

Explore the relationship between Transformational Leadership, Social Interaction and Knowledge Management among Banking Sector of Pakistan

Raza Hussain Lashari^{1*}, Aiza Hussain Rana²
 Management Sciences Department, Lahore Garrison University (Pakistan)^{1&2}
 razahussain10312@gmail.com¹
 aizahussainrana@lgu.edu.pk²

*Corresponding author

Abstract- *The intention of current empirical research is to explore the relationship between transformational leadership, social interaction and knowledge management among banking sector of Pakistan. The said sector is selected as population of the research. With the help of simple random sampling, different branches of public banks and private banks are selected as a sample. 270 questionnaires were circulated to top level and middle level managers. 230 questionnaires were filled by employee and used for analysis. The overall response rate was 85%. Different statistical methods i.e. Reliability analysis, Pearson's correlation analysis and multiple regression analysis are applied on collected data. The results of Person's correlation analysis shows that there is positive relationship between transformational leadership, social interaction, knowledge management and its dimensions i.e. knowledge sharing and knowledge application. Moreover, regression analysis's results explains that social interaction is strong predictor of knowledge management as compare to transformational leadership. From the managerial viewpoint, the results give rational direction to banking sector of Pakistan to understand the significance of knowledge and its management as well.*

Key words: *Transformational leadership; Social interaction; Knowledge management; Knowledge sharing; Knowledge application and Banking Sector Pakistan*

1. INTRODUCTION

Knowledge is the key source of competitive edge for organizations (Spender & Grant, 1996[49]; Chen, 2004[14]; Matusik & Hill, 1998)[35]. Its management is also considered as an important source of competitive advantage that can positively influence the organization's effectiveness (Dutta, 1997[23]; Nonaka & Takeuchi, 1995[37]; Drucker, 1993)[21]. Now organizations are moving towards knowledge based economy rather than industrial economy (Danish, et al., 2014)[19]. To achieve superior and desired outcomes, effective organizations continuously manage and absorb knowledge assets into their functioning activities (Teece, 1998[54]; Droge, et al., 2003)[20]. Knowledge is a main resource of any organization which is embedded in human's mind (Malhotra, 1997)[34]. According to Baker, et al., (1997)[5] knowledge is a set of information, abilities, expertise and practices that are used by the individuals to resolve different issues of the organization. The approach in which organizations create, use, apply, share and store knowledge is known as knowledge management (Probst, et al., 1998).

Leadership is a key antecedent of knowledge management that leads to the success of an organization (Tienne, et al., 2004)[55]. In this study researchers explores the relationship between transformational leadership and knowledge management (KM). According to Burns, (1978)[11] Transformational leadership (TL) is a process in which followers and leaders develop superior level of

motivation and morale by mutual relationship. There are many styles of leadership but TL enhances level of KM, improves the process of KM and implements KM in any organization (Noruzi, et al., 2013)[38]. Furthermore, transformational leadership style has positive impact on knowledge management (Bryant, 2003[10]; Crawford, 2005)[17]. The growth of banking sector heavily depends on how well leaders understand the objective of organization, need of the market, how effectively they share as well as apply knowledge to the employee of an organization and how successfully the employees deliver this knowledge to their customers as well (Piri & Asefzadeh, 2006[41]; Prodromos & Vraimaki, 2009)[43]. So, it is the essential effort of leaders to develop adequate networks like teams and communities in order to have efficient knowledge management activities within the organization (Cleveland, 1985)[16].

Social interaction (SI) refers the extent to which organizational members interact with each other in terms of trust, communication, and coordination (Chen & Huang, 2007)[15]. For knowledge sharing and knowledge application, social interaction is considered important medium for organization's members (Singh, 2005)[47]; Bartol & Srivastava, 2002[6]; Levin & Cross, 2004)[31]. The formation of social interaction network is compulsory for organization's employees because it raises variety of knowledge that is required for particular task and timely integrates it to organization's boundaries (McGrath, 2001[36]; Szulanski, 1996)[52]. Moreover, social

interaction phenomena i.e. trust, communication and coordination improves knowledge management's structure in modern banking sector (Chatzoglou, et al., 2009)[13].

