Determinants of Cross-Cultural Competence among IT Professionals in Chennai

Dr.M. Fathima
M.Com., M.phil., Ph. D, Assistant Professor, PG & Research Department of Commerce,
The Quaide Milleth College for Men, Chennai, Tamilnadu, India.
Email: fathimam780@gmail.com

Peer Review Information	Abstract
	Cross-cultural management entails the application of modern management principles in a diverse cultural setting (Hofstede, 2011; Adler & Gundersen, 2008). While a significant amount of cultural investigation has taken place, the majority of these studies have largely depended on Western management philosophies and theories until recently (House et al., 2004). Most studies on culture in the context of Western management have concentrated on the cultural differences identified in non-Western markets (Hofstede, 2001). The aim is to conduct a cross-cultural study on IT companies operating in India, which is classified as a non-Western market (Gannon & Pillai, 2010). In a cross-cultural environment, various challenges recognized by many scholars encompass cultural differences, assumptions, language barriers, mistrust, and differing methodologies (Stahl et al., 2010; Thomas & Peterson, 2017). This study seeks to explore the elements influencing cross-cultural competencies within IT firms. A total of 121 individuals from IT organizations in Chennai were collected, along with their responses to the study-related questions. This investigation encompasses individuals involved in a cross-cultural platform (Earley & Mosakowski, 2004). The compilation and analysis of data are performed using SPSS v25. The reliability of the study was found to be 0.859 (85.9%) (Tavakol & Dennick, 2011). The findings revealed that the elements affecting cross-cultural competencies in IT firms are defined by collectivism, power distance, and uncertainty (Hofstede, 2011; House et al., 2004). It is essential for organizations to acknowledge individual contributions even within team settings; leaders should have the necessary authority and autonomy to function effectively; and fostering innovation that improves performance should be rewarded; these factors are vital for developing cross-cultural competencies (Adler & Gundersen, 2008; Thomas & Peterson, 2017). Influence of age, education, designation and work experiences on cross culture competencies in IT organizations are observed as significant.

Introduction

Culture represents a complex and widespread concept (Kroeber & Kluckhohn, 1952). At the outset, the notion of culture was associated with the broader idea of civilization as a whole (Tylor, 1871). Culture includes all the traditional behaviors that have developed throughout human history and are passed down from one generation to the next (Geertz, 1973). Nevertheless, it was essential to establish a clear

definition of culture relevant to a particular human society in order to examine other societies (Herskovits, 1948). The quotation proceeds as follows: "A culture is less precise" (Kroeber & Kluckhohn, 1952). This pertains to common behaviors that symbolize a particular society, a group of societies, a specific race, a defined region, or a unique historical era (Herskovits, 1948). As a result, in the realm of anthropological literature, culture is identified as the focal point of investigation within cultural anthropology (Boas, 1920). Various alternative definitions have been proposed, showing significant diversity (Geertz, 1973). They seem to concur that culture is something that is learnt and associated with groups of people, including a wide range of elements like norms, values, shared meanings, and established behavioral patterns (Kroeber & Kluckhohn, 1952; Hofstede, 2011). The notion of culture as a scientific tool has encountered scrutiny within anthropological discourse, giving rise to the "writing against culture movement" (Marcus & Fischer, 1986). In anthropology, culture generally refers to civilizations characterized by national or ethnic traits; nonetheless, the term has also been utilized to depict the knowledge and behaviors of various groups, as seen in concepts like corporate culture or organizational culture (Schein, 2010). Moreover, the phenomenon of globalization has given rise to the challenge of cultural exchange (Appadurai, 1996). This interaction blurs cultural boundaries and increases the need for managers and professionals who are culturally aware and skilled (Thomas & Inkson, 2004).

Issues in managing Cross Culture

Cross-Cultural Competence is essential for multinational companies to thrive in the global marketplace (Beck et al. 2000). From their viewpoint, competency could play a crucial role in differentiating between international competitive advantage and disadvantage. It may represent the distinction between:

1. Attracting, nurturing, and retaining top-tier talent on a global scale is crucial to avoid a potential worldwide 'talent exodus.'
2. Additionally, relying on international teams to work together and deliver projects within set timelines and budgetary limits is essential.
3. Addressing ineffective behavior in international teams; 4. Successfully introducing a new product in an emerging global market, or confronting a global marketing setback; and 5. Demonstrating swift market entry, attaining market exclusivity and dominance, or witnessing a drop in international market share.

