

# The Trust Factor: Design Team Knowledge Sharing Culture

Light. Zaglago, Craig. Chapman, and Hanifa Shah, *Member, IAENG*

**Abstract**—Managers often struggle to promote an environment in which design engineers have the opportunity to develop trust, which is central part of a design team's knowledge sharing. Trust plays a significant role in whether design engineers cooperate or not and whether design engineers share or conceal knowledge from the team members. Trust is determined to be one of the several antecedents to knowledge sharing as well as being integral to other variables that impact knowledge sharing culture. This study aims to investigate the factors that affect trust in design team knowledge sharing culture. This review provides more insight to managers and design engineers on the value of trust and the factors affecting trust in building knowledge sharing culture and offers directions for enhancement.

**Index Terms**— knowledge sharing culture, trust, design team

## I. INTRODUCTION

Knowledge sharing is vital for a product design team to develop skills, competences, increase value, and sustain competitive advantages (Chen *et al.*, 2010). Nonaka and Takeuchi (1995) highlight knowledge sharing as a precondition for translating general ideas and concepts into products. According to Snowden (2000) cited in (Bell DeTienne *et al.*, 2004) trust is the most critical prerequisite for knowledge exchange. However, according to Krogh (1998) knowledge sharing is a fragile process comprising conflict of interest among the design engineers. While technology brings design engineers together, knowledge sharing among them has not lived up to expectation (Jiacheng *et al.*, 2010). Kelly (2007) pointed out that although technology solutions offer the ability to share information and knowledge, the presence of technology in itself will not create and maintain a commitment to knowledge sharing behaviour. Davenport and Prusak (1998b) submit that cultural habits such as lack of trust

inhibit knowledge sharing. Sackmann and Friesl (2007) went further to opine that trust in the team context is absolutely pivotal to the successful development of a knowledge sharing culture. Managers often don't know what they can do to foster valuable knowledge exchanges (Baiden, 2006). Obviously, the biggest challenge in fostering knowledge sharing culture could be, unwillingness to share knowledge due to mistrust of co-designers (Ribiere and Sitar, 2003). According to Bell DeTienne *et al.* (2004) mistrust remains one of the most significant cultural challenges facing Knowledge sharing among design teams. Where lack of trust exists, a great amount of sharing will not happen. Design engineers may be hesitant to contribute to a knowledge database if they think that by doing so they will in some way devalue themselves to the team (Bell DeTienne *et al.*, 2004). Getting design engineers involved in the knowledge-sharing process may prove to be a difficult task for many teams. While design teams are seeking to leverage the knowledge of their design engineers, others may be opposing such efforts (Bell DeTienne *et al.*, 2004). Even though the relationship between trust and knowledge management have been looked at by other researchers, few studies explore the role of trust within the context of design team knowledge sharing culture (Chen *et al.*, 2010). This study investigates factors affecting trust in knowledge sharing culture. The study commences by examining trust and knowledge sharing leading to the associated factors affecting trust in knowledge sharing. It follows by defining trust and importance of trust in knowledge sharing. Subsequently, we explore the level of trust and knowledge sharing culture, factors affecting trust on knowledge sharing, in which we suggest implications for researchers and practitioners and highlight the key contributions of our study.

## II RESEARCH METHODOLOGY

This paper is based on a systematic literature review, conducted on journal papers, conference papers, and books on knowledge management, human resource management, technology management, and information management particularly focusing on key themes such as knowledge, knowledge sharing culture, and trust. These themes were used as key words in searching for related journal articles, conference papers and books from electronic online repositories. The review first examined literature on trust and knowledge sharing and then focused on the factors affecting fostering trust in knowledge sharing among design teams.

This work was supported in part by the Birmingham City University. The Trust Factor: Design Team Knowledge Sharing Culture.

Light Zaglago is with the Birmingham City University, Faculty of Technology, Engineering and the Environment, City Centre Campus, Millennium Point-Level 4 Curson Street, Birmingham, B4 7XG, England, phone: 01952299901; fax: 01952299901; e-mail: Light.zaglago@bcu.ac.uk).

Ardavan Amini, Head of IAESI is with the Birmingham City University, Faculty of Technology, Engineering and the Environment, City Centre Campus, Millennium Point-Level 4 Curson Street, Birmingham, B4 7XG, England (e-mail: ardavan.amini@bcu.ac.uk).

