

On the Cultural Diversity of Multi-National ICT Organizations: A Review Study

Sadiah Zafar¹, Muhammad Atif^{2*}, Muhammad Adnan Hashmi² and Tabbasum Naz²

¹Department of Computer Science, Lahore College for Women University, Lahore-54000, Pakistan;
zafarsadiah88@gmail.com

²Department of Computer Science and Information Technology, The University of Lahore-54000, Pakistan;
muhammad.atif@cs.uol.edu.pk, muhammad.adnan@cs.uol.edu.pk, tabbasum.naz@cs.uol.edu.pk

Abstract

Objectives: To find out what aspects of culture affect the work productivity of individuals in a diverse, global organization with multi- ethnicity. The main objective of this research is to uncover all the facets of a culture that affects the work productivity of employees in multi-national ICT organizations. **Methodology:** In order to conduct a comprehensive review of research and work done on cultural diversity, a systematic study was conducted. It followed studying literature, work done on culture, its dimensions (parameters) that impact or interferes with work performance in global ICT organizations and segregating technical and nontechnical factors shaping the work culture within such organizations. **Findings:** ICT organizations cannot work without incorporating a culturally diverse work force. Findings indicate that global firms that have HR well equipped with cultural intelligence are able to bring forth more profits for the company. ICT firms that have leadership that is able to tackle the various cultural inhibitions of workers, create a more productive work environment 10. The study also highlighted an important research finding: no successful practical solution or effective research has been conducted on non-technical aspects of cultural diversity that has a massive impact on work performance of employees- the religion and social limitations of the individual employee. These factors affect mind plus heart, which directly governs how well he/she will perform. **Application/Improvements:** This study will benefit multi-national ICT companies to best utilize their human resource by motivating them to uncover the significance of cultural aspects either they are on the basis of religion and/or social factors.

Keywords: Cultural Diversity, Cultural Intelligence, Global Software Development, Project Management

1. Introduction

Culture is an inseparable aspect of human life and it influences one's behavior and responses in an organization. Researchers and practitioners explored various facets of culture such as role of cultural diversity and cross cultural challenges in the global market. Culture is a governing behavior in an organization therefore researchers highlighted relationships between leadership, employee trust issues, cross cultural challenges, models of decision making, knowledge sharing, team management, adaptability and effective strategic decision making ¹⁻³.

Researchers and practitioners both are working to devise and formulate plans on how to join behavioral

dimensions with other dimensions of organizational governance, in order to capture optimal business profits. But, according to our best knowledge, a major behavior that is based on religion, moral and social obligations of individuals and particularly how these facets relate to agility of multi-dimensional organizations are ignored so far. This study aims to target this gap.

To the best of our knowledge, a huge void exists in research as well as practice that determines or explains how the social and religious beliefs outline an individual's performance. This review paper aims to hit the first step in the series of research aimed at finding the connection between work attitude and the cognitive/mental

*Author for correspondence

reasoning of any individual with regards to that person's non-technical aspects of life.

This report highlights the various studies conducted on behavioral and cultural dimensions, particularly, how a culture influences work attitudes in organizations where workers belong to multiple ethnicities.

2. Understanding Culture

Cultural and ethical issues are broad terms that envelop religious and moral issues. Culture was defined for the first time in the 18th century by Sir Edward Burnett Tylor as "Culture, or civilization, taken in its broad, ethnographic sense, is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society"⁴. Culture can also be concisely defined as a solidified hermeneutic system which overlaps customs, language, social norms, morals, and beliefs. Culture effects how people response and behave in the work community. Cultural environment also monitors how people associate various objects and attach significance to them.

3. Cultural Challenges

Cultural differences pose a major threat for globalized business. The reason is simple: human mind does not adjust rapidly to environment different from its usual habitat. The behavioral researchers have tried to explore the patterns and reasons governing organizational human behaviors. Culture also plays a pivotal role in shaping out how work roles differ in different environments and how individuals value roles and responsibilities in the work market. This differs from continent to continent, from one regional area to another and from city to city⁴.

The cultural factor also impacts the strategic and work decisions such as decisions of recruiting work force in cross-cultural countries. Gender here becomes a sensitive issue when companies are assigning responsibilities in diverse cultural environments. As working force plays an important part in the successful working of any organizations therefore the cultural issues must be addressed to reap full benefits of businesses.

4. Cultural Research

Different aspects of a culture on our daily lives have been explored. Some of the most important and well research areas are discussed below:

4.1 Culture versus Business

The business and IT managers along with research community endeavored to uncover reasons behind various cultural challenges. In⁵, the authors explored the reasons of failure of an employee when sent on the mission of global business and dealings, or the reasons of failure when resources are imported from global environment. This study provides a framework for HR managers to better train their staff about international businesses and dealings. Moreover, the research also illustrates the market inclination towards international HR management⁶. With globalization on the rise, multi-national organizations have to face numerous cultural challenges. Literature indicates that organizations where the HR management is adept and qualified in CQ (cultural quotient) that is cultural intelligence science bring forth greater profits and higher business growth for organizations⁷. References from recent studies indicate the mammoth success achieved by individuals who understand the cultural diversity of a region where the organization is doing business⁸.

