trust is observed as an obligatory material to team-working, support and learning, knowledge sharing and creating (Whitener et al., 1998)

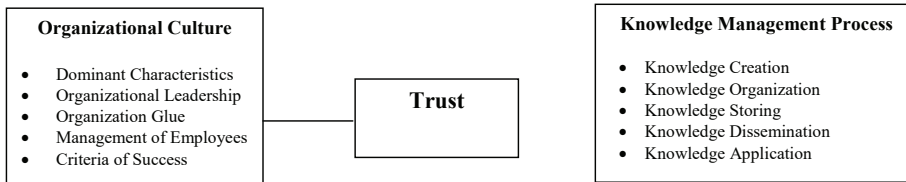
Hence, the study hypothesizes that

H3: Employee trust significantly affects knowledge management in an organization

H4: Employee trust mediates the relationship amongst organizational culture and knowledge management activities.

Research Framework

Mediating Variable



Independent Variable

Dependent Variable

Hypotheses

H1: Organizational culture significantly affects knowledge management activities in an organization

H2: Organizational culture significantly affects employee trust activities in an organization

H3: Employee trust significantly affects knowledge management activities in an organization

H4: Employee trust mediates the relationship amongst organizational culture and knowledge management activities.

RESEARCH METHODOLOGY

This study is carried out under positivist paradigm, as it is based on existing literature and measure cause and effect relationship. The study follows deductive approach where hypotheses were drawn with the help of prevailing theory. A quantitative cross-sectional survey design is considered for the present research study, as it is an appropriate design for research studies done under positivist worldview using deductive approach.

There are total 195 universities in Pakistan according to HEC, out of which 100 are private. The participants were selected from private sector universities to gain understating of the organizational culture on knowledge management process of private universities of Pakistan. Purposive sampling technique has been used to take data from the respondents. The sample of 380 has been taken for

the study consisting professors, assistant professors, lecturers and admin staff of private universities of Pakistan. According to Ume Sekaran (2003), sample of 380 is justified at confidence interval of 0.95 if population exceeds 5000. Data was gathered from all levels of faculty members comprising lecturers and assistant professors. Language of survey Response rate was 85%. 70% respondents were male, aged between 25 and 45 years, mostly having more than 5 years of experience.

A closed-ended questionnaire is used as research instrument in current study using 5-points likert scale. Organizational Culture was measured using Organizational Culture Assessment Instrument (OCAI) and knowledge management was measured by means of the Knowledge Management Assessment Instrument (KMAI) built on the theoretical model of the Competing Value Framework (CVF), a valid tool which is evinced through efficacious outcomes of previous studies mentioned in literature review.

DATA ANALYSIS

Reliability Analysis

	Cronbach's Alpha	N of Items
Organizational Culture	0.903	20
DC	0.672	4
ME	0.702	4
OL	0.776	4
OG	0.805	4
CS	0.830	4
Knowledge Management	0.942	20
CK	0.799	4
OK	0.846	4
SK	0.844	4
DK	0.833	4
AK	0.757	4
Employee Trust	0.758	12

Above table shows the reliability statistics. A total of three different measures have been used to gather data for the study variables. Reliability for all constructs is calculated through Cronbach Alpha. It is a diagnostic measure that estimates the internal consistency of the entire scale. Twenty items were used for the construct of organizational culture which was taken from the Organizational Culture Assessment Instrument (OCAI). The reliability of this construct is 90.3% which is significantly high.

For knowledge management construct twenty items were used for the construct of organizational culture which was taken from the Knowledge Management Assessment Instrument (KMAI). The reliability of this construct is 94.2% which is significantly high. For construct of employee trust twelve items were used from the study of Polat (2007). Reliability of this construct is 75.8% which is considered as good reliability.

Correlation Matrix

		OC	TRUST	KM
OC	Pearson's r	-	0.726	0.653
	p-value	-	<.001	<.001
TRUST	Pearson's r		-	0.792
	p-value		-	<.001
KM	Pearson's r			-
	p-value			-

To measure the strength of the association between two variables, correlation test is used. The value of correlation is known as the Pearson's correlation value. The independent variable for the study which is organizational culture has moderate positive correlation value (0.653) with the dependent variable of the study which is knowledge management. The mediating variable for the study which is employee trust has strong positive correlation value indicated in above table as 0.792 with the dependent variable knowledge management. The Pearson correlation value of mediating variable and independent variable organizational culture is also positive and strong indicated above as 0.726.

