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An Empirical Study of Impact of Organizational Culture on Knowledge Management Practices

M. Shakeel Ahmed[1], Muhammad Zohaib Irshad[2], Muhammad Asim Nawaz[3]

[1] Lecturer College of Commerce G.C. University Faisalabad, shakeelahmed196fsd@gmail.com
[2] Lecturer College of Commerce G.C. University Faisalabad
[3] Assistant professor Lyallpur business school G.C. University Faisalabad

Abstract
This study aims to examine the impact of corporate culture on knowledge management methods, including knowledge acquisition, knowledge conversion, knowledge application, and knowledge preservation. Organizational culture is the fundamental source of inspiration for personnel to behave in some desired way. Knowledge management practices in absence of supportive culture will fail to achieve desired outcomes because technology cannot replace human being. A questionnaire is designed on the basis of construct adopted from existing literature. Data is collected from five organizations with response rate of 63% as only 256 respondents replied out of 410. Data analysis is done through SPSS and AMOS. The outcomes of this study indicate that organizational culture significantly enhances knowledge management activities, including knowledge collection, conversion, application, and preservation. This study will enhance both theoretical and practical understanding by elucidating the influence of organizational culture on knowledge management techniques inside organizations. It will also contribute theoretically in existing literature. This study has also some future implications as improved knowledge management in an organization can results in better organizational performance and future studies can be conducted in this regard by considering other organizational factors. Similarly mediating effect in this relationship can also be studied.

Keywords: Knowledge Management; Innovation; Organizational Culture

Introduction
Culture is an essential prerequisite and necessity for knowledge management. Knowledge management activities are influenced by company culture and social norms. Culture is defined as a "distinct resource accumulated over time that can serve as a competitive advantage if it is unique, valuable, and challenging to replicate" (Barney, 1986). Organizational culture can be defined as: “Comprising of conduct, activity, what's more values that individuals in an association are relied upon to take after. However organizational culture as an idea is acknowledged to be exceptionally key component of overseeing organizational change and renewal. Subsequently organizational culture is a kind of glue that bonds the social structure of an association together. It is exceptionally significant in light of the fact that associations are at last social developments and without social incorporation, they might stop to exist” (Katz, 1978). Organizational culture refers to a collection of norms, processes, ideas, and fundamental values that guide and influence the thoughts and behaviors of its members towards each other and the organization's stakeholders (Cadorin, et al. 2017).

Organization Culture Dimensions
Organizational culture dimensions used in this study has three dimensions and is discussed as:

Trust

Trust is defined as "the readiness of a party to be vulnerable" (Mayer, 1995). Trust among employees within the same department and across different departments is a fundamental aspect of organizational culture. Open communication and knowledge sharing necessitate trust among employees (Gruenfeld, 1996). One of the biggest obstacles to information transmission amongst employees is a lack of trust (Szuianski, 1996). By lowering employee anxiety, trust promotes knowledge generation (Roberts, 2000). Individuals make decisions on knowledge sharing based on mutual trust (Huemer, 1998). A team's performance is significantly impacted by member trust (Madhavan, 1998). Teams from various areas within an organization need trust since information hoarding brought on by a lack of trust may be detrimental to knowledge sharing, learning, and replication (Hedlund, 1994).

Reward Systems

As previously mentioned, employees require a strong motivation to share information. It is unrealistic to assume that organizations can establish an information-sharing culture where employees will willingly share their expertise without considering the potential benefits or drawbacks (Syed-Ikhsan, 2004). Managers should encourage collaboration among employees by incentivizing the exchange of best practices and ideas, which can result in monetary benefits for the facilitators. This endeavor tries to conceptualize and provide a framework and funding for knowledge transfer and banker-to-banker interaction. The remuneration packages should not be based on individualistic approaches, but rather on the performance of the team (Goh, 2002). Thus, Therefore, we can observe that the benefits of social exchange extend beyond the use of numerical values, as it fosters personal commitment, gratitude, and trust. edge sharing can build a friendly relationship that brings out the extrinsic motivation associated with reciprocity (Bock, 2005).

