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You are a Stranger! Examining The Process of Swift Trust Formation in Global Virtual Teams Using Team Model and Cross-Cultural Theoretical Framework

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14. ABSTRACT Choosing the right communication platforms for virtual collaboration is also important. In our study, GVT members heavily relied on Facebook and Whatsapp. Everyone could be reached anytime and anywhere, yet it was still a challenge to achieve high-performing teams. In this study, using Halls theoretical lens, we found that GVT members exhibited three distinctive communication patterns and behaviors. This is significant for MNCs because teams cannot be successful without good, clear communication. Members of GVTs need to be aware of, sensitive to, and competent at interacting with other cultures. They may not have the opportunity to meet face-to-face to rectify any miscommunications or misinterpretations that surface in the course of a project. Team members also need to be aware of their own cultural habits and how they impact their ability to communicate and to achieve goals in a short period of time. The implication of this study is that individuals with accommodating and diverging learning styles tend to be those with high-context cultural values, while individuals with converging and assimilating learning styles tend to be those with low-context cultural values. Furthermore, each individual also has his or her own communication style, which may contribute to or detract from working effectively on a GVT. MNCs need to train their people in cross-cultural literacy, a crucial intercultural communication competency for any global virtual project. In sum, future research should focus on aspects that tie intercultural communication patterns and styles to high performing team behaviours. Two key questions for future research could be: 1) To what extent do GVTs integrate HC and LC communication styles to improve performance? 2) What are the motivations for engaging in switching behaviours between HC and LC styles? and 3) In what ways do the switching behaviours of GVT influ					
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Abstract: Traditionally, a team has been defined as a group of people that meet face-to-face to achieve a common goal. Yet the past two decades have witnessed a dramatic shift in our understanding of the nature and function of teams, with the conventional structure increasingly giving way to a globally distributed collaborative environment. Numerous multinational corporations (MNCs) now have their employees participate in global virtual teams (GVTs). A key benefit of this form of synergistic teamwork is its low cost; no travel is required. However, people on a GVT are continually challenged by the diversity of intercultural communication styles, patterns and mannerisms (Byron, 2008; Holtbrugge et al., 2012). According to Robert, Denis, & Hung (2009), trust is gradually developed over time; but in GVT, a trust formation has to take place swiftly among team members. A meta-analysis conducted by Yusof and Zakaria (2012) proposed that swift trust in a GVT is more challenging than in a collocated work setting due to the diverse cultural backgrounds of team members. Hence, the goal of this study is to examine how culture impacts the formation of swift trust in global virtual teams (GVTs). The

study employed a qualitative research method to understand the phenomenon of swift trust formation based on an experiential learning project that was administered as a global virtual

teams project encompassed of more than 100 universities across the globe. We found that team members undergo a process of swift trust formation in a cyclical manner and that several stages reiterate in a different manner than a face-to-face teamwork due to the novelty nature of virtual work setting and its heterogeneous members. Teams also demonstrate a divergent intercultural communication styles that challenge the formation of swift trust. Some of the communication patterns differ arises in the way words are exchanged among members such as directness and indirectness, succinct and precision, how time is observed in terms of its urgency and fluidity, the manner decisions were shared and deliberated and lastly the reliance on non-verbal and verbal cues.

1.0 INTRODUCTION

Traditionally, a team has been defined as a group of people that meet face-to-face to achieve a common goal. Yet the past two decades have witnessed a dramatic shift in our understanding of the nature and function of teams, with the conventional structure increasingly giving way to a globally distributed collaborative environment. Numerous multinational corporations (MNCs) now have their employees participate in global virtual teams (GVTs). A key benefit of this form of synergistic teamwork is its low cost; no travel is required. However, people on a GVT are continually challenged by the diversity of intercultural communication styles, patterns and mannerisms (Byron, 2008; Holtbrugge et al., 2012).

When analyzing the success of GVTs, it is important to understand challenges that arise when team members are culturally different from one another. A GVT is characterized by members who work on shared objectives, interact across geographical boundaries, rely on digital media like email and videoconferencing for communication, have little or no historical background of working together, and come from diverse cultural backgrounds (Yusof & Zakaria, 2012). With the rapid pace of technological innovation in communication, GVTs have become more convenient, and their use more widespread. Not only have GVTs become popular for their ease of implementation, but studies suggest that they foster diversity, flexibility and a task-oriented focus, all of which are necessary for success in today's changing business world.