Research indicates that intelligent strategic HR policies went a long way in smoothing out business for multinational organizations. The connection of having a strong understanding of human behaviour means a lot. Organizations, which had managers well versed in cultural intelligence conducted better and more successful management. They were able to train, guide and come up with more secure and beneficial business plans for the organizations due to this knowledge. Several researches conducted on this verify and strengthen this trait.

4.2 Cultural Intelligence Factor (CQ)

Cultural Intelligence is the latest research area in the field of behavioural sciences and management studies. Simply saying cultural intelligence is the capability to adapt and respond to different cultural context and unknown situations where an individual upbringing, beliefs, and assumptions proved ineffective⁹.

Work conducted in¹⁰ calculates an individual's cultural intelligence factor that indicates how effective leadership can be predicted or estimated in a diverse environment.

The more aware an individual is with the cross cultural strains, political, ethnic and social ties, the better he can plan to control the business operations. This enables ones to make the best use of his resources under diverse political, religious and social environments. Furthermore, there is a need to explore as many markets as possible

due to the tough competition. In¹⁰, the authors highlight the detailed analysis of various leadership strategies, and how leadership of resources- employees differs with each other.

4.3 Research Aspects of Cultural Intelligence

Working across cross-cultures is a hard task, indeed. Most of the work in this regard has been conducted in the management science domain which is still finding innovative means of gaining maximum profits at the cost of effective resource management and timely business.

The issues faced due to cultural diversity were not highlighted until globalization started developing its roots. With the concept of going international and/or global, importance of understanding the underlying workings and governing principles became utmost important.

It was initially agreed that the organizations had to recruit managers who could perform in the diverse cultural environments. These managers are termed as golden managers and they could see beyond the surface¹¹. Research indicates that multiple types and levels of intelligence co-exists which aid individuals in solving and sorting out problems. However, there is a lack of the research work to understand cultural intelligence that can help managers to cater cultural diversity implications.

There exists a plethora of work on cognitive and academic learning¹², social intelligence¹³, emotional intelligence¹⁴ and practical intelligence¹⁵, however there is a very limited research work on the impact of cultural diversity in an organization. This issue led to the work on a set of principles that may help in solving cross-cultural problems and the proposed model was inspired from the study conducted by Sternberg on theoretical intelligence framework¹⁶.

Ng et al, 2007 also explained that there are four dimensions of cultural intelligence based on cultural capability¹⁷. Furthermore, they described CQ in terms of distinct parameters that have the following two leading characteristics: (a) these four dimensions coexist at the same conceptual level, and (b) these dimensions together makeup the final (whole) culture¹⁸. In short, CQ construct is made up of motivational, meta- cognitive, cognitive, and behavioral capabilities.

The philosophy behind CQ is simple and not very complex¹⁹. It does not restrict its domain and signifies the individual's capabilities, rather than his/her interests or

personality characteristics. Broadly speaking, a CQ targets an individual's capabilities that are relevant to cultural sphere but it does not deal with an individual's unique personality trait. It also differs vastly from other domains of intelligence such as cognitive or emotional intelligence; where cognitive aspect is related with enabling an individual to learn and work across variant situations and emotional intelligence deals with allowing an individual to recognize and monitor emotions according to a situation. Notice that, these both forms of intelligence do not focus on an individual handling of culturally diverse situations or people. Furthermore, cultural intelligence is not restricted with a single culture or a set of specific cultures. The most useful intercultural parameters and intelligence metrics are meta-cognition, cognitive and educational psychology that were taken from the work of²⁰.

4.4 Culture versus Global Software Development

Global Software Development (GSD) is the latest business platform for software industry. The management of GSD becomes difficult, when the software development is conducted over different regions that have distinct ethnic, cultural and social obligations²¹. The main reasons behind the failure of a GSD are human factors rather technical. Furthermore, it is observed that cross-cultural factors are ignored.

A human nature is governed by the surrounding environment and the prevalent social practices in his/her vicinity. Therefore, there is a dire need to define and understand culture for the progress of an organization. There exists various models for measuring and understanding cultural diversity such as the model discussed in²². Researchers have emphasized on the importance of understanding cultural factors that may affect global software development such as the studies conducted in²³. It is observed that the cultural diversity impeded agile methodology practices as it relies on strong interpersonal understanding and communication. The major challenge of GSD is to monitor, regulate and conduct effective collaboration among team members.

4.5 Work/Family Equilibrium

The behavioral scientists and cultural experts understand the underlying psychology of different individuals that explain the cross-cultures response for maintaining balance between work and their family. They observed that

in some cultures, working overtime is considered worthy whereas in other cultures the same practice is designated as neglecting the family. Therefore, the organizations that are working in different geographical locations need to address such questions, so that these organizations may operate successfully across diverse cultures. Furthermore, in certain parts of the world, females have more responsibility about their families so the organizations should also consider this factor. Suppose there is an organization that has offices at different places having multi-culture environment. For such an organization, the answer to question like can the organization run every office with the same set of rules and policies is essential. Having a unified set of strategic plan, management outline and work outlay for all outlets is nearly impossible.