Management / Leadership Support

Management is essential to the efficacy of knowledge management (Horak, 2001). Management's support and dedication are crucial for the success of knowledge management (Sharp, 2003). Management exemplifies the desired conduct by serving as a role model. Management should proactively disseminate their skills to promote the acquisition of novel ideas and information. They should demonstrate their behavior by deeds rather than simply words. Management may incentivize workers to participate in talks regarding their expertise and engage in knowledge management activities. A leader must possess supplementary skills for efficient knowledge management, including the ability to oversee change, articulate the significance of knowledge management to personnel, maintain their motivation, and foster a culture that encourages knowledge generation and dissemination. Top management should be maintained and executed effectively. Support may be transformed into specialized efforts that enhance the efficacy of knowledge management (Storey, 2000).

Knowledge Management

Knowledge management is presently extensively used in several countries (Asian Productivity Organization, 2005). In Pakistan, "knowledge management" is an emerging idea and is presently in the initial phases of application. A restricted number of businesses have deliberately included "knowledge management" into their structures. Moreover, substantial multinational corporations, regional organizations, research and development institutes, financial institutions, and governmental agencies participate in "knowledge management." However, the concept remains limited to a select few data framework specialists within these organizations. Knowledge encompasses essential aspects such as comprehensiveness, modifiability, and varying qualities (Turner, 2006). Each firm possesses a unique combination of the three perspectives, allowing for its own distinct focal point of learning. It is crucial for a firm to effectively manage its unique

knowledge. The proficiency of a firm in utilizing knowledge indicates its capability to leverage acquired insights for the development of innovative and enhanced products (Jantunen, 2005).

Figure 1: Constructs of Knowledge Management

Knowledge Acquisition:

The procedures of knowledge management pertaining to the acquisition of knowledge are referred to as Knowledge Acquisition. The phrases obtain, pursue, produce, create, capture, and collaborate are frequently employed to characterize the acquisition process. The generation of new knowledge through the application of existing knowledge is a crucial component of knowledge acquisition and serves as a catalyst for innovation. The practice encompasses the elements of approachability and the accumulation of knowledge. This outlines the process by which knowledge is acquired from various internal and external sources within the organization (Gold, 2001).

Knowledge Conversion:

Knowledge management processes that emphasize conversion and results to improve the applicability of current knowledge. The processes of knowledge conversion involve a company's capacity to consolidate (Davenport, 1998), integrate (Grant, 1996), combine, structure, coordinate (Sanchez, 1996), and disseminate information (Zander, 1995). The knowledge obtained from many internal and external sources is rendered ineffective until transformed into a practical and relevant manner. This will enhance productivity and operational processes (Smith, 2010).

Knowledge Application:

Knowledge application processes are designed for the practical utilization of knowledge. The literature lacks substantial discussion regarding the outcomes of knowledge application. There is an assumption concerning the use of this knowledge, although there is no proof of it. In fact, we assume that an organization capable of creating knowledge will apply it (Nonaka, 1995). The issues of knowledge application include the storage, retrieval, application, contribution, and sharing of stored knowledge (Almeida, 1996). This crucial step is integral to the knowledge management processes. This implies that the efficiency with which an organization utilizes its individual and management knowledge determines its value. The use of knowledge allows businesses to reliably transform their operational capabilities into measurable outcomes (Zaim, 2007).

Knowledge Protection

Knowledge may be preserved inside the organization's memory in several media, including printed documents, systematically arranged electronic data, classified human expertise in specialized systems, and recorded organizational procedures. It includes non-physical techniques and systems beyond the organization (Zaim, 2007). Activities designed to safeguard against information theft and unlawful utilization inside an organization are classified as knowledge protection activities.

To maintain a competitive advantage, it is crucial to protect organizational knowledge. The literature study exhibits inadequate focus on knowledge protection, akin to application processes. It is often believed that knowledge may be protected by patents, copyrights, trademarks, and other systems. Nonetheless, not all information may be restricted by the confines of property and copyright legislation (Porter-Libeskind, 1996).