Knowledge management is widely practiced in developing and developed countries which are in various stages of its application (APO, 2005). According to Akhavan et al., (2005)[1] many organization fail due to lack of proper knowledge management system and they further quoted the failure rate as 50% but this rate of failure can be increased if organizations do not introduce effective and efficient knowledge management system. A study conducted among the top 40 management consultant organizations of US, which elaborated that more than 60% of them identified knowledge management as an important success factor for their businesses (Ofek & Saravay, 2001)[40]. In Pakistan, knowledge management is a new concept and it is at the initial stages of its implementation (Tayyab, 2009)[53]. It is evident from the vision 2030, Pakistan will make knowledge based economy by promoting innovative culture and knowledge sharing society for efficient and effective utilization of the knowledge resources (GoP, 2007)[26]. In modern banking industry, bankers not only offer mortgage, saving, investment services to their customers but also provide them up-dated information and knowledge for achieving competitive edge in market (Li, 2012)[32]. In this regard, transformational leadership and social interaction plays significant role in knowledge and its management (Chatzoglou, et al., 2009[13]; Noruzi, et al., 2013)[38].

So, the objective of current study is to examine the role of transformational leadership, social interaction in knowledge management within banking sector of Pakistan. The research explores the impact of knowledge management in Pakistan's banking sector because this sector is playing crucial role in country's economy (Shah, et al., 2012b)[46]. According to SBP, (2015) the growth rate of Pakistan's banking sector is 16.8% which is better than all other service sectors. Knowledge management is vital to banking sector as it is for any other kind of organization (Li, 2012)[32].

2. LITERATURE REVIEW

2.1 Knowledge Management (KM)

KM is a way to improve procedures and practices, develop and enhance employee abilities, improve the learning curve related with new employees or new tasks and customer service as well (Roman, 2004)[45]. KM is a process that control the individual and mutual knowledge within firm to avail competitive benefit (Carlsson, 2003)[12]. KM is a planned action which ensure that to cope with *rapidly changing environment*; organizations have sufficient knowledge to manage different situations (Alvesson & Karreman, 2001)[3]. In this study, researchers focus on knowledge sharing and knowledge application which are dimensions of KM.

2.1.1 Knowledge Sharing (KS)

The process in which individuals and groups deliver knowledge to solve difficult problems within short period of time is called knowledge sharing (Cross & Sproull, 2004)[18]. Without sharing, it is difficult for knowledge to be delivered to individuals or team (Quink, 2008)[44].

2.1.2 Knowledge Application (KA)

The competitive advantage of the organization depends upon knowledge application as compare to knowledge itself because it is main feature of "knowledge based theory" of the organization (Grant, 1996b[27]; Alavi & Leidner, 2001)[2].

2.2 Transformational Leadership (TL)

According to Burns, (1978)[11] TL is a process in which leaders and followers help each other to develop higher level of motivation and morale. There are many styles of leadership but TL enhances level of KM, improves the process of KM and implements KM in any organization (Noruzi, et al., 2013)[38]. There are four dimension of TL i.e. Idealized Influence or Charismatic leadership, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and considered as "the Four I's" (Bass & Avolio, 1994)[7]. But in current study, researchers selected one more dimension that is risk acceptance (Xiaoxia & Jing, 2006)[57].

2.2.1 Idealized Influence /Charisma (II)

By using charismatic or idealized influence transformational leaders impress their subordinates. Moreover, such type of leaders, in the time of difficulty listen and solve problems of their workers. These leaders have proficiencies and enthusiasm to solve the problems of employees (Bass & Riggio, 2006)[8].

2.2.2 Inspirational Motivation (IM)

Inspirational motivation is a process in which leaders motivate and encourage employees by providing them meaningful and challenging task. For envision of optimistic future, leaders encourage their employees and promote team spirit, enthusiasm, and optimism among themselves (Bass, et al., 2003)[9].

2.2.3 Intellectual Stimulation (IS)

In this behavior, leaders encourage employees to think in creative, innovative and effective way. They involve them in decision making process and also find solution of problems that influence their social, political, environmental, economic wellbeing (Nwagbara, 2010)[39].

2.2.4 Individualized Consideration (IC)

In this trait of TL, leaders act as a mentor and provide special attention to each employee's need. Leaders individually guide and support employees to find their potential skills and act accordingly (Bass & Riggio, 2006)[8].

2.2.5 Risk Acceptance (RA)

Risk acceptance is a characteristics of leader that is now included in transformational leadership’s dimensions because transformational leaders accept risk positively and view risk as opportunity rather than threat. In this characteristic, leaders show their risk acceptance attitude when they face technological and organizational problems (Xiaoxia & Jing, 2006)[57].