Hypothesis Testing

For hypothesis testing mediation analysis was carried out in Jamovi software has been used. Results of mediation analysis and path estimates are given as below.

Mediation Estimates

Effect	Estimate	SE	Z	p	%Mediation
Indirect	0.556	0.0488	11.38	<.001	74.4
Direct	0.192	0.0544	3.52	<.001	25.6
Total	0.747	0.0472	15.84	<.001	100.0

There is significant direct effect of Employee Trust on KM with 25.6 % mediation effect. There is also significant indirect effect of Organizational Culture on KM through Employee Trust with 74.4 % mediation effect. Therefore, evidence of partial mediation of employee trust is found.

Path Estimates

			Estimate	SE	Z	p
OC		TRUST	0.599	0.0309	19.39	<.001
TRUST		KM	0.928	0.0660	14.06	<.001
OC		KM	0.192	0.0544	3.52	<.001

The findings of the study show that organizational culture has a positive effect on knowledge management in an organization. Culture produces an atmosphere for societal contacts and has a main influence on knowledge creation, sharing, and usage. Lastly, culture support conception and implementation of new-fangled knowledge. The result is consistent with the findings of (Choo & Bontis, 2002; Berman-Brown & Woodland, 1999; Delong & Fahey 2000; Lawson 2004; Gupta et al., 2000; Bhatt, 2001; Leidner & Kayworth, 2006; Ajmal & Koskinen, 2008).

Similarly, the study also confirms the hypothesis that organizational culture significantly affects employee trust activities in an organization. The result is consistent with the findings of (Gattiker & Larwood, 1988; Martins et al., 2002; Issa & Haddad, 2008; Morgan & Zeffane, 2003; Bock et al., 2005; Kim & Lee, 2006; and Suppiah & Sandhu, 2011).

It is also evident that employee trust significantly affects knowledge management activities in an organization shown as above estimates and value of correlation. An environment of trust and protection is necessary to reassure invention, investigation and risk taking in order to advance knowledge and use prevailing knowledge. From the knowledge management standpoint, a trusting individual would be more probable to offer valuable knowledge to others as trust enables actual knowledge sharing. The result is dependable with the results of (Lopez et al., 2004; Balu (1964); Nonaka (1994); Dyer & Singh (1998); Kalantzis and Cope, 2003; Renzl, 2008 and Pervaiz, 2016).

The estimates of mediation analysis also show that employee trust mediates the relationship amongst organizational culture and knowledge management.

CONCLUSION AND RECOMMENDATIONS

Knowledge management is an important issue that influenced business performance and competition. From this study of organizational culture to knowledge management, all outcomes show that supportive culture has significant impact on knowledge management in organizations. In this regard employees trust has also found significant in mediating the relationship between organizational culture and knowledge management.

The findings of the research would benefit knowledge management investigators as well as experts to advance an improved understanding of the role of organizational culture and effective application of knowledge management procedure in education sector. In formulating policies and rules and training guides, the present study may offer essential procedures to comprehend the matters of knowledge management and culture.

For that purpose, the organization should form the culture that builds trust among the employees that can work to support knowledge management activities. Employees feel comfortable to exchange knowledge only when they have trust on management, on other colleagues and systems.