Organizational Culture Impact on Knowledge Management

Organizations engaged in knowledge management operations have several problems. Organizational dynamics, particularly cultural factors, can significantly influence the knowledge management requirements and practices inside an organization (Alavi, 2006). Each organization have a unique culture, cultivated over time, which manifests its originality in both overt and subtle dimensions. A prominent facet of culture is demonstrated via the beliefs, philosophy, and mission of an organization. The unseen component is defined by implicit ideals that guide employees' perceptions and directions inside a company (McDermott, 2001). To timely respond to fast changes of market and client interest, firms are urged to foster an information supported culture. It is generally perceived that information isn't just a significant asset of a firm however it likewise fills in as an essential wellspring of upper hands (Gunsel, et al. 2011; Lee and Choi 2003). An effective information the board system permits associations to plan and defeat natural difficulties and changes(Kafashpoor, et al. 2013) . As data organization is acquiring significance in current administrative practices, a large number and researchers have focused broad examinations to distinguish its aspects. Essentially, information the executives incorporates practices of distinguishing proof, obtaining, creation, capacity, sharing and utilization of information by people and gatherings inside an association(Chan, et al. 2011; Liao and Wu 2010; Nijssen, et al. 2012). As far as the organizational abilities viewpoints, information the board is made out of innovation, design and culture alongside information process engineering of obtaining, change, and protection (Liao, et al. 2012).Those elements are viewed as fundamental for an association's preconditions for a compelling information the executives procedure. As referenced by (Cui, et al. 2005) information the executives procedures comprise of three interrelated processes: information securing, information change and information application. Organizations that rely on knowledge work teams must prioritize a strong commitment, trust, and collaboration among their members. Knowledge workers appreciate the advantages of being part of skilled teams. Therefore, emphasis should be placed on culture rather than solely on technology for effective knowledge management (Pyoria, 2007). The primary challenge is organizational culture (Gold, 2001). The significance of organizational culture in the effective management of knowledge and organizational learning cannot be overstated, as it shapes the norms, ethics, philosophies, and work approaches that can either foster or hinder the creation and sharing of knowledge (Janz, 2003). Culture plays a crucial role in the knowledge management process and aids in the development of the organization's tactical agenda. It significantly influences various organizational aspects, including administrative style, human resource management, and structural design. Promotion should focus on facilitating the implementation of knowledge management, which will ultimately foster a unified organizational vision, enhance collaboration on shared projects, support independent decision-making, and encourage continuous improvement (Gold, 2001).The culture of an organization encompasses various elements such as principles, philosophies, and operational structures, which can either facilitate or hinder knowledge management practices associated with knowledge acquisition, creation, and transfer (Janz, 2003). Organizational culture is viewed important as a key to success in the enhancement of knowledge management and learning in organizations. It outlines beliefs, philosophies, and operational frameworks that can either promote or hinder the processes of knowledge acquisition, conversion, application, protection, and management (Janz, 2003). Culture defines not only the value of knowledge but also the knowledge that should be preserved within the organization to maintain a continuous innovative edge (Long, 1997). An

organizational culture characterized by strict control and command often limits opportunities for knowledge creation. To foster knowledge creation, it is essential to maintain a continuous flow of thoughts, information, and discussions among staff. Therefore, establishing an appropriate culture that encourages individuals to generate and share knowledge within an organization is crucial (Holsapple, 2000). Organizational culture ought to promote experimentation and the exchange of ideas. Organizations should prioritize learning and knowledge management, which can be fostered through a culture of openness and collaboration. This involves motivating and engaging individuals while integrating knowledge management practices into everyday business operations, systems, and structures (Cormican, 2003). According to Martin (2000), Amoco exemplifies a knowledge culture by offering its staff both the time and the essential support for effective knowledge management. Designated time slots are established daily for the acquisition and application of knowledge management skills. Amoco additionally provides support for these initiatives through technical tools. Coaching is also offered to enhance confidence and proficiency in selected techniques. It has been established that the development of knowledge management is significantly influenced by organizational culture. Businesses' capacity to adopt open innovation is impacted by the effectiveness of their management of external information, which is determined by their interactions with relevant stakeholders (Zhu, et al. 2019). According to some earlier research, organizational culture serves as the cornerstone of knowledge efforts because it can motivate members to acquire and disseminate new knowledge (Hofstede 2015; Zehir, et al. 2011). Organizational culture plays an important role in supporting an efficient knowledge management process, which includes the generation, sharing, and application of both new and old information, as stated by (Kayworth and Leidner 2004).
So, on the basis of existing literature following hypothesis are postulated