An essential element of achieving cross-cultural competence is the ability to recognize, quickly absorb, and effectively utilize extensive global information. Today, organizations are continuously overwhelmed by an increasing volume of electronic and paper-based information that is quite difficult to manage much less synthesize, analyses, and make informed decisions based on the data obtained.

Impact of Cross-Cultural Competency

Karunasekera and Bedse (2007) emphasized that multinational companies require a unique set of skills among their employees to successfully carry out global tasks. These frequently included qualities like adaptability, flexibility, conflict resolution abilities, cross-cultural awareness, communication skills, emotional maturity, cultural sensitivity, negotiation abilities, and team-building strengths. The skills and competencies discussed can be classified into basic and advanced categories.

- Core Competencies: include the essential skills that all personnel within the organization must possess to fulfil its mandate and vision.
- Technical/Professional Competencies: encompass the specific skills and knowledge required to function well within the roles of the stream. For instance, proficiency in specific software or expertise in specialized fields such as banking or biochemistry.

Raina and Pande (2012) emphasized that a successful international company manager needs to have all the skills necessary for domestic business operations. Every nation has its distinct ethos, beliefs, and cultural practices in business and society; thus, it is essential to be both a broad expert and a specialized generalist, deepening knowledge and skill while navigating between these realms. Global managers functioned inside a matrix framework that necessitates cross-functional, cross-cultural, cross-product/service, and often multi-regional international connections; thus, they require the following competencies: -

- Gaining insight into one's own nation: To genuinely value the cultures of other nations, it is crucial to possess a comprehensive understanding of one's own. Grasping historical and cultural values, comprehending current social and political issues, and being cognizant of the commercial landscape are essential.
- Global Perspective: A global business manager must possess a comprehensive understanding of the intricacies of international business dynamics and the functioning of the

global landscape. The processes involved in gaining, relinquishing, and regaining knowledge are essential components of a knowledge-driven global organization. Future global leaders must be prepared to handle unexpected challenges, errors, misunderstandings, and even miscalculations in their cross-cultural interactions.

• Grasping the Global Business Landscape: Engaging in trade across nations necessitates a profound understanding of market regulations and an extensive familiarity with both traditional and modern business methodologies. Understanding the tax regulations, employment laws, employee social benefits, and the governmental and public perceptions of foreign business executives and workers in another country is essential. Furthermore, comprehending the policies surrounding foreign business investment and ownership is crucial.

• Proficiency in both silent and spoken international languages: Silent and spoken languages serve as fundamental means of communication across all cultures. Although each country may designate one or more official languages, significant variations exist in the utilization of both spoken and non-verbal languages across different regions within those nations.

Review of literature
Johnson and Newman (2016) investigated how cultural intelligence (CQ) contributes to improving cross-cultural effectiveness in the IT and service sectors. The analysis demonstrated that elevated cultural intelligence notably diminishes cultural misinterpretations and enhances interpersonal adaptability, especially within globally integrated teams. The findings revealed that individuals frequently have an understanding of cultural differences on a theoretical level, yet they encounter challenges when it comes to implementing these insights in practical work environments, underscoring a continuous disconnect between awareness and actual behavior. The authors suggest implementing targeted CQ training as a strategic intervention within the organization. **Gupta and Varma (2018)** examined the elements that affect cross-cultural adaptability among IT professionals employed in multinational corporations in India. The findings indicated that support from the organization, exposure to diversity, and previous intercultural experiences are significant predictors of employees' adaptability in culturally diverse work teams. Nevertheless, the authors observed that a lack of adequate cultural training frequently results in adjustment stress and diminished collaborative