For a GVT to be successful, it is important for members to develop trust rapidly across cultural and geographical boundaries. GVTs must complete tasks quickly, efficiently, and effectively; yet, managing GVTs is challenging because members who come from different backgrounds might fail to develop trust quickly. Trusting behavior is said to be rooted in cultural values (Fukuyama, 1995). In some cultures, it takes longer to develop a bond between team members because people must first establish personal relationships with each other, whereas in other cultures, people focus on the tasks to be completed and are less concerned with relationship building.

Previous studies have shown that teams often face challenges in forming trust because members have different expectations, communication styles, collaboration preferences, and motivations for trusting those they work with (Adler, 2007; Pinjani & Palvia, 2013). In any team, trust is key to success; in GVTs, which rely on geographically dispersed members, success in developing trust is impacted by the different cultural values that each member brings to the table.

Though a study by Mockaitis, Rose, and Zettinig (2012) found that developing trust and loyalty was time-consuming in a GVT because of cultural differences, Jarvenpaa and Leidner (1999) had opposite findings: that in GVTs, culture did not significantly impact trust development. According to Robert, Denis, & Hung (2009), trust is gradually developed over time; but in a GVT, trust formation has to take place swiftly among team members. A meta-analysis conducted by Yusof and Zakaria (2012) proposed that swift trust in a GVT is more challenging than in a traditional work setting.

A survey conducted by Pinjani and Palvia (2013) to investigate the impact of task interdependence on trust and knowledge sharing in a GVT, showed that trust level was significantly related to knowledge sharing. Alsharo (2013) had similar findings, and also showed that trust among team members was higher when they shared similar characteristics. Swift trust is considered a prerequisite to successful performance when people work together on a project that has a tight deadline (Adler, 2007; Laat, 2005; Greenberg, Greenberg & Antonucci, 2007; Remiez, Stam & Laffey, 2007, Young, 2006). According to Laat (2005), the conditions for and challenges to establishing trust differ depending on factors like social setting, identity, age, race, and gender (Laat, 2005). When talking about trust in a distributed environment, the concept takes on a new perspective, as Jarvenpaa suggested that “swift trust” is a legitimate form of trust. As its name suggests, in developing swift trust time is of the essence. Greenburg and colleagues (2007) asserted that swift trust arises during the inception stage of a team’s life cycle. Their research found five different types of trust, which correspond to five distinct team stages: 1- Planning (dispositional trust), 2-Inception (swift trust), 3 - Organization (ability and integrity), 4 -Transition, and 5 - Accomplishment of task (benevolence and integrity). These stages are based on Tuckman and Jensen, (1965) and Gersick’s earlier models (1988, 1989).

It should be noted that GVTs are formed to operate on an ad hoc basis. Projects must be completed quickly, and GVTs need to develop trust more quickly than face-to-face teams so that performance can quickly be maximized and maintained. Challenges arise because team members are often strangers to each other, and not all cultures are conducive to developing trust quickly in the absence of a strong “in-group.” GVTs working for MNCs are also assembled differently from traditional face-to-face teams. In a distributed environment, team members not only need to communicate via technology but must also acculturate and adapt to the diversity of cultural values present. This study contributes to the theoretical development and practical implications of swift trust formation and should be useful for corporations that wish to use GVTs as part of an innovative and competitive work structure. Hence, the goal of this study is to examine how culture impacts the formation of swift trust in global virtual teams (GVTs). The specific research questions to be answered were:

1. What is the process of swift trust formation within GVTs, based on Tuckman and Jensen’s (1977) teamwork model?
2. What are the impacts of intercultural communication styles on the formation of swift trust using the high vs. low context cultural dimension (Hall, 1976)?