H-1: Organizational culture has a positive impact on knowledge acquisition process.
H-2: Organizational culture has a positive impact on knowledge conversion process.
H-3: Organizational culture has a positive impact on knowledge application process.
H-4: Organizational culture has a positive impact on knowledge protection process.

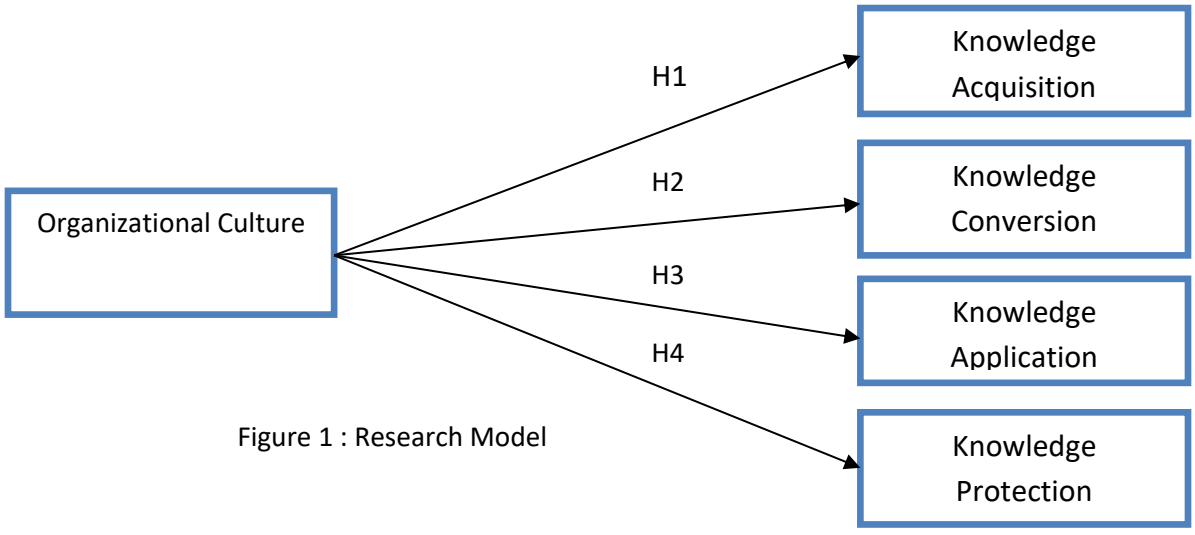

Figure 1 : Research Model

Research Methodology

This study utilizes a quantitative research technique for data analysis. Quantitative research employs variables, hypotheses, units of analysis, and investigates causal links. In overall of quantitative research, variable stands for the chief idea. A correlation can be made between an independent variable on the one hand and a dependent variable on the other. A quantitative

researcher formulates hypotheses before data gathering. Measurement protocols are instituted to link ideas and data.

Results

Data is collected through self-administrated questionnaires which are distributed to 410 respondents. The response rate of these questionnaires is 63% for this study as only 256 respondents replied. 192 respondents are male as gender while only 64 female respondents replied. So, 75% respondents are male while 25% respondents are female. Major reason behind this male to female ratio is employment percentage of both genders because Male are more employed than females on workplace. Figure 3 shows the gender wise detail of respondents.