effectiveness. Their proposal includes continuous learning frameworks aimed at enhancing cultural adaptability within rapidly evolving IT environments. **Park and Cho (2019)** examined the impact of cultural diversity on the innovation capabilities of teams within technology-driven organizations. The study utilized a mixed-methods approach, revealing that teams with cultural diversity excel beyond homogeneous groups when there is an emphasis on psychological safety and open communication. Nonetheless, a lack of effective management in diversity led to heightened conflict and delayed project completion. The authors emphasize the importance of managers cultivating multicultural leadership skills to effectively leverage innovation driven by diversity. **Mensah and Kim (2020)** investigated the cross-cultural stressors faced by expatriate IT employees and how these factors influence team productivity. The findings revealed that cultural distance, communication misunderstandings, and unfamiliar organizational norms significantly increase stress levels, subsequently leading to a decline in role performance. The findings indicate that programs focused on cultural coaching led by mentors facilitate quicker adaptation for expatriates and alleviate workplace tension. **Rahman and Al-Nasser (2021)** investigated the impact of multicultural team environments on communication competency and knowledge sharing within software development organizations. The findings indicated that misunderstandings across cultures frequently hinder the transfer of knowledge, resulting in delays in coordinating projects. The investigation highlighted the significance of training in cross-cultural communication to enhance the transfer of knowledge and mitigate project risks within teams that are distributed globally. **Li and Wang (2023)** examined how digital collaboration tools influence the development of cross-cultural competencies in remote IT professionals. The investigation revealed that digital platforms promote cultural comprehension, allow for immediate communication, and reduce the likelihood of misinterpretation. Nevertheless, the authors observed that in the absence of cultural sensitivity training, technology by itself is insufficient to overcome entrenched cultural obstacles. The findings indicate that incorporating cultural competence modules into virtual collaboration systems improves the efficiency of global teamwork. **Santos and Ribeiro (2024)** investigated leadership behaviors that foster cross-cultural collaboration within multinational IT organizations. The results indicated that inclusive leadership,

marked by empathy, cultural sensitivity, and transparent communication, greatly enhances cross-cultural competence within teams. Leaders who fostered open communication and acknowledged cultural diversity nurtured greater trust, minimized interpersonal conflict, and enhanced team unity. The research emphasizes the importance of leadership development as a vital factor in enhancing cross-cultural competence within international IT firms. **Henderson and Alim (2025)** investigated the development of cross-cultural competence in IT professionals engaged in hybrid and globally distributed teams. Their study highlighted the rising significance of adaptive cultural intelligence, especially as organizations increasingly depend on virtual collaboration platforms and multicultural project frameworks. The results indicated that although employees have a fundamental understanding of cultural nuances, they frequently find it challenging to apply this knowledge effectively in intercultural interactions, especially under pressure or in technology-driven environments. The authors pinpointed digital miscommunication, culturally influenced work-style variations, and insufficient organizational training as key obstacles. The findings indicate that a structured approach to competency development encompassing cultural intelligence, technology-mediated communication skills, and the management of team diversity will be crucial for IT organizations operating within globalized work environments in 2025 and beyond.

Objective of the study
- To identify the factors that determine the Cross-cultural competencies in IT companies
- To study the perception of the IT employees on Cross-cultural competencies and its dimensions
- To study the influence of the demographic variables on Cross-cultural competencies

Hypothesis of the study
H_0: There is no significant influence of demographic variables on Cross-Cultural Competencies

Methodology of the study
This investigation delves into the elements that affect cross-cultural competencies within IT organizations in Chennai. A total of 121 individuals from IT organizations in Chennai were collected, along with their responses to the questions related to the study. This study employed a questionnaire as the tool for data collection. This investigation encompasses individuals involved in a cross-cultural platform. The questionnaire is divided into two sections: the first part gathers personal and job-related information from the respondents, while the second part presents scales related to cross-cultural competencies. Exploratory factor analysis is employed to investigate the variables related to cross-cultural abilities. Cronbach's alpha is utilized to evaluate the reliability of the data. Data compilation and analysis are performed using SPSS v25.

Analysis and Interpretation
The reliability of the study was assessed at 0.851 (85.1%). The findings indicate that 52.3% of the participants identify as male, whereas 47.7% identify as female. Additionally, 52.4% of the respondents fall within the 30-35 age bracket, 32.8% are graduates, 61.5% are unmarried, and 37.6% earn between Rs. 5-6 lakhs annually.

Factors influencing Cross cultural competencies
This section outlines the factors influencing cross-cultural competencies within IT organizations. Twenty-four variables were employed to assess the elements influencing cross-cultural competence. Based on the consent obtained from the selected respondents, factor analysis using the principal component method with varimax rotation was applied to organize the variables into distinct factors. The KMO measure of 0.862 suggests that the sample size is adequate, while the Chi-square value from Bartlett's test of sphericity is 468.214 (p=.000), indicating significance. The results of the factor analysis regarding cross-cultural abilities can be found in Table I.