2.3 Social Interaction

The extent in which organizational members interact with each other in terms of communication, trust and coordination is called social interaction (Chen & Huang, 2007)[15]. According to Chen & Huang, (2007)[15] there are three dimensions of SI:

2.3.1 Trust

Trust is a mutual understanding between employees and leaders for sharing and apply knowledge within the organization (Bartol & Srivastava, 2002)[6]. Common understanding and trusty behavior among individuals and groups allow organizations to promote knowledge sharing and knowledge application behaviors within the organization with proficiently (Bartol & Srivastava, 2002)[6].

2.3.2 Communication

According to Hoegl, et al., (2003)[28] communication is a process of transforming any kind of knowledge to organization’s members.

2.3.3 Coordination

The degree in which individuals and groups feel that their organizations well integrated and organized is called

coordination (Janz, et al., 1997)[30]. Coordinative behaviors among organizational departments enhance the sharing and application of required knowledge inside the firms (Tsai, 2002[56]; Janz, et al., 1997)[30].

3. RESEARCH METHODS

3.1 Hypothesis

Gelard, et al., (2014)[24] proved that transformational leadership had positive impact on knowledge management. On the basis of this fact current research propose the following hypothesis.

H₁: Transformational leadership plays an important role in knowledge management.

Social interaction had a strong positive impact on knowledge management (Chen & Huang 2007)[15]. On the basis of this fact current research propose the following hypothesis.

H₂: Social interaction puts strong influence on knowledge management.

According to the best of researcher’s knowledge, the below discussed hypotheses are not yet proposed in previous researches. The hypotheses are as follows:

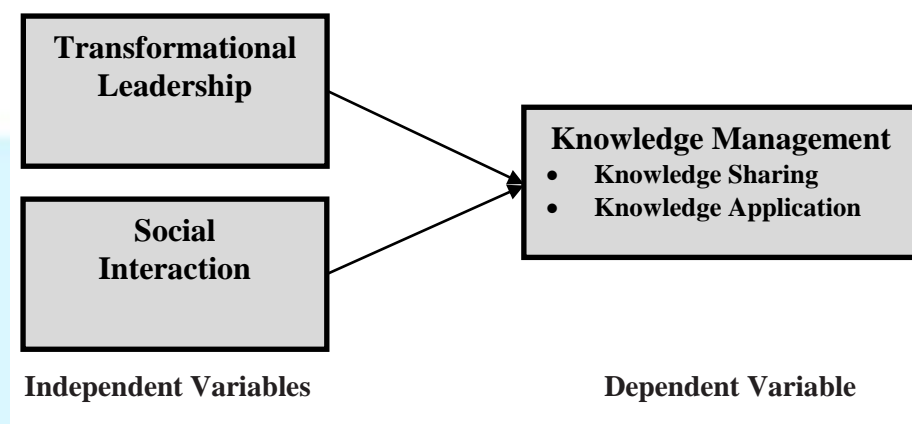
H₃: Transformational leadership plays an important role in knowledge sharing.

H₄: Social interaction strongly influence the knowledge sharing.

H₅: Transformational leadership plays an important role in knowledge application.

H₆: Social interaction strongly influence the knowledge application.

Figure 1: Theoretical Framework



3.2 Research Instrument

The intention of research is to examine the relationship between transformational leadership, social interaction

and knowledge management. To measure the said concept, already established instruments are adopted in this study.

Table 1: Research Instruments

Sr.	Variable Name (Item Scale)	Taken From	Number of Items
1	Transformational Leadership	(Xiaoxia & Jing, 2006)	15
2	Social Interaction	Sivadas & Dwyer, (2000)	7
3	Knowledge Management	Gold, et al., (2001); Lin & Lee, (2005)	5

Total	27
--------------	-----------

7 point Likert scale from strongly disagree to strongly agree is used.

3.3 Population

The current study focuses on the employees of banking sector of Pakistan as population. Due to shortage of time and capital, researchers are selected the banks in the city of Pakistan i.e. Lahore as a sample for data collection.