Craig Chapman, Professor of Knowledge based Engineering, associate Head of Faculty of Technology, Engineering and the Environment, City Centre Campus, Millennium Point-Level 4 Curson Street, Birmingham, B4 7XG, England (e-mail: Craig.Chapman@bcu.ac.uk).

### III TRUST DEFINITION

Many studies have recognized trust as a multidimensional construct (Chen *et al.*, 2010) which is much used, but also much debated (Kramer and Tyler, 1996). The definition of the concept lacks consensus (Fisman and Khanna, 1999). However, there appears to be agreement that trust is both complex and multifaceted (Usoro *et al.*, 2006). A number of definitions of trust presented in the table I below reveal that trust primarily has to do with willingness to risk. According to Chen *et al.* (2010) trust varies with time, environment, and objectively evaluating trust has become an important issue in the field of knowledge sharing.

**Table 1: Various Definition of Trust**

Authors	Definition
(Cook and Wall, 1980)	Trust is mainly the extent to which one is willing to ascribe good intentions to and have confidence in the words and actions of other design engineers
(Luhmann,1988)	Trust can be seen as a mechanism that allows design engineers to assess whether or not to expose themselves to a situation where the possible damage may compensate the advantage
Fukuyama (1995)	Trust as "the expectation that arises within a team of regular, honest, and cooperative behaviour, based on commonly shared norms, on the part of the members of the team" This view of trust based on the expectation of honest and cooperative actions is shared by many.
(Mayer, 1995)	Trust is about dealing with risk and uncertainty; and secondly, trust is about <i>accepting</i> vulnerability and identifies three attributes of another party in which perceptions of trust can be based, namely, benevolence, integrity and ability.
(Mishra,1996)	The willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.
(Dirks, 2001)	Trust is the willingness of a party to be vulnerable
(Castelfranchi , 2004)	Trust has been defined as a state of a positive, confident though subjective expectation regarding the behaviour of somebody or something in a situation which entails risk to the trusting party.

(Usoro <i>et al.</i> , 2006)	Trust is the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.
(Julibert, 2008)	Trust is an element enhancing cooperation and spontaneous sociability, both of which contribute towards willingness to share
Campbell (2009)	Trust is the willingness of a person to be vulnerable to the actions of another person, with the expectation that the recipient of the trust will perform a particular action that is important to the giver, irrespective of the giver's ability to monitor or control the recipient
(Chen <i>et al.</i> , 2010).	Trust is a psychological state that comprises the intention to accept vulnerability based on positive expectations regarding the intentions or behaviour of others without the ability to monitor or control that other party.
(Jiacheng <i>et al.</i> , 2010).	Trust is an implicit set of beliefs that the other party will behave in a dependent manner and will not take advantage of the situation has been recognized as an important factor affecting knowledge sharing
(Liu and Porter, 2010)	Trust is the degree of one's willingness to be vulnerable to the actions of other design engineers.
(Saeed <i>et al.</i> , 2010)	Trust is an expectation that arises within a team of regular, honest and cooperative behaviour, based on commonly shared norms, on the part of other members of that team

### IMPORTANCE OF TRUST IN KNOWLEDGE SHARING

Trust is very important in the design team, because it could create a necessary atmosphere that makes interaction with others more open and rules out the undesired and opportunistic behaviours. It also reduces design team complexity, and creates a comprehensive for interpersonal interactions among team (Sackmann and Friesl, 2007). Furthermore, with trust, design team could form their collective characteristics, such as predictability, reliability, and fairness (Jiacheng *et al.*, 2010). Trust stimulates innovation, leads to greater emotional stability, facilitates acceptance and openness of expression and encourages risk taking (Ribiere and Sitar, 2003). Von Krogh (1998) cited in (Soonhee and Hyangsoo, 2006) argues that trust in design

team culture promote active knowledge sharing among design engineers. Nonaka (1994) observes that trusting relationships eliminate deception, cheating, and the tendency to blame others for team failures (Chen *et al.*, 2010). Where trust exists, it enhances the likelihood of resource exchange between trusting parties, decreases transactions costs because there is less need to undertake actions to protect one's interests, makes knowledge sharing less costly and increases the likelihood that newly acquired knowledge can be absorbed and retained (Tseng, 2008). Trust is an essential ingredient for establishing a solid knowledge base in work teams that enables interaction and knowledge sharing allude to by (Mayer, 1995). Chai and Kim, (2010) echoed views stating that trust is characterized as the main attribute for fostering a successful knowledge sharing practice. Blau (1964) cited in (Engelmann and Hesse, 2011) proposed that trust shapes and maintains social exchange relationships, which may lead to knowledge sharing activities afterwards.