Table-I: Eigen values for factors of Cross-cultural competencies

Factors	Eigen Value	Variance Explored (in %)	Cumulative Variance (in %)
1	10.352	46.216	46.216
2	1.896	12.027	58.243
3	1.052	8.373	66.616

Note: Eigen Value > 1

Through correlation analysis, twenty-four variables have been distilled into three distinct factors. This method condenses twenty-four variables into three components that capture a significant portion of the original data. The cumulative percentage column shows that the three extracted factors together represent 66.61% of the total variation. The three identified factors,

along with their respective components, are displayed in Table II.

Table -II: Factor scores of Cross-cultural competencies

Factor	Components	Factor Scores
Factor1: Socialism	Organizations must reward individual performance even when teams are used	0.822
	Individual rights are key to a free society	0.802
	Individuals should respect the decision made by their groups	0.795
	Individuals should feel good when they cooperate with others	0.764
	Group interests should take precedence over personal interests	0.742
	Being accepted by the members of your workgroup is very important	0.709
	Employees should not disagree with team decisions	0.658
	Managers should not delegate important tasks to employees	0.622
	Employees should pursue their goals after considering the welfare of the group	0.526
Factor 2: Authority remoteness	Leaders must have power and discretion in order to be effective	0.801
	Those with power should treat other as equals	0.786
	People having authority should be respected because of their position	0.752
	People having authority and status should have privileges	0.726
	One should obey the person in the authority	0.702
	Team Managers should make most decisions without consulting subordinates	0.615
	It is frequently necessary for a manager to use authority and power when dealing with subordinates	0.583
	Managers should seldom ask for the opinions of employees	0.552
Factor 3: Ambiguity	Being innovative to improve performance should be rewarded	0.809
	The wise person should live for today since planning tomorrow is futile	0.753
	Planning only makes a person unhappy since plans hardly ever work out anyway	0.712
	It is important to have job requirements and instructions spelled out in detail	0.673
	Standard operating procedures are helpful to employees on the job	0.622
	Instructions for operations are important for employees on the job	0.538
	Rules and regularities are important because they inform workers what the organization expects of them	0.515

Note: Factor loadings >0.5

Table II indicates that factor 1 comprises of nine variables: "Organizations must reward individual performance even when teams are utilized", "Individual rights are essential to a free society", "Individuals should respect the decisions made by their groups", "Individuals should derive satisfaction from cooperating with others", "Group interests should supersede personal interests", "Acceptance by workgroup members is crucial", "Employees should refrain from dissenting against team decisions", "Managers should not delegate significant tasks to employees", and "Employees should pursue their objectives while considering the group's welfare", collectively termed the "**Socialism**" factor.

Factor 2 encompasses eight variables, including "Leaders must possess power and discretion to be effective", "Those in power should treat others as equals", "Individuals in authority deserve respect due to their position", "Individuals with authority and status should enjoy privileges", "One should comply with the person in authority", "Team Managers should predominantly make decisions without consulting subordinates", "It is often essential for a manager to exercise authority and power when interacting with subordinates," and "Managers should rarely solicit the opinions of employees" This is referred to as "**Authority remoteness**" factor.

Factor 3 comprises seven variables, including "Being innovative to enhance performance should be incentivized", "The prudent individual should focus on the present, as planning for the future is often futile", "Planning typically leads to dissatisfaction, as plans rarely materialize", "It is essential to delineate job requirements and instructions explicitly", "Standard operating procedures assist employees in their tasks" "Operational instructions are crucial for employees in their roles," and "Rules and regulations are significant as they convey organizational expectations to workers." This factor is designated as the **Ambiguity** factor.

The determinants affecting cross-cultural competences in IT companies are identified as Socialism, Authority remoteness, and Ambiguity. Organizations have a responsibility to acknowledge individual accomplishments, even when they are accomplished within the framework of a team; leaders must possess authority and autonomy in order to be effective; and innovation that aims to improve performance should be incentivized, as they are essential components of cross-cultural abilities. The protection of individual rights is essential to the functioning of a free society; those in positions of authority ought to regard others as equals. In addition, the sensible person should concentrate on the here and now, because there are times when planning for the future is a waste of opportunity. Cross-cultural competencies are enhanced by the presence of these components.