3.4 Sampling technique and Sample size

With the help of simple random sampling, researchers distributed 270 questionnaires in different branches of banks. According to Israel, (1992)[29] a good sample size i.e., 200-500, is needed for simple and multiple regression which might be performed for more rigorous state impact evaluations. Therefore, 270 questionnaires were circulated among different branches of banks in Lahore, Pakistan. In data collection process, 230 questionnaires were received back and used for final analysis. Data was collected from top level managers and middle level managers. Response rate of return was 85% overall.

4. RESULTS

4.1 Validity and Reliability

Before measuring the behavior of individuals by using variables with different questions, the questions must be

relevant, well formulated and supported to the research. In this research study, 27 statements finalized which measure the attitudes and behavior of individuals. However, the questionnaire on which the current research study is based, was already used and showed high extent of validity.

This study is based upon 230 employees of banks. The top level and middle level employees are involved in current research. The overall **Chronbach's alpha is 0.793** as in SPSS reliability test. George & Mallery, (2003) provide more detailed classes of reliability values (i.e., >0.9 "Excellent", >0.8 "Good", >0.7 "Acceptable", >0.6 "Questionable", >0.5 "Poor", while <0.5 "Unacceptable"). So in this regard the value of Chronbach's alpha is good enough for study.

4.2 Correlation Analysis

In order to examine the relationship between transformational leadership, social interaction knowledge management, knowledge sharing and knowledge application, a bivariate correlation analysis is used. The below table shows the results of correlation analysis:

Table 2: Pearson's correlation analysis

Variables	TL	SI	KM	KS	KA
Transformational Leadership (TL)	1				
Social Interaction (SI)	.541**	1			
Knowledge Management (KM)	.507**	.641**	1		
Knowledge Sharing (KS)	.486**	.606**	.937**	1	
Knowledge Application (KA)	.422**	.545**	.863**	.631**	1

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

The above table shows relationship between variables of current research. The value range from 0.422** to 0.937**, and these are positively associated with each other. The table explains that there is highly significant relationship between TL, SI and KM. Similarly, TL, SI have very highly significant relation with the KS and

there is highly significant relationship between TL, SI and KA.

4.3 Regression Analysis

Regression analysis is a very powerful tool in the field of statistical analysis because it predicts the value of one variable, given the value of another variable, when those variables are related to each other.

Table 3: Regression Analysis

H ₁ : Transformational leadership plays an important role in knowledge management.		Beta β	Std. Error	t- value	p- value
H ₂ : Social interaction puts strong influence on	Constant	1.100	.338	3.251	.001
	TL	.270	.070	3.863	.000
	SI	.571	.065	8.834	.000
	R ²	.447			
	F	91.801			.000

knowledge management.					
H₃: Transformational leadership plays an important role in knowledge sharing.		Beta β	Std. Error	t- value	p- value
	Constant	.895	.382	2.341	.020
	TL	.289	.079	3.665	.000
	SI	.580	.073	7.947	.000
	R²	.402			
H₄: Social interaction strongly influence the knowledge sharing.	F	76.387			.000
H₅: Transformational leadership plays an important role in knowledge application.		Beta β	Std. Error	t- value	p- value
	Constant	1.408	.424	3.324	.001
	TL	.241	.087	2.754	.000
	SI	.557	.081	6.884	.000
	R²	.320			
H₆: Social interaction strongly influence the knowledge application.	F	53.353			.000

***Significant at the 0.01 level. **Significant at the 0.05 level. * Significant at the 0.10 level

The **Value of R²** shows the level of effect of the independent variables on dependent variables. The value of R² should greater than 25% i.e. .25. In all hypotheses, the value of R² is greater than .25 and is equal to .447, .402, .320.

The **Value of F** defines the level of relationship between dependent variables and independent variables. Greater value of F denotes that there is strong relation between these variables. In all hypothesis, the value of F is greater and is equal to 91.801, 76.387 & 53.353. Moreover, in all hypotheses, its significance value is equal to 0.000.

The **Value of t** should be non-zero and in all hypotheses the table indicates that t-value are non-zero.

For the relationship of TL and KM, the value of $\beta=.270$ i.e. that one unit change in transformational leadership may results 27.0% change in knowledge management. In the relationship of SI and KM, the value of $\beta=.571$ i.e. that one unit change in social interaction may results 57.1% change in knowledge management.

For the relationship of TL and KS, the value of $\beta=.289$ i.e. that one unit change in transformational leadership may results 28.9% change in knowledge sharing. Among the relationship of SI and KS, the value of $\beta=.580$ i.e. that one unit change in social interaction may results 58.0% change in knowledge sharing.