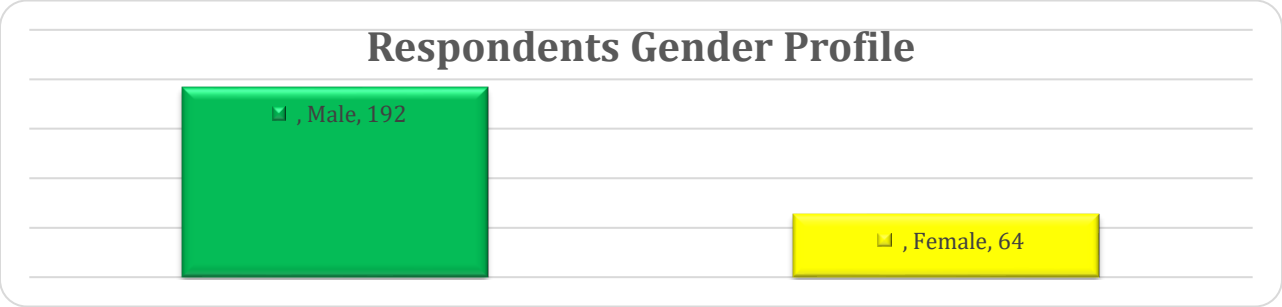

Figure 3: Respondents Gender Profile

Total 111 respondents belong to the age slab of 26 to 30 years, 47 respondents belong to age slab of 21-25 years and 31 to 35 years, 21 respondents belong to 36 to 40 years, 12 respondents belong to 41 to 45 years, 9 respondents belong to 46 to 50 years, 6 respondents belong to 51-55 years while 3 respondents belong to 56 to 60 years age. Reason behind more respondents with low age is that in recent years after privatization of banking sector under change management program most of the old employees were replaced with new one. Figure 4 shows the age wise respondents' detail for this study.

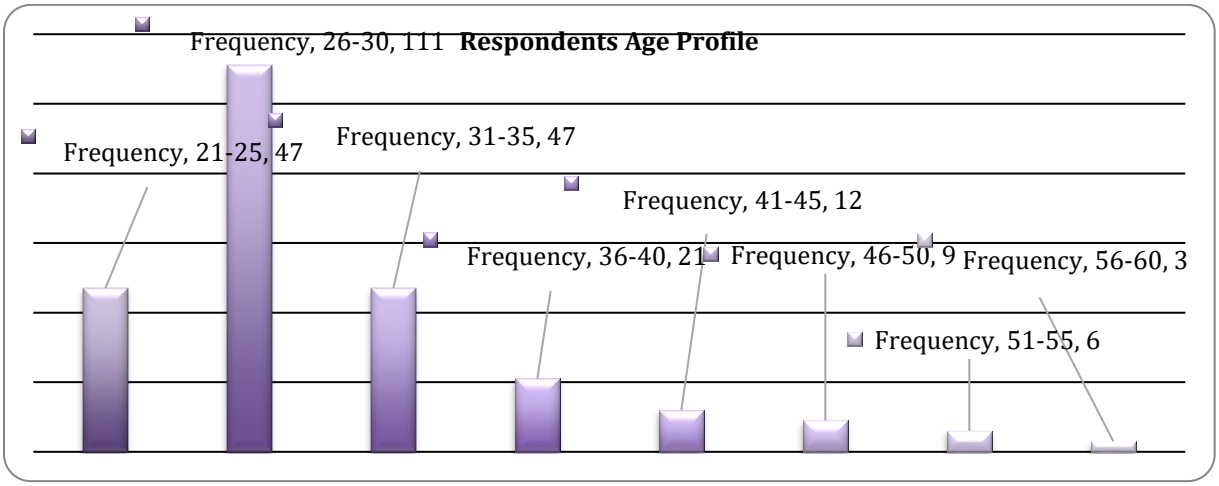

Figure 4: Respondents Age Profile

There are 138 respondents with 1 to 5 years of experience, 64 with 6 to 10 years, 22 with 11 to 15 years, 15 with 16 to 20 years, 12 with 21 to 25 years, 2 with 26 to 30 years, and 3 with 36 to 40 years of experience. Major reason of respondents with low profile in high number is that most of the banks have replaced their existing experienced employees with young energetic employees under change management program. Figure 5 shows the graphical representation of experience wise detail of respondents for this study.