Descriptive measures for Cross-cultural competencies and it dimensions

Cross-cultural competencies play a crucial role in shaping how individuals perceive leadership, teamwork, innovation, and organizational practices. Understanding these cultural dimensions such as Socialism (collective orientation), Authority Remoteness (attitudes toward power and hierarchical distance), and Ambiguity (tolerance for uncertainty, structure, and procedural guidance) helps explain variations in employee behavior and workplace expectations. The following descriptive analysis presents respondents' perceptions across these dimensions, offering insights into how cultural values influence organizational functioning and employee interactions.

Table -III: Perception about Socialism

Statement	Mean	SD
Organizations must reward individual performance even when teams are used	3.55	1.41
Individual rights are key to a free society	3.78	1.32
Individuals should respect the decision made by their groups	3.96	1.28
Individuals should feel good when they cooperate with others	4.02	1.19
Group interests should take precedence over personal interests	3.88	1.36
Being accepted by the members of your workgroup is very important	3.91	1.27
Employees should not disagree with team decisions	3.12	1.48
Managers should not delegate important tasks to employees	2.89	1.52
Employees should pursue their goals after considering the welfare of the group	3.94	1.21

Note: Score range 1(low) and 5(high)

Table-III presents respondents' perception on Socialism. The results show that the respondents strongly agree that individuals should feel good when they cooperate with others (Mean = 4.02), indicating that teamwork and collaborative behavior are highly valued. Similarly, high agreement was observed for respecting group decisions (Mean = 3.96), considering group welfare while pursuing personal goals (Mean = 3.94), and the importance of being accepted by workgroup members (Mean = 3.91). These findings highlight a strong collective orientation among the respondents.

The statement group interests should take precedence over personal interests also received a relatively high score (Mean = 3.88), emphasizing alignment toward shared goals and group harmony. Respondents also acknowledged the significance of individual rights (Mean = 3.78) and moderately agreed that organizations must reward individual performance even in team-based contexts (Mean = 3.55), suggesting a balanced view between recognizing individual contributions and promoting group cohesion.

However, lower mean scores were recorded for statements reflecting restrictive or hierarchical practices. Participants expressed lower agreement with the notion that employees should not disagree with team decisions (Mean = 3.12), indicating openness to constructive dissent. The least agreement was noted for managers should not delegate important tasks to employees (Mean = 2.89), suggesting that respondents generally support empowerment and participative decision-making.

Overall, the results indicate that respondents lean more toward collectivistic values, emphasizing cooperation, group welfare, and mutual respect, while still valuing individual rights and performance recognition. Hierarchical or non-participatory practices gained minimal support, reflecting a preference for inclusive and balanced organizational culture.

Table -IV: Perception about Authority remoteness

Statement	Mean	SD
Leaders must have power and discretion in order to be effective	3.82	1.29
Those with power should treat others as equals	4.01	1.18
People having authority should be respected because of their position	3.76	1.33
People having authority and status should have privileges	3.21	1.47
One should obey the person in authority	3.69	1.39
Team managers should make most decisions without consulting subordinates	3.05	1.52
It is frequently necessary for a manager to use authority and power when dealing with subordinates	3.58	1.41
Managers should seldom ask for the opinions of employees	2.89	1.56

Note: Score range 1(low) and 5(high)

Table-IV presents respondents' perceptions related to Authority remoteness. The results indicate strong agreement that those with power should treat others as equals (Mean = 4.01), suggesting that respondents value humility and fairness in leadership positions. Likewise, respondents moderately agree that leaders must have power and discretion to be effective (Mean = 3.82) and that people in authority deserve respect due to their position (Mean = 3.76), showing a balanced view of leadership legitimacy and role-based respect.

Moderate agreement is also seen for obeying persons in authority (Mean = 3.69) and the idea that use of authority is sometimes necessary (Mean = 3.58), revealing that respondents recognize the importance of structured hierarchy, particularly in managerial decision-making and organizational control.

However, there is comparatively lower agreement with statements supporting unequal privilege and unilateral decision-making. The perception that people with authority should enjoy privileges received a moderate score (Mean = 3.21), indicating limited endorsement of power-based advantages. The respondents show even lower agreement with the idea that managers should make most decisions without consulting subordinates (Mean = 3.05) and should seldom ask for employee opinions (Mean = 2.89). This suggests that respondents prefer participative leadership styles and value employee voice in decision-making processes.