In the relationship of TL and KA, the value of $\beta=.241$ i.e. that one unit change in transformational leadership may results 24.1% change in knowledge application. In the relationship of SI and KA, the value of $\beta=.557$ i.e. that one unit change in social interaction may results 55.7% change in knowledge application.

The **value of p** describes the real extent of the relationship. When the value of p is less than 0.10, 0.01 or 0.05, then the hypotheses are accepted. In all relationship i.e transformational leadership, social interaction, knowledge management, knowledge sharing and knowledge application; the value of p for the relationship is equal to 0.000 which is less than 0.01. This means all hypotheses are accepted.

5. DISCUSSION AND CONCLUSION

Knowledge management (KM) is a process that control the individual and mutual knowledge within firm to avail competitive benefit (Carlsson, 2003)[12]. KM is a planned action which ensure that to cope with **rapidly changing environment**; organizations have sufficient knowledge to manage different situations (Alvesson & Karreman, 2001)[3]. In this study, researchers focus on knowledge sharing and knowledge application which are dimensions of KM. This study explore the relationship between transformational leadership, social interaction and knowledge management. The results of study show a positive relationship between the above cited variables.

There are many styles of leadership but TL enhances level of KM, improves the process of KM and implements KM in any organization (Noruzi, et al., 2013). The prior studies and their results proposed the similar positive relationship between TL and KM as in this research (Gelard, et al., 2014)[24]. For knowledge management, social interaction is considered important medium for organization's members (Singh, 2005[47]; Bartol & Srivastava, 2002[6]; Levin & Cross, 2004)[31]. Moreover, the earlier studies and their results also

revealed the similar effect of SI with KM in this study (Chen & Hung, 2007)[15]. So, current research is also in compliance with the previous studies. Furthermore, the results of the regression analysis indicate that if organization will adopt transformational leadership style and build strong social interaction network among organizational members then it will improve the knowledge management activities in term of knowledge sharing and knowledge application within banking sector of Pakistan. Banking sector of Pakistan should make better policies about transformational leadership and social interaction for the advancement of knowledge management.

This study has some limitations. Due to cost and time restraint the target population is limited to the banks of Lahore only i.e. the city of Pakistan. The target population of current research is only banking sector but other sectors like textile sector, education sector and telecommunication sector remain unexplored. This is cross-sectional study because data is collected from respondents at specific point of time.

It is recommended that to make the results more generalize a bigger sample size, with wider area of research, numbers of banks and other sectors as well must be taken into account. The same research can also be arranged in other organizations e.g. industrial sector, telecommunications, hospitality sectors, educational institutions etc. to check the generalizability of results. For more generalizing the results, longitudinal study will conduct on banking sector of Lahore. From the research paper it is recommended that banking sectors should improve transformational leadership, create sophisticated social interaction network among organizational members for the enhancement of knowledge management activities. More researches can be done to determine the factors that influencing the adoption of knowledge management in the banking sector of Pakistan.

From a practical point of view, this study suggests that managers of banks should be aware of the importance of knowledge management in the link of transformational leadership, social interaction and knowledge management. The empirical results indicate transformational leadership and social interaction are crucial for knowledge management and ultimately for knowledge sharing and knowledge application.