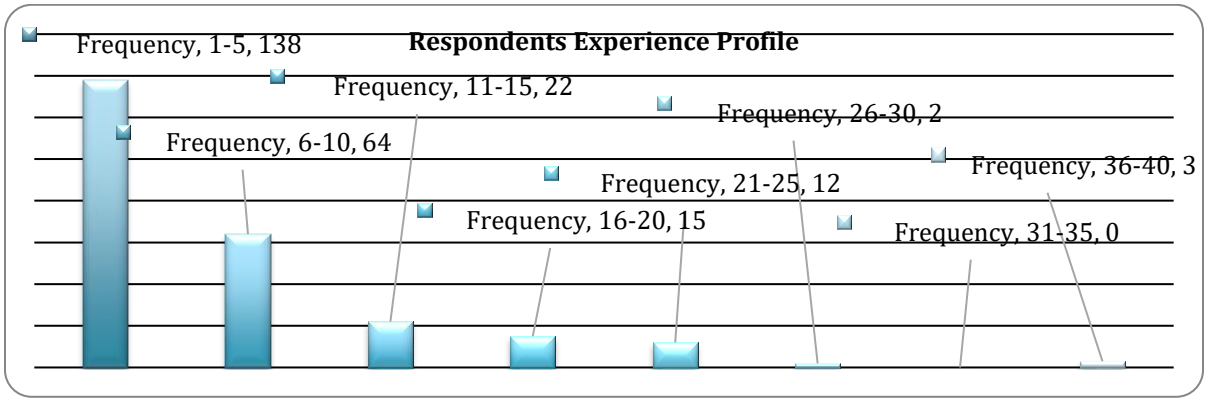

Figure 5: Respondents Experience Profile

Reliability

Validity and dependability are critical elements in evaluating an estimation tool. Instruments may include standardized information, competency or aptitude assessments, clinical simulations, or survey inquiries. Instruments can assess concepts, psychological competencies, or emotional traits. Validity denotes the extent to which an instrument accurately measures its intended purpose. Reliability denotes an instrument's ability to produce consistent measurements (Tavakol et al., 2008). The reliability of an instrument is closely linked to its validity. A tool is considered valid only when it demonstrates reliability. The reliability of an instrument is independent of its validity (Nunnally and Bernstein, 1994). Cronbach's alpha is utilized to assess the reliability of the data. Alpha, introduced by Lee Cronbach in 1951, functions as a measure of the internal consistency of a test or scale, expressed as a value between 0 and 1. Internal consistency is the extent to which all items in a test assess the same concept, whereas construct pertains to the elements encompassed inside the examination. Ensuring internal consistency is essential prior to employing a test for assessment or evaluation to confirm its validity. Moreover, the evaluation of reliability signifies the extent of estimation error in a test. As the assessment of reliability progresses, the fraction of a test score due to error will decrease (Nunnally and Bernstein, 1994). When the items in a test exhibit correlation, the alpha value rises. A high alpha coefficient does not always indicate strong internal consistency. This is due to the impact of test length on alpha. If the test period is very short, the alpha coefficient decreases. Alpha may range from 0.7 to 0.95 (Bland J, 1997; Nunnally, 1994; Streiner, 2003). To enhance alpha, it is essential to incorporate more relevant elements that evaluate the same concept into the assessment (Streiner, 2003). George and Mallery (2003, p. 231) contend that an alpha value must meet or above a designated threshold.9 is outstanding, fulfilling or beyond expectations.8 is allowed, equal to or greater than.7 is acceptable, meeting or surpassing the specified number.Six is open to scrutiny, being equal to or exceeding. Five is inadequate and not larger than or equal to. The digit 5 is inadmissible. The value of reliability coefficient for constructs of knowledge management is 0.946 and for constructs of organizational culture is 0.903. Both values are acceptable as shown in Table 1