2.0 LITERATURE REVIEW

2.1 Culture

Culture is an intricate and multifaceted concept, yet it is an important term for describing the unique characteristics of a group of people. The earliest definition of culture comes from Taylor, who described it as “that complex whole which includes knowledge, beliefs, arts, morals, law, customs and any other capabilities and habits acquired by man as a member of society” (Taylor in Ferraro & Ferraro, 1997). Hall sees culture as “[the] way of life of a people; the sum of their learned behavior patterns, attitudes and material things” (Hall, 1959, p.20). Hofstede described culture as “collective programming of the mind which distinguishes the members of one group from another” (Hofstede, 1991, p. 5). Perhaps the broadest definition comes from Ferraro, who says, “Culture is everything that people have, think, and do as members of their society” (Ferraro & Ferraro, 1997, p.15). Samovar, Porter, and McDaniel (2007) view culture as a blueprint of people’s life activities. People need guidelines to structure their lives and to help them avoid deviating from their society’s norms. An important characteristic of culture is that it is learned, rather than inherited. (Hofstede, 1991, p. 5).

When dealing with cultures different from our own, we need to develop what is known as cultural competence. According to Polistina (2009), a culturally competent individual is flexible and able to assess and treat all people with respect and good manners, regardless of their culture. She also relates cultural competence to cultural literacy, arguing that “Cultural literacy includes cultural competence but adds to it the ability to critically reflect on and, if necessary, bring about change in one's own culture” (Polistina, 2009). The ability to analyze and adapt to other cultures is central to cross-cultural collaboration. In this study, we explore intercultural communication styles and their implications for organizations in building cross-cultural literacy among GVT members. Here, the term “intercultural communication” refers to the wide range of communication that takes place between people with different cultural backgrounds, and it involves understanding how to communicate clearly and effectively.

2.2 Defining Global virtual teams (GVTs)

In the global marketplace, many traditional work structures have been supplanted with a virtual work structure called the global virtual team (GVT). In early GVT studies, Jarvenpaa, Knoll, and Leidner (1998) described the GVT as an example of a boundaryless network organization form where a temporary team is assembled on an as-needed basis for the duration of a task and staffed by members from different countries”(p.29). Later, Maznevski, Chudoba, and Maznevski (2000) defined GVTs as “internationally distributed groups of people with an organizational mandate to make or implement decisions with international components and implications” (p.473). Zakaria, Amelinckx, and Wilemon (2004) described the GVT as a work structure that “require[s] innovative communication and learning capabilities for different team members to effectively work together across cultural, organizational and geographical boundaries” (p.1). More recently, in 2013, Crisp and Jarvenpaa defined the GVT as a group of people from different countries working together towards making and implementing decisions that are important to an organization’s overall strategy (Pinjani & Palvia, 2013).

2.3 Past studies in GVT

Nurmi and Hinds (2016) explored job complexity and learning opportunities within two GVT work structures based in Finland. In the early stages of their study, they did preliminary interviews with engineers actively engaged in a GVT to gain a better understanding of the GVT work structure and its characteristics. Their findings revealed the salient characteristics of global virtual work are job complexity, learning opportunities and off-job recovery. Almost 90% of respondents believed that global virtual work is challenging due to the need to collaborate at a distance with people from different cultural backgrounds.

However, 92% of respondents said that the learning opportunities they received from the project collaboration were beneficial because 1) it gave them access to experts across the globe and 2) it exposed them to new cultures, about which they gained a positive perspective. Almost 90% of respondents stated that time off was crucial in enabling them to deal with the job complexity and stay motivated. To validate their qualitative findings, Nurmi and Hinds conducted a survey of 515 members of a labor union for experts and managers (including global workers and local workers). Among the respondents, 66% were engaged in some kind of global work structure. The studies confirmed that global virtual work is associated with job complexity and learning opportunities. Job complexity did not hinder learning opportunities, but global workers needed to take time to recover from work stress (referred to as “off-job recovery”). The findings also showed that workers engaged in a global virtual work structures had better performance outcomes than local workers.

However, as the study was limited to workers in Finland, the findings cannot be generalized to other populations. A global worker is not the same as a global virtual team member. Each global worker in this study collaborated with at least one co-worker in another country and spent 35% of his or her work time on this collaboration. On the other hand, Jarvenpaa and Leidner (1999) in their GVT framework specifically define a GVT as a work structure in which none of the team members have a common history or the possibility of working together in the future. They communicate purely via digital technology, and they are culturally and geographically diverse.