6. REFERENCES

- [1] Akhavan, P., Jafari, M., and Fathian, M. (2005). Exploring Failure-Factors of Implementing Knowledge Management Systems in Organizations. *Journal of Knowledge Management Practice*, vol. 6, May, pp. 1-8.
- [2] Alavi, M. and Leidner, D.E. (2001). Review: knowledge management and knowledge management systems: conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.
- [3] Alvesson, M. and Kaerremann, D. (2001). Odd couple: Making sense of the curious concept of knowledge management. *The Journal of Management Studies*, 38(7), 995-1018.
- [4] Asian Productivity Organization (APO, 2005). State of knowledge management. A study meeting on the measurement of Knowledge Management in Asia, December 6-9, 2005, Yogyakarta, Indonesia.
- [5] Baker, M., Baker, M., Thorne, J. and Dutnell, M. (1997). Leveraging human capital. *Journal of Knowledge Management*, 1(1), 63-74.
- [6] Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64–76.
- [7] Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership. Sage.
- [8] Bass, B.M., & Riggio, R.E. (2006). Transformational leadership (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.
- [9] Bass, B.M., Avolio, B.J., Jung, D.I., & Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. *The Journal of Applied Psychology*, 88, 207–218.
- [10] Bryant, S. E. (2003). The role of transformational and transactional leadership in creating, sharing, and exploiting knowledge. *Journal of Leadership & Organizational Studies*, 9, 32–44.
- [11] Burns, J.M, (1978). Leadership, N.Y, Harper and Row.
- [12] Carlsson, S.A., (2003). Knowledge Managing and Knowledge Management Systems in Inter-organizational Networks. *Knowledge and Process Management*, 10(3), 194-206.
- [13] Chatzoglou, Prodromos D. & Eftichia Vraimaki. (2009). Knowledge-sharing behavior of Bank Employees in Greece. *Business Process Management Journal* 15 (2):245-266.
- [14] Chen, C. (2004). The effects of knowledge attribute, alliance characteristics, and absorptive capacity on knowledge transfer performance. *R&D Management*, 34(3), 311–321.
- [15] Chen, C.J. & Huang J.W. (2007). How organizational climate and structure affect knowledge management—the social interaction perspective. *International Journal of Information management* 27 (2007) 104–118.
- [16] Cleveland, H. (1985). *The Knowledge Executive*, E.P. Dutton, New York: NY.
- [17] Crawford, C. B. (2005). Effects of transformational leadership and organizational position on knowledge management. *Journal of Knowledge Management*, 9, 6–16.
- [18] Cross, R. and Sproull, L. (2004). More Than an Answer: Information Relationships for Actionable Knowledge. *Organization Science*, 15(4), 446-462.
- [19] Danish, R.Q., Asghar, A. & Asghar, S. (2014). Factors of Knowledge Management in Banking Sector of

- Pakistan. Journal of Management Information System and E-commerce, vol. 1, No. 1; June 2014 41.
- [20] Droge, C., Claycomb, C., & Germain, R. (2003). Does knowledge mediate the effect of context on performance? Some initial evidence. *Decision Sciences*, 34(3), 541–568.
- [21] Drucker, P. (1993). *Managing for Results*, reprint ed., Collins, London.
- [22] Drucker, P. (1993). *Post-Capitalist Society*, Harper Business, New York, NY.
- [23] Dutta, S. (1997). Strategies for implementing knowledge-based systems. *IEEE Transactions on Engineering Management*, 44(1), 79–90.
- [24] Gelard, P., Boroumand, Z., & Mohammadi, A. (2014). Relationship between Transformational Leadership and Knowledge Management. *International Journal of Information Science and Management Vol. 12, No. 2*, 2014, 67-82.
- [25] Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information System*, 18(1), 185–214.
- [26] Government of Pakistan (GoP, 2007), *Vision 2030. Working Paper*, Islamabad: Planning commission.
- [27] Grant, R.M. (1996b). Toward a Knowledge-based Theory of the Firm. *Strategic Management Journal*, Winter Special Issue 17, 109-122.
- [28] Hoegl, M., Parboteeah, K. P., & Munson, C. L. (2003). Team-level antecedents of individuals' knowledge networks. *Decision Sciences*, 34(4), 741–770.
- [29] Israel, Glenn D. (1992). *Determining Sample Size*. University of Florida FCES Fact Sheet PEOD 6 November 1992.
- [30] Janz, B. D., Wehterbe, J. C., Colquitt, J. A., & Noe, R. A. (1997). Knowledge worker team effectiveness: The role of autonomy interdependence, team development, and contextual support variables. *Personnel Psychology*, 50(4), 877–904.
- [31] Levin, D. Z., & Cross, R. (2004). The strength of weak ties you can trust: The mediating role of trust in effective knowledge transfer. *Management Science*, 50(11), 1477–1490.
- [32] Li, Rita Yi Man. (2012). Knowledge Management, Sharing and Creation in Developing Countries' Banking Industries. *Advanced in Network and Communications (ANC) Volume1, Number1*, December 2012 doi: 10.4156/anc.vol1.issue1.2.
- [33] Lin, H. F., & Lee, G. G. (2005). Impact of organizational learning and knowledge management factors on e-business adoption. *Management Decision*, 43(2), 171–188.
- [34] Malhotra, Y. (1997). Knowledge management in inquiring organizations. *Proceedings of 3rd Americas Conference on Information Systems Philosophy of Information Systems Mini-track*, Indianapolis, 15(17), 293-5.
- [35] Matusik, S. F., & Hill, C. W. L. (1998). The utilization of contingent work, knowledge creation, and competitive advantage. *Academy of Management Review*, 23(4), 680–697.
- [36] McGrath, R. G. (2001). Exploratory learning, innovative capacity, and managerial oversight. *Academy of Management Journal*, 44(1), 118–131.
- [37] Nonaka, I. and H. Takeuchi (1995). *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. New York, Oxford University Press.
- [38] Noruzi, A., Majazi Dalfard, V. Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: An empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64 (5-8), 1073–1085.
- [39] Nwagbara, U. (2010). Towards a paradigm shift in the Niger delta: Transformational leadership change in the era of post amnesty deal. *Journal of Sustainable Development in Africa*, 12 (3), 387-401.
- [40] Ofek, E. and Saravay, M. (2001). Leveraging the customer base: creating competitive advantage through knowledge management. *Management Science*, Vol. 47 No. 11, pp. 11414-56.
- [41] Piri, Z., and S. Asefzadeh (2006)' How KM can be Applied to Healthcare Organizations? *The Journal of Qazvin University of Medical Sciences*, Vol.10, No.38, pp: 124-132.
- [42] Probst, G., Bu'chel, B. and Raub, S. (1998). *Knowledge as strategic resource, understanding, Managing and Measuring Knowledge*. London /New Delhi: Sage (pp. 240-52).
- [43] Prodromos D. C. & Vraimaki, H. (2009). Knowledge-sharing behavior of bank employees in Greece. *Journal Business Process Management*, Vol. 15 No. 2, , pp.245-266.
- [44] Quink, U. (2008). *An Exploration of Knowledge Management and Intellectual Capital in a Nonprofit Organization Context*. Thesis presented in Fulfilment of the Requirements for the Degree of Master in Business (Research) of the Queensland University of Technology (QUT).
- [45] Roman-Velazquez, J.A. (2004). An empirical Study of Knowledge Management Processes at Individual, Group and Organizational Levels. *Decision Sciences*, 34(2), 255-261.
- [46] Shah, A. A., Jhatial, A. A., & Ghumro, I. A. (2012b). A narrative description of banking sector in pakistan. *Interdisciplinary Journal of Contemporary Research In Business*, 4(1), 18.
- [47] Singh, J. (2005). Collaborative networks as determinants of knowledge diffusion patterns. *Management Science*, 51(5), 756–770.
- [48] Sivadas, E., & Dwyer, F. R. (2000). An examination of organizational factors influencing new product