Table 1: Reliability Statistics

Scale	Cronbach's Alpha	No. of Items
Total Scale	.962	25
Knowledge Management	.946	16
Organizational Culture	.903	9

Correlation

Co-efficient of correlations indicate precisely in terms of quantity the nature and the degree of the direct relation between two variables. Pearson correlation coefficients (r) reachable are from – 1. It shows the availability of a positive or a negative relationship. By only looking at the absolute value of the coefficient estimate, we can gain information about the strength of coupling. A correlation of 1 or -1 signifies that the value of one variable may be accurately predicted by the value of the other variable. A correlation of 0 signifies the absence of a link between the two variables. Comprehending the quality of one variable does not facilitate the prediction of the quality of the second variable (Pallant, 2005). The correlation coefficient (r) signifies the extent of linear linkage between the two variables or the strength of their relationship. By straight, we denote the extent of linearity demonstrated by the line when depicted on a graph, elucidating the characteristics of their connection. The significance of analyzing linear connections stems from the necessity for the measured variables to be continuous (i.e., interval or ratio), facilitating the theoretical establishment of a straight line. Only interval and ratio data, which allow for the calculation of means and standard deviations, may be utilized to assess linearity. The correlation coefficient (r) varies from 1.0 to -1.0. When (r) equals 1 or -1, it signifies that the data is perfectly aligned in a straight line. A positive correlation is present when r is positive. A positive correlation signifies that a rise in one variable leads to an increase in the value of another variable. A negative value of r signifies an inverse connection, indicating that a rise in the quality of one variable corresponds with a reduction in the value of the other variable. Conversely, when r equals 0, it indicates the absence of a link between the two variables. The values of r, spanning from 0 to 1, exemplify the distinct attributes of the correlation between the two variables. If r is below 0.33, it denotes a weak association; if r is between 0.34 and 0.66, it reflects a moderate link; and if r is from 0.67 to 0.99, it suggests a strong relationship (Somekh and Lewin, 2005, p. 230). Table 2 illustrates the association between the constructs of knowledge management and organizational culture. Organizational culture has positive strong correlation with knowledge acquisition followed by its relation with Knowledge application. All values of correlations show a positive strong relationship with organizational culture which is statistically significant.

Table 2: Pearson Correlation

Pearson Correlation					
Constructs	**Knowledge Acquisition**	**Knowledge Conversion**	**Knowledge Application**	**Knowledge Protection**	**Organizational Culture**
Knowledge Acquisition	**1**				
Knowledge Conversion	.773**	**1**			
Knowledge Application	.833**	.711**	**1**		
Knowledge Protection	.762**	.670**	.743**	**1**	
Organizational Culture	.859**	.712**	.766**	.763**	**1**

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

Model Fit Test

Model fit denotes the efficacy with which a model forecasts or represents its anticipated results (Barrett, 2007). Six criteria were utilized to evaluate the model's fit. The initial criteria is the ratio of chi-square to degrees of freedom. A chi-square to degrees of freedom ratio below 3 is regarded as an exceptional fit to the data. The second and third criterion are the goodness of fit index (GFI) and the adjusted goodness of fit index (AGFI), both of which must surpass 0.9. The fourth criteria is the comparative fit index (CFI), which must exceed 0.95. The fifth criteria is the root mean

square residual (RMR), with a lower value indicating a superior fit; an RMR value under 0.05 denotes a tight fit. The ultimate criteria are the root mean square error of approximation (RMSEA), with an acceptable threshold being below 0.08 (Lee, 2010). The fitness of proposed model is made through AMOS. Table 3 shows the values of different Goodness-of Fit Measures. It is clear from the below table that all value of GOF measures is within acceptable rage as per criteria laid down by previous researches.