REFERENCES

- Alavi, M., Kayworth, T. R., & Leidner, E. L., (2006). An empirical examination of the influence of organizational culture on knowledge management practices. *Journal of Management Information Systems*, 22(3), 191-224.
- Alshekaili and Boerhannoeddin, (2011). Human Capital Approach towards Enhancing Innovation Performance in Omani Industrial Firms: The Role of Knowledge Management Progress in *Business Innovation & Technology Management*, 1, 23-33
- Blau, P.M. (1964). *Exchange and Power in Social life*, New York: John Wiley and Sons
- Cameron, K. S. & Quinn, R.E. (1999). *Diagnosing and changing organizational culture*. Upper
- Chiu, C.M., Hsu, M.H. and Wang, Eric T.G. (2006). Understanding Knowledge Sharing in Virtual Communities: An Integration of Social Capital and Social Cognitive Theories, *Decision Support Systems*, 42(3), 1872-1888.
- Chowdhury, S. (2005). The role of affect-and cognitions-based trust in complex knowledge sharing, *Journal of Managerial Issues* 17(3): 310–326.
- Dirks, K. T. and Ferrin, D. L. (2002). Trust in Leadership: Meta-Analytic Findings and Implications for Research and Practice. *Journal of Applied Psychology*, 87, 611-628
- Gupta. B, Lakshmi S. Iyer, Jay E. Aronson, (2000). Knowledge management: practices and challenges, *Industrial Management & Data Systems*, 100 (1), 17-21.
- Henry, W. (2001). American Higher education in the twenty-first century: Social, political and economic change. *Higher Education Policy*, 14(1), 96-98.
- Issa, R.R.A. and Haddad, J. (2008). Perceptions of the impacts of organizational culture and information technology on knowledge sharing in construction, *Construction Innovation*, 8 (3), 182-201.
- Kuo, Y. L. 2013. Technology readiness as moderator for construction company performance, *Industrial Management & Data Systems* 113(4): 558-572.
- Lawson, S. (2004). Examining the relationship between organizational culture and knowledge management. (Doctoral dissertation, Nova Southeastern University, 2003). *Dissertations Abstracts International*, 64/08, 2975.
- Lee H. & Choi B. (2003). Knowledge management enablers, processes, and organizational performance: An integrative view and empirical examination, *Journal of Management Information Systems*, 20(1): 179–228.
- Lopez, S.P., Peon, J.M.M., Ordas, C.J.V. (2004). Managing knowledge: the link between culture and organizational learning. *Journal of Knowledge Management*, 8(6), 93-104.
- Morgan, D. and Zeffane, R. (2003). Employee involvement, organizational change and trust in management, *International Journal of Human Resource Management*, 4(1), 55-75.
- Nonaka, I., and Takeuchi, H., (1996). The Theory of Organizational Knowledge Creation. *International Journal of Technology Management*, 11(7/8).
- Ogbonna, E. & Harris, L. (1998). Managing organizational culture: Compliance or genuine change? *British Journal of Management*, 9, 273-288.
- Pervaiz, U.; Imran, M.; Arshad, Q.; Haq, R.; Khan, M. K. (2016). Human resource practices and knowledge sharing: the moderating role of trust, *International Journal of Organizational Leadership* 5(1): 15–23.
- Pinjani, P.; Palvia, P. (2013). Trust and knowledge sharing in diverse global virtual teams, *Information*

- & Management 50(4): 144-153.
- Polat S 2007. Relation between Organizational Justice Perceptions, Organizational Trust Levels and Organizational Citizenship Behaviors of Secondary Education Teachers. Doctoral Dissertation, Unpublished. Institute of Social Sciences. Kocaeli: Kocaeli University.
- Renzl, B. (2008). Trust in management and knowledge sharing: the mediating effects of fear and knowledge documentation, *The International Journal of Management Science* 36(2): 206-220.
- Rivera-Vazquez, J. C., Ortiz-Fournier, L. V., and Flores, F. R. (2009). Overcoming culture barriers for innovation and knowledge sharing, *Journal of knowledge management*. 13(5), 257-270. Saddle River, NJ: Prentice-Hall.
- Serenko, A.; Serenko, A.; Bontis, N.; Bontis, N. (2016). Negotiate, reciprocate, or cooperate? The impact of exchange modes on inter-employee knowledge sharing, *Journal of Knowledge Management* 20(4): 687-712.
- Stuermer, M.; Abu-Tayeh, G.; Myrach, T. (2016). Digital sustainability: basic conditions for sustainable digital artifacts and their ecosystems, *Sustainability Science* 12(2): 247–262.
- Tuan, L.T. (2012). What trust grows through upward influence? *Asia-Pacific Journal of Business Administration*, 4(2), 158-181.
- Whitener, E. M., Brodt, S. E., Korsgaard, M. A. & Werner, J. M. (1998). Managers as initiators of trust: An exchange relationship framework for understanding managerial trustworthy behaviour. *Academy of Management Review*, 23, 513-530.
- Zack M., McKeen J. & Singh S. (2009). Knowledge management and organizational performance: an exploratory analysis, *Journal of Knowledge Management*, 13(6): 392-409
- Zaied A. (2012). An Integrated Knowledge Management Capabilities Framework for Assessing Organizational Performance, *International Journal of Information Technology and Computer Science*, (4)2: 1-10.