- success in internal and alliance-based processes. *Journal of Marketing*, 64(1), 31–50.
- [49] Spender, J. C., & Grant, R. (1996). Knowledge and the firm: An overview. *Strategic Management Journal*, 17(winter), 5–9.
- [50] Spender, J.-C. & Grant, R.M. (1996). Knowledge and the firm: Overview. *Strategic Management Journal*, 12(5) 5-10.
- [51] State bank of Pakistan (SBP, 2015). Financial Stability Review (FSR) of SBP 2015. <http://tribune.com.pk/story/1131498/financial-stability-review-pakistans-financial-system-sound-stable-says-sbp/>
- [52] Szulanski, G. (1996). Exploring internal stickiness: Impediments to the transfer of best practice within the firm. *Strategic Management Journal*, 17(10), 27–43.
- [53] Tayyab, B.B. (2009). Organizational culture and knowledge management processes in the Pakistani Corporate Sectors. Department of Administrative Sciences Quaid-i-Azam University Islamabad Pakistan.
- [54] Teece, D. J. (1998). Capturing value from knowledge assets: The new economy, markets for know-how, and intangible assets. *California Management Review*, 40(3), 55–79.
- [55] Tienne, B.D, Dyer, G., Hoopes, C. and Harris, S. (2004). Toward a model of effective knowledge management and directions for future research: culture, leadership, and CKOs. *Journal of Leadership and Organizational Studies*, 10(4), 26-43.
- [56] Tsai, W. (2002). Social structure of “coopetition” within a multiunit organization: Coordination, competition, and intra-organizational knowledge sharing. *Organization Science*, 13(2), 179–190.
- [57] Xiaoxia, P., Jing, W., (2006). Transformational Leadership VS Transactional Leadership: The Influence of Gender and Culture on Leadership Styles of SMEs in China and Sweden.