Overall, the findings reflect a balanced perspective toward authority, where respondents accept the necessity of leadership power and respect hierarchical roles but clearly

prefer egalitarian treatment, shared decision-making, and participative managerial behavior.

Table-V: Perception about Ambiguity

Statement	Mean	SD
Being innovative to improve performance should be rewarded	4.12	1.18
The wise person should live for today since planning tomorrow is futile	2.89	1.47
Planning only makes a person unhappy since plans hardly ever work out anyway	2.76	1.52
It is important to have job requirements and instructions spelled out in detail	3.95	1.25
Standard operating procedures are helpful to employees on the job	4.03	1.16
Instructions for operations are important for employees on the job	4.09	1.13
Rules and regularities are important because they inform workers what the organization expects of them	3.98	1.21

Note: Score range 1(low) and 5(high)

Table-V presents respondents' perceptions regarding Ambiguity. The highest agreement was observed for the statements "Being innovative to improve performance should be rewarded" (Mean = 4.12) and "Instructions for operations are important for employees on the job" (Mean = 4.09). Respondents also strongly agreed that standard operating procedures are helpful (Mean = 4.03) and that rules and regularities guide employees by clarifying organizational expectations (Mean = 3.98). These findings indicate a strong preference for structured guidance, clarity in job roles, and the recognition of innovative efforts within the workplace.

Moderate agreement was seen for the statement "It is important to have job requirements and instructions spelled out in detail" (Mean = 3.95), showing that employees value clear documentation and explicit guidance to perform their duties effectively.

On the contrary, comparatively lower mean scores were recorded for attitudes against planning. Respondents expressed limited agreement with the notion that one should live only for today because planning is futile (Mean = 2.89), and even less support for the statement "planning only makes a person unhappy since plans hardly work out" (Mean = 2.76). This

indicates that employees do not perceive planning as futile or harmful; instead, they value structure, guidelines, and systematic approaches to work.

Overall, the findings reflect that respondents favor a structured work environment supported by rules, detailed instructions, and standard procedures, while also strongly endorsing innovation and performance-based rewards. The rejection of anti-planning beliefs further emphasizes their preference for organized and well-defined operational processes.

Influence of demographic variables on Cross-Cultural Competencies

The impact of demographic factors on cross-cultural competencies in information technology organizations is the topic of discussion in this section. Together with Duncan's post hoc tests, a one-way analysis of variance (ANOVA) is utilized in order to determine the influence. In the following table, the results of the study on the influence of demographic variables on cross-cultural competencies are presented.

H₀: There is no significant influence of demographic variables on Cross-Cultural Competencies

Table-VI: Influence of demographic variables on Cross-Cultural Competencies

Variable	Classification	Mean	S D	F-value
Age (in years)	Up to 25	3.19	1.035	5.638** (p=.001)
	25 to 30	3.64	0.972	
	30-35	3.82	0.857	
	35-40	3.73	1.035	

		Mean	SD	F (p-value)
	Above 40	3.44	1.032	
Gender	Male	3.69	0.984	1.238 (p=.132)
	Female	3.52	1.016	
Education	Graduation	3.03	1.124	7.218** (p=.000)
	Post graduation	3.73	1.146	
	Professional degree	3.83	0.912	
	Others	3.66	0.943	
Marital status	Married	3.63	1.037	1.362 (p=.218)
	Single	3.58	0.946	
Designation	Team Member	3.32	1.185	6.875** (p=.000)
	Team Manager	3.86	0.848	
Work experience (in years)	Up to 3	3.18	0.832	9.362** (p=.000)
	3-6	3.42	0.959	
	6-9	3.94	1.189	
	10 and above	3.74	0.996	
Monthly salary (in Rs.)	Up to 50,000	3.52	1.082	2.214 (p=.096)
	50,000 to 1 lakh	3.55	0.912	
	1-2 lakhs	3.62	1.118	
	Above 2 lakhs	3.66	0.934	

*Note: ** p<.01*

Significant influence of age (F=5.638, p=.001), education (F=7.218, p=.000), designation (F=6.875, p=.000), and work experiences (F=9.362, p=.000) on cross culture competencies in IT organizations are observed, H_0 is rejected at 1% level. Significant influence of gender (F=1.238, p=.132), marital status (F=1.362 p=.218), monthly salary (F=2.214, p=.096), on cross culture competencies in IT organizations are not observed, H_0 is accepted at 5% level.