#### LEVEL OF TRUST AND KNOWLEDGE SHARING CULTURE

The level of trust affects the extent of knowledge sharing. High levels of trust between the teams are considered essential for effective communication to improve the quality of discussion between teams and to facilitate knowledge sharing (Lucas, 2005). According to Talebi and Moghaddam (2006) the depth and breadth of knowledge that will be shared between individuals will be determined by their levels of trust towards one another. When trust is high, the individuals are more prone to participate in knowledge exchange, resulting in knowledge creation gain (Saeed *et al.*, 2010). Cohen and Prusak (2001) cited (Soonhee and Hyangsoo, 2006) contend that high level of design engineer trust can lead to better knowledge sharing, shared goals, and lower transaction costs.

#### FACTORS AFFECTING TRUST IN KNOWLEDGE SHARING CULTURE

While there are many factors that affect trust in knowledge sharing. An analysis of relevant literature leads to the following classification of critical factors that may contribute to mistrust in knowledge sharing among design team.

**Competition:** According to Tseng (2008) the climate of intensified competition and development of more global business horizons have made it much more difficult to develop and preserve trust within design teams, as well as making it very risky to invest in trust. Davenport and Prusak (1998a) argue that sharing knowledge is often unnatural because design engineers may think their knowledge is valuable and important; hoarding knowledge and being suspicious of knowledge from others are the natural tendency. Environments that are highly competitive are even more likely to have problems with knowledge sharing that arise out of trust-related issues (Chai and Kim, 2010).

**Risk:** Knowledge sharing inherently involves an element of risk, particularly where proprietary knowledge is being shared. The design teams and individual design engineers involved must therefore trust each other to use the knowledge in an appropriate manner (Barson *et al.*, 2000). According to Chai and Kim (2010) if co-designers trust one another they will share knowledge freely because they do not feel that their job and future opportunities are endangered. Holste and Fields (2010) contend that sharing tacit knowledge involves risks to an individual, such as loss of competitive advantage over peers. Likewise, use of tacit knowledge may involve risks to an individual, such as a source providing incomplete or having a questionable track record. Bandyopadhyay and Pathak (2007) also advance the notions that trust is also seen as a necessary element in alleviating the risks associated with the opportunistic behaviour of teams, and in dealing with uncertainty, and incomplete information. Ford and Chan (2003) particularly contend that a design engineers' possible reluctance to share what they know can be attributed in large part to a lack of trust, or a sense that the knowledge recipient might not have their best interests at heart.

**Contributing:** Mistrust among designers may rise from perceptions that others are not contributing equally to the team or that others might exploit their own design engineer's cooperative efforts. These doubts and suspicions create a reluctance to initiate exchanges with others design engineers or respond to others' invitations to participate in cooperative exchanges with members of the team. In the absence of trust, formal knowledge-sharing practices will be insufficient to encourage individuals design engineers to share knowledge with others within the same work environment. Shared knowledge becomes public and allows all design engineers to benefit from that knowledge. However, this may result in opportunistic behaviour and free-riding as there is a possibility to benefit without contributing (Chai and Kim, 2010).

**Rewards:** For knowledge markets to work effectively trust must be visible throughout the design team members and design engineers must get credit for knowledge sharing (Ribiere and Sitar, 2003). According to the economic exchange theory, individuals will behave by rational self-interest, thus, knowledge sharing will occur when its outcomes exceed its costs or are as expected (Jiacheng *et al.*, 2010). Also, if members of design team believe that they would receive extrinsic benefits such as monetary rewards, promotion, or educational opportunity from their knowledge sharing, then they would develop a more positive attitude toward knowledge sharing allude to by (Bartol and Srivastava, 2002). On the other hand, if members believe that they would receive intrinsic benefits such as self-satisfaction, social recognition, or power, then they would also have pleasure in knowledge sharing (Jiacheng *et al.*, 2010). Kelly (2007) also advance the notions that successful knowledge management in teams hinges on creating a team culture in which design engineers are committed to working together towards the common goals of the team, rather than working largely towards individualistic egoistic.