Table 3: Model Fitness

Goodness-of-Fit (GOF) Measure	Conceptual Model	Criterion	Reference
χ2/degree of freedom	2.841	<=3	Hair et. al, 2006
GFI	.97	>0.8	Etezadi-Amoli & Farhoomand, 1996
AGFI	.925	>0.8	Etezadi-Amoli & Farhoomand, 1996
CFI	.990	>0.95	Hair et. al, 2006
RMR	.019	<0.05	Hair et. al, 2006
RMSEA	.079	<0.08	Hair et. al, 2006

Path Analysis

Correlation analysis does not test for causality between variables; thus, to test for this, route analysis is used in the hypothetical model at R of .811. Proposed for use in large-scale surveys, path analysis is a quantitative method that defines and studies the connections between variables within a model, serving as a simplified form of structural equation modeling. The assessment approach for analyzing the theoretical model developed from a sequence of regression studies, including all predictive variables, may be executed within the regression model simultaneously (Huang, 2007). Figure 6 illustrates the path analysis for the research variables, indicating that organizational culture exerts a strong positive influence on Knowledge Acquisition, Knowledge Conversion, Knowledge Application, and Knowledge Protection. As the value of β for these relationships are 0.840, 0.665, 0.771 and 0.777 respectively. So, hypothesis 1, 2, 3, 4 are supported as values of β are statistically significant (p<0.001).

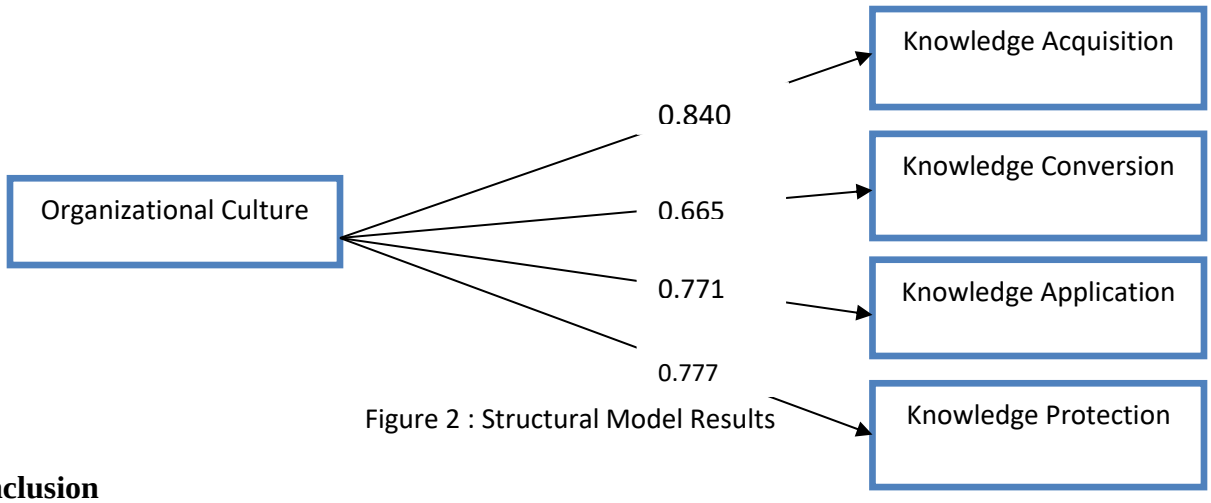

Figure 2 : Structural Model Results

Conclusion

Organizational culture profoundly influences knowledge management inside a company. Knowledge-based enterprises should prioritize human interactions above technology, as technology can be acquired or replicated, however human expertise and skill must be developed through "knowledge management." Committed and motivated staff, along with current expertise, are a significant advantage for any firm. In an organization “knowledge management” practices can be improved through improved organizational culture. In present study results revealed that organizational culture has significant positive impact on “knowledge management” constructs.

Present study has also contributed both managerially and theoretically as it will help organizations to study the impact of organizational culture on "knowledge management" activities in an organization and also adds in existing literature. Similarly, present study has some future implications as improved "knowledge management" in an organization can results in better organizational performance and future studies can be conducted in this regard. Similarly mediating effect in this relationship can also be studied.

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