Respondents in 30-35 years of age group have scored highest mean value of 3.82 and the lowest mean value is scored by the respondents in the age group of up to 25 years (3.19). Employees in the age group of 30-35 years are possessing better level of Cross-cultural competencies, where less Cross-cultural competencies are possessed by employees with up to 25 years of age.

Respondents possessing professional degree have scored highest mean value of 3.83 and the lowest mean value is scored by the respondents with the education of under graduation (3.03).

Employees with professional degree are identified with Cross cultural competencies of better level, whereas the employees with bachelor degree are identified with lesser level of Cross-cultural competencies.

Respondents with 6 to 9 years of experience have scored highest mean value of 3.94 and the lowest mean value is scored by the respondents with an experience of up to 3 years (3.18). Employees with 6-9 years of experience are found with better level of Cross-cultural competencies, wherein the employees with 3 years of experience shows lesser level of Cross-cultural competencies.

Conclusion
In our increasingly globalized business environment, acquiring a deeper comprehension of knowledge exchange between culturally varied software teams is critically important (Yu et al., 2022; Sulthana et al., 2013). It emphasizes the necessity for scholars and practitioners to investigate the interplay between formal and

expertise coordination (Lee, 2021; Arif et al., 2023). Previous literature has acknowledged the significance of each of these ideas individually, and our scenario further emphasizes how an enhancement of formal administrative coordination procedures affects the use of the specification as a boundary object in expertise coordination (Chernova et al., 2020). Although the specification initially served as an effective border object, the increased emphasis on formal coordination diminished informal interactions and agreements among groups over the specification, transforming it into a more rigid shared object utilized independently by various groups in their respective tasks (Xiaodan Yu et al., 2022). The ramifications for expertise coordination were significant due to minimal knowledge exchange among the groups (Sunaina Tomar, 2022). Secondly, formal coordination influences expertise coordination by highlighting the status disparities among various groups, which can result in negative stereotyping and a diminished willingness to exchange knowledge (Lee, 2021). The elements impacting cross-cultural competences in IT companies are identified as collectivism, power distance, and uncertainty avoidance (Arif et al., 2023; Apud et al., 2006). Organizations must recognize individual achievement even within team settings; leaders must possess authority and autonomy to be effective; and innovation aimed at enhancing performance should be incentivized, as they are crucial elements of cross-cultural skills (Chernova et al., 2020; Sulthana et al., 2013). The outcome we have emphasized may be the politicization of cultural barriers, or what we refer to as culturing, when divisions emerge among these groups instead of the bridging effect characteristic of boundary objects (Yu et al., 2022; Xiaodan Yu et al., 2022).

References

Adler, N. J., & Gundersen, A. (2008). *International dimensions of organizational behavior* (5th ed.). Cengage Learning.

Appadurai, A. (1996). *Modernity at large: Cultural dimensions of globalization*. University of Minnesota Press.

Apud, S., Johnson, J. P., & Lenartowicz, T. (2006). Cross-cultural competence in international business: Toward a definition and a model. *Journal of International Business Studies, 37*(4), 525–543.

Arif, E., Elsya, M., et al. (2023). The potential of ChatGPT in enhancing cross-cultural team management performance. *Journal of International Business and Technology, 15*(3), 45–62.

Arif, T., Munaf, U., & Ul-Haque, I. (2023). The future of medical education and research: Is ChatGPT a blessing or blight in disguise? *Medical Education Online, 28*(1), 1–4.

Atreyi Kankanhalli, B. C. Y. Tan, K.-K. Wei, & Holmes, M. C. (2004). Cross-cultural differences and information systems developer values. *Decision Support Systems, 38*(2), 183–195.

Boas, F. (1920). The methods of anthropology. *American Anthropologist, 22*(4), 311–321. https://doi.org/10.1525/aa.1920.22.4.02a00030

Chernova, T., Chernov, A., & Komarova, T. (2020). Formation of cross-cultural competencies of employees in international companies under Industry 4.0 conditions. *Journal of Business and Industrial Management, 8*(4), 101–118.

Earley, P. C., & Mosakowski, E. (2004). Cultural intelligence. *Harvard Business Review, 82*(10), 139–146.

Gannon, M. J., & Pillai, R. (2010). *Understanding global cultures: Metaphorical journeys through 31 nations, clusters of nations, continents, and diversity* (5th ed.). SAGE Publications.