Bartol and Srivastava, (2002) has therefore argue that

procedural and distributive fairness of rewards will influence the level of trust in the design team, which, in turn, will affect the extent to which individuals engage in prosocial behaviours such as knowledge sharing in informal interactions. Davenport and Prusak (1998b) observed that transparency of design team expectations and procedures especially those concerning KM objectives and initiatives must exist within the design to enhance trust. Fair procedures are likely to inculcate individual trust in systems. If design team leaders are perceived as following fair procedures in giving rewards to an individual for contributions made to the design team, the individual is likely to believe that in the future also, the design team leaders will protect their interests. Fair procedures convey a signal to design engineers that the design team values them and this may prompt them to respond with design team citizenship behaviours that could include sharing knowledge with co-designers so as to help them (Bartol and Srivastava, 2002).

**Downsizing:** With the increasing number of downsizings among design teams during the past several years, however, it is no wonder that many design engineers are finding it difficult to trust the design teams. According to Cook and Wall, (1980) design engineers may fear that sharing their knowledge will have negative effects on their tenure or career advancement are likely to distrust the design team and to be reluctant to share the knowledge they possess. Fukuyama (1995) found that employers are faced with the challenge of motivating short-term design engineers to contribute to design team knowledge. Also, design engineers are finding that training may be more difficult to obtain because businesses are hesitant to dump company information into a new and unproven staff member. These are the types of circumstances that may create a sense of mistrust. De Long, (1997) further submit that teams that have recently downsized have a particular problem to rebuild trust levels in their culture before they can expect individuals to share expertise freely without worrying about the impact of this sharing on their value to the company.

**Interpersonal relationship:** views echoed in previous research reveal that the greatest willingness to share knowledge occurs when social relationships are based on emotional attachment, mutual trust, respect and genuine understanding of fellow design engineers' strengths and capabilities (Nor and Egbu, 2010). Trust is engendered among individuals who develop relationships based on interactions with colleagues (Nor and Egbu, 2010). The design engineers who work with others are usually interdependent; they rely on each other in certain degree in order to accomplish the team objectives, and trust can subsequently result in a willingness to depend on the other party in carrying out certain product design. Critical to the development of knowledge-based trust within a team are the recurring face-to-face interactions that allow design engineers to get to know one another and to be able to predict how the other party will react or behave in various circumstances (Tseng, 2008). However, the frequency of interactions and the familiarity among design team's members-although important but do not alone

guarantee knowledge-based trust (Baiden, 2006). According to Bell DeTienne *et al.*, (2004) design engineers will be reluctant to share their know-how and expertise with those they believe will take advantage of the knowledge provided them and likewise. Gan *et al.*, (2006) further submit that when team relationships have a high level of mutual trust, members are more willing to engage in knowledge exchange. It has been found that low levels of mutual trust are a key barrier to knowledge exchange in teams

**Competence:** According to Baiden (2006) knowledge exchange is more effective when the knowledge recipient views the knowledge source as being competent. Without building a sense of competence between the knowledge seekers and sources, teams will find it difficult to take advantage of perhaps their most valuable resource. Lucas (2005) particularly point out that Knowledge acquirers who trust knowledge providers are more likely to listen to, absorb, and act on the information provided by the latter to support knowledge share. If an individual does not trust the information or knowledge they are receiving they are obviously unlikely to make full use of it. Conversely, if an individual does not trust the person to whom they are imparting knowledge to use it wisely or keep company secrets they will resist sharing (Barson *et al.*, 2000). This view is supported by (Castelfranchi, 2004) distilled that when it comes to knowledge sharing, trusting design engineers' competence is even more important when the knowledge is difficult to codify. For individuals to take advantage of experiential or tacit knowledge, they must believe that the knowledge source is both willing to help and is well versed in the particular discipline (Baiden, 2006).

**Environment:** In the process of knowledge sharing, the environment plays a key role in facilitating or impeding knowledge share among team members. For instance, without a trusting environment, design team members may be less willing to share knowledge with others (Ma *et al.*, 2008). Successful cooperation requires the existence of a climate in which design engineers feel safe in displaying behaviour that can enhance knowledge sharing (Campbell, 2009). DeLong and Fahey, (2001) note that trust leads to a greater willingness among design engineers to share insights and expertise with each other. Not only does a design engineer choosing to share knowledge within an environment lacking in trust stand to lose their unique standing within the design team but any knowledge they share that is subsequently judged to be irrelevant could potentially damage their reputation (Baiden, 2006).