Grounded theory Approach is a remarkable methodology for investigating various factors via which this relation could be explored and studied in detail. Business and management disciplines have extensively used this theory to investigate and study or enhance existing theories, and find out constructs or parameters that govern them²⁴.

5. Conclusion

In this study, we highlight the points recognized and worked on by various researchers as well as practitioners regarding the culture and its involvement in the business community. It is observed that the cultural diversity plays a remarkable role for shaping the marketing approaches and the work-managing policies in multinational organizations.

Nowadays, organizations aiming to be globally successful need to pay close attention to the behavioral aspects based on cognitive dimensions and social lives. Understanding the effectiveness of cultural diversity plays a vital role in an organization's success. However it is observed that the multi-cultural organization did not pay proper attention to ethnic and religious aspects of its worker, therefore, it is a need of the time pay special attention to these aspects.

6. References

1. Iivari J, Iivari N. The relationship between organizational culture and the deployment of agile methods. *Information and Software Technology*. 2011;53 (5):509–20. Crossref
2. Walumbwa F, Mayer D, Wang P, Wang H, Workman K, Christensen A. Linking ethical leadership to employee performance: The roles of leader–member exchange, self-efficacy, and organizational identification. *Organizational Behavior and Human Decision Processes*. 2011;115 (2):204–13. Crossref
3. Sung S, Choi J. Effects of team knowledge management on the creativity and financial performance of organizational teams. *Organizational Behavior and Human Decision Processes*. 2012;118 (1):4–13. Crossref
4. Thein H, Austen S, Currie J, Lewin E. The impact of cultural context on the perception of work/family balance by professional women in Singapore and Hong Kong. *International Journal of Cross Cultural Management*. 2010;10 (3): 303–20. Crossref
5. Cascio W. Managing human resources: productivity quality of work life profits. 1992.
6. Earley P, Ang S, Tan JS. CQ: Developing cultural intelligence at work. Stanford University Press: Boston. 2006.
7. Rockstuhl T, Seiler S, Ang S, Dyne LV, Annen H. Beyond General Intelligence (IQ) and Emotional Intelligence (EQ): The role of cultural intelligence (CQ) on cross-border leadership effectiveness in a globalized world. *Journal of Social Issues*. 2011;67(4): 825–40. Crossref
8. Plessis A, Beaver B. The changing role of human resource managers for international assignments. *International Review of Business Research Papers*. 2008;4 (5): 166–181.
9. Imai L, Gelfand M. The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*. 2010; 112 (2): 83–98. Crossref
10. Avolio B, Walumbwa F, Weber T. Leadership: Current theories, research, and future directions. *Annual Review of Psychology*. 2009; 60:421–49. Crossref PMID:18651820
11. Kanter RM. Thriving locally in the global economy. *Harvard Business Review*. 2003;81 (8):119–28. PMID:12884672
12. Murdock G. Outline of cultural materials. New Haven: Human Relations Area Files. 1961.
13. Mayer J, Salovey P. The intelligence of emotional intelligence. *Intelligence*. 1993;17(4): 433–42. Crossref
14. Sternberg J. The theory of successful intelligence. *Review of General psychology*. 1999;3(4): 292–316. Crossref
15. Sternberg JR, Detterman KD. What is intelligence? Contemporary viewpoints on its nature and definition. 1986.
16. Nicholson B, Sahay S. Some political and cultural issues in the globalisation of software development: case experience from Britain and India. *Information and Organization*. 2001;11(1):25–43. Crossref
17. Ng KY, Dyne LV, Ang S. Cultural intelligence: A review, reflections, and recommendations for future research. Conducting multinational research projects in orga-

- nizational psychology. Washington, DC: American Psychological Association. 2012.p.1–30.
18. Ang S, Dyne LV. Handbook of cultural intelligence: Theory measurement and applications. ME Sharpe. 2008.
 19. Schmidt LF, Hunter EJ. The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. Psychological bulletin. 1998;124 (2):262–74. Crossref
 20. O’Neil Jr FH, Abedi J. Reliability and validity of a state metacognitive inventory: Potential for alternative assessment. The Journal of Educational Research. 1996;89 (4): 234–45. Crossref
 21. Hofstede G. Culture’s recent consequences. IWIPS. 2005.p.3–4.
 22. Ang S, Dyne LV, Koh C, Ng KY, Templer JK, Tay C, Chandrasekar NA. Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. Management and Organization Review. 2007;3 (3):335–71. Crossref
 23. Maznevski LM, Chudoba MK. Bridging space over time: Global virtual team dynamics and effectiveness. Organization science. 2000;11(5): 473. Crossref
 24. Hempel SP, Sue-Chan C. Culture and the assessment of creativity. Management and Organization Review. 2010;6 (3): 415–35. Crossref