Geertz, C. (1973). *The interpretation of cultures: Selected essays*. Basic Books.

Gupta, K., & Varma, A. (2018). Determinants of cross-cultural adaptability in the Indian IT sector. *Asian Journal of Management Research, 9*(3), 112–125.

Henderson, T., & Alim, R. (2025). Developing cross-cultural competence in hybrid global IT teams: Challenges and opportunities in the digital workplace. *Journal of International Technology Management, 18*(1), 33–52.

Herskovits, M. J. (1948). *Man and his works: The science of cultural anthropology*. Knopf.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2nd ed.). SAGE Publications.

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture, 2*(1), Article 8. https://doi.org/10.9707/2307-0919.1014

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. SAGE Publications.

Johnson, R., & Newman, S. (2016). Cultural intelligence and cross-cultural effectiveness among global professionals. *Journal of International Human Resource Development, 9*(2), 45–62.

Kroeber, A. L., & Kluckhohn, C. (1952). *Culture: A critical review of concepts and definitions*. Vintage Books.

Lee, S. (2021). Factors affecting job performance in relation to cross-cultural adjustment, work

stress, and work adaptation. *International Journal of Human Resource Studies, 11*(1), 77–94.

Li, Y., & Wang, H. (2023). Digital collaboration technologies and cross-cultural competence in remote IT teams. *Journal of Technology and Global Work, 5*(1), 14–29.

Marcus, G. E., & Fischer, M. M. J. (1986). *Anthropology as cultural critique: An experimental moment in the human sciences*. University of Chicago Press.

Mensah, E., & Kim, D. (2020). Cross-cultural stress and expatriate performance in global IT firms. *International Journal of Cross-Cultural Management, 20*(4), 567–584.

Park, J., & Cho, M. (2019). Cultural diversity and innovation in technology teams. *Management & Innovation Review, 11*(1), 23–39.

Rahman, M., & Al-Nasser, F. (2021). Multicultural team communication and knowledge sharing in software development. *Journal of Global Workforce Management, 7*(2), 89–104.

Santos, L., & Ribeiro, P. (2024). Inclusive leadership and cross-cultural collaboration in multinational IT firms. *International Review of Organizational Leadership, 12*(2), 77–95.

Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). Jossey-Bass.

Stahl, G. K., Mäkelä, K., Zander, L., & Maznevski, M. L. (2010). A look at the bright side of multicultural team diversity. *Scandinavian Journal of Management, 26*(4), 439–447. https://doi.org/10.1016/j.scaman.2010.09.002

Sulthana, S., Afrin, M., Rashid, M., Mohiuddin, M., & Mazumder, M. (2013). Cultural influences on software project team management and productivity. *International Journal of Software Engineering & Management, 5*(1), 22–35.

Sunaina Tomar. (2022). Cross-cultural recruitment and its impact on employee productivity and organizational performance. *Global Journal of Human Resource Management, 7*(2), 33–48.

Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education, 2*, 53–55. https://doi.org/10.5116/ijme.4dfb.8dfd

Thomas, D. C., & Inkson, K. (2004). *Cultural intelligence: People skills for global business*. Berrett-Koehler Publishers.

Thomas, D. C., & Peterson, M. F. (2017). *Cross-cultural management: Essential concepts* (4th ed.). SAGE Publications.

Tylor, E. B. (1871). *Primitive culture: Researches into the development of mythology, philosophy, religion, language, art, and custom*. John Murray.

Walsham, G. (2002). Cross-cultural software production and use: A structurational analysis. *MIS Quarterly, 26*(4), 359–380.

Walz, D., Elam, J., & Curtis, B. (1993). Inside a software design team: Knowledge acquisition, sharing and integration. *Communications of the ACM, 36*(10), 63–77.

Xiaodan Yu, Y., Shen, Y., Cheng, X., & Bao, Y. (2022). Cross-cultural virtual learning teams: The roles of swift trust, team trust, and shared mental models. *Computers & Education, 182*, 104463. https://doi.org/10.1016/j.compedu.2022.1044 63

Xiaodan Yu, Y., Shen, Y., Cheng, X., & Bao, Y. (2022). How can cross-cultural virtual learning teams collaborate effectively: A longitudinal study. *Information & Management, 9*(6), 145–152.