**Leadership:** According to Holste and Fields (2010) Leaders are the design engineers who are in the position to instill the appropriate values in the design team that will foster the values that is necessary for knowledge sharing to flourish. Design team leader that lays the foundation of values, like trust, that filter down to the staff in the institution and are necessary for programs such as knowledge management to be successful (Talebani and Moghaddam, 2006). Liu and Phillips (2011) opines that team leader can influence the level of trust is the modeling and recognition of trust-building behaviours, such as

receptivity and discretion. Employing active listening skills and encouraging design engineers to voice their concerns in an atmosphere where their issues will not be improperly disclosed can build trust between team leader and design engineers (Liu and Porter, 2010).

#### IV SUGGESTION

Trust promotes knowledge creation as it reduces the fear of risk. Hence, high levels of trust can reduce this risk in teams. When team members trust one another, they are less apprehensive to share ideas and thoughts (Gan *et al.*, 2006). Effective members of new product teams should be open and honest in communication thereby establishing interpersonal trust (Ribiere and Sitar, 2003). The declaration of the importance of trust in the corporate mission statement must support with commitment from management (Mayfield, 2010). "Trust is the glue that binds the members of a design team to act in sharing and adapting manner (Castelfranchi, 2004). Although trust is negotiated by design engineers, managers can play a substantial role in creating the conditions through which trust is developed and fostered (Baiden, 2006). A successful knowledge-sharing environment promotes trust among team members (Bell DeTienne *et al.*, 2004). For instance, without a trusting environment, design team members may be less willing to share knowledge with others (Ma *et al.*, 2008). Successful cooperation requires the existence of a climate in which design engineers feel safe in displaying behaviour that can enhance knowledge sharing (Campbell, 2009). Delong and Fahey, (2001) note that trust leads to a greater willingness among design engineers to share insights and expertise with each other. Not only does a design engineer choosing to share knowledge within an environment lacking in trust stand to lose their unique standing within the design team but any knowledge they share that is subsequently judged to be irrelevant could potentially damage their reputation (Baiden, 2006).

#### V. CONCLUSION

The paper brings out the important factors which affect fostering trust in knowledge sharing culture. The findings from the study revealed trust is an enabler of knowledge sharing culture. The paper will be valuable to the practitioners as it provides a basis of understanding of issues of trust in knowledge sharing in design team. This is one of the critical issues for achieving success in today's knowledge-based organisations. Future research to examine how trust may vary over time in knowledge sharing culture would be an important contribution.

#### REFERENCES

[1] Baiden, B.K. (2006) Framework for the integration of the project delivery team. Unpublished PhD thesis, Department of Building and Civil Engineering, Loughborough University.

[2] Bandyopadhyay, S. and Pathak, P. (2007) Knowledge sharing and cooperation in outsourcing projects—A game theoretic analysis. *Decision Support Systems*, 43(2), pp.349-358.

[3] Barson, R.J., Foster, G., Struck, T., Ratchev, S., Pawar, K., Weber, F. and Wunram, M. (2000) Inter-and intra-Organisational barriers to sharing knowledge in the extended supply-chain. Citeseer.

[4] Bartol, K.M. and Srivastava, A. (2002) Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), p.64.

[5] Bell DeTienne, K., 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 & Organizational Studies*, 10(4), p.26.

[6] Campbell, M.J. (2009) Identification of Organizational Cultural Factors That Impact Knowledge Sharing. University of Oregon.

[7] Castelfranchi, C. (2004) Trust mediation in knowledge management and sharing. *Trust Management*, pp.304-318.

[8] Chai, S. and Kim, M. (2010) What makes bloggers share knowledge? An investigation on the role of trust. *International Journal of Information Management*, 30(5), pp.408-415.

[9] Chen, T.Y., Chen, Y.M., Lin, C.J. and Chen, P.Y. (2010) A fuzzy trust evaluation method for knowledge sharing in virtual enterprises. *Computers & Industrial Engineering*, 59(4), pp.853-864.

[10] Cook, J. and Wall, T. (1980) New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational Psychology*.

[11] Davenport, T.H. and Prusak, L. (1998a) Working knowledge: How organizations manage what they know Harvard Business School Press. Boston, MA.

[12] Davenport, T.H. and Prusak, L. (1998b) Working knowledge: how organizations manage what they know; Working knowledge: how organizations manage what they know. Harvard Business School Press.

[13] De Long, D. (1997) Building the knowledge-based organization: how culture drives knowledge behaviors. Center for Business Innovation, Ernst & Young.

[14] Engelmann, T. and Hesse, F.W. (2011) Fostering sharing of unshared knowledge by having access to the collaborators' meta-knowledge structures. *Computers in Human Behavior*.

[15] Fisman, R. and Khanna, T. (1999) Is trust a historical residue? Information flows and trust levels. *Journal of economic behavior & organization*, 38(1), pp.79-92.

[16] Gan, G.G.G., Ryan, C. and Gururajan, R. (2006) The effects of culture on knowledge management practice: A qualitative case study of MSC status companies. *Kajian Malaysia*, 24, p.1.

[17] Holste, J.S. and Fields, D. (2010) Trust and tacit knowledge sharing and use. *Journal of Knowledge Management*, 14(1), pp.128-140.

[18] Jiacheng, W., Lu, L. and Francesco, C.A. (2010) A cognitive model of intra-organizational knowledge-sharing motivations in the view of cross-culture. *International Journal of Information Management*, 30(3), pp.220-230.

[19] Kelly, C. (2007) Managing the relationship between knowledge and power in organisations. 59 Emerald Group Publishing Limited, pp. 125-138.

[20] Kramer, R.M. and Tyler, T.R. (1996) Trust in organizations: Frontiers of theory and research. Sage Publications, Inc.

[21] Krogh, G. (1998) Care in knowledge creation. *California management review*, 40(3), pp.133-153.

[22] Liu, E. and Porter, T. (2010) Culture and KM in China. *VINE*, 40(3/4), pp.326-333.

[23] Liu, Y. and Phillips, J.S. (2011) Examining the antecedents of knowledge sharing in facilitating team innovativeness from a multilevel perspective. *International Journal of Information Management*, 31(1), pp.44-52.

[24] Lucas, L.M. (2005) The impact of trust and reputation on the transfer of best practices. *Journal of Knowledge Management*, 9(4), pp.87-101.

[25] Ma, Z., Qi, L. and Wang, K. (2008) Knowledge sharing in Chinese construction project teams and its affecting factors: an empirical study. *Chinese Management Studies*, 2(2), pp.97-108.

[26] Mayer, R.C., J. H. Davis, et al (1995) An integrative model of organizational trust. *The Academy of Management Review* 20(3), pp.709-734.

[27] Mayfield, M. (2010) Tacit knowledge sharing: techniques for putting a powerful tool in practice. *Development and Learning in Organizations*, 24(1), pp.24-26.

[28] Nonaka, I. (1994) A dynamic theory of organizational knowledge creation. *Organization science*, pp.14-37.

- [29] Nonaka, I. and Takeuchi, H. (1995) *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford University Press, USA.
- [30] Nor, M. and Egbu, C. (2010) The impact of organisational size on the implementation of knowledge sharing practices in quantity surveying firms in Malaysia. 1 School of Built Environment, The University of Salford.
- [31] Ribiere, V.M. and Sitar, A.S. (2003) Critical role of leadership in nurturing a knowledge-supporting culture. *Knowledge Management Research & Practice*, 1(1), pp.39-48.
- [32] Sackmann, S.A. and Friesl, M. (2007) Exploring cultural impacts on knowledge sharing behavior in project teams—results from a simulation study. *Journal of Knowledge Management*, 11(6), pp.142-156.
- [33] Saeed, T., Tayyb, B., Anis-UL-Haque, M., Ahmnad, H.M. and Chaudhry, A.U. (2010) Knowledge management practices: Role of organisation culture. Volume 17 Number 1.
- [34] Soonhee, K. and Hyangsoo, L. (2006) The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review*, 66(3), pp.370-385.
- [35] Talebi, B.Z. and Moghaddam, H.S. (2006) Empowering Asia through General Curriculum Adaptively Based on Cultural Differences in Open and Distance Universities.
- [36] Tseng, H. (2008) *An Empirical Study of Employee Perspectives during Mergers and Acquisitions in the Electronic Manufacturing Industry of Taiwan*. The paper considers the effects of Employee Uncertainty, Communication, Trust, Work Attitude and Role Stress. MSc Industrial Enterprise Management. Aston University School of Applied Science and Engineering.
- [37] Usoro, A., Sharratt, M.W. and Tsui, E. (2006) An investigation into trust as an antecedent to knowledge sharing in virtual communities of practice. *Computing and Information Systems*, 10(1), p.42.