Studies by Lockwood (2015), Daim et al. (2012), Duran and Popescu (2014) and Shachaf (2008) investigated the factors that cause communication to break down in a GVT work structure. Lockwood conducted a training needs analysis (TNA) of a multinational financial company that employed a GVT work structure. The analysis identified language and cultural misunderstandings as the root causes of communication breakdown in a virtual team. Other factors that contribute to communication breakdowns include power hierarchies, lack of alignment around corporate values, lack of trust, identity struggles and anxiety. A series of interviews conducted by Daim et al. (2012) with virtual team members in high-tech companies revealed that trust, interpersonal relations, cultural differences, leadership and technology could be problematic in a GVTs. Furthermore, findings showed that cross cultural differences in a GVT affect team performance.

On the other hand, a survey conducted by Duran and Popescu (2014) emphasized solutions to communication problems. Almost 50% of respondents said that adaptive communication strategies such as humor and the use of open-ended questions helped to overcome miscommunication during virtual collaboration. Despite the fact that the nature of virtual teams is to have people from different cultural backgrounds, 33% of respondents stated that they did not emphasize cultural differences. The researchers concluded that culture in virtual team collaboration acts in two different ways; 1) as an accent on *team* culture and 2) culture as a

transition stage. Even so, the findings of this study did not fully explore the impact of culture on communication in a GVT, for two reasons. First, the study was conducted with only 40 respondents in a single multinational company. Second, no cultural dimension was used (e.g., Hofstede or Hall) as a foundation. Still, the study's findings regarding adaptive communication including the use of humor to diffuse intercultural misunderstandings are valuable (Ramírez-Alesón & Fleta-Asín, 2016).

2.4 Cultural challenges in GVTs

Studies that have examined the effectiveness of GVTs (Maznevski & Chudoba, 2000) have made several observations about successful GVT management. The first is that the higher the required level of interdependence, the more communication will be initiated. Pinjani & Palvia, (2013) also found that team members overcome their individual differences and collaborate more effectively when the task requires a high level of interdependence. Thus, these studies demonstrate that effective communication and collaboration can occur and are influenced by the interdependence level of the team's task. The fact that GVTs get their members to collaborate quickly and effectively due to the interdependent nature of their tasks is a key benefit of the GVT structure.

Despite the benefits GVTs offer to corporations, there are significant challenges to be addressed (Jarvenpaa & Leidner, 1999; Jarvenpaa et al., 1998; Kayworth & Leidner, 2000; Lee-Kelley & Sankey, 2008). These include the inability of team members to rely on non-verbal cues such as tone of voice and body language. Different languages and cultural values may also hinder communication and trust (Greenberg, Greenberg, & Antonucci, 2007; Martins & Schilpzand, 2011). A study by Daim et al. (2012) identified five factors that contribute to communication breakdown in GVTs: 1) cultural differences, 2) interpersonal relations, 3) leadership, 4) technology and 5) trust. Their findings showed that cultural differences affected team performance, and that ineffectual communication may counteract the benefits offered by the team's diverse composition.

The previous section reviewed past studies on GVT effectiveness. This section focuses on cultural challenges. In the 2016 Trends in Global Virtual Teams survey conducted by RW³ CultureWizard, 48% of respondents reported that half of their virtual teams' members came from different cultures (Solomon, 2016). They acknowledged that issues related to cultural competency are to be expected. Klitmøller & Luring (2013) conducted a qualitative study to explore the interrelationships among language, communication-media, and what they referred to as "social categorization" in global virtual teams within a single Finnish MNC. The findings revealed that during verbal communication (i.e., on the phone), the differences in language proficiency (in this case, proficiency with English), led to the emergence of social categories among members such as "South" and "North" based on members' accents. One respondent said, "North members have a better accent and their English is much easier to understand compared to South members." This indicates that diverse speech patterns can lead to social categorization of individuals on a team. In a written medium such as email, language proficiency had no impact on communication, perhaps because computer tools like spelling and grammar check make language more uniform.

Muethel, Siebdrat, and Hoegl (2012) explored how geographic dispersion, communication media and cultural values affect the development of interpersonal trust on GVTs. Respondents from two countries, Germany and the United States, participated in a survey of 80 software development teams. The findings showed that cultural values had a significant influence on trust.

They also found that geographical proximity plays an important role: the less dispersed the team, the less the members relied on trust to achieve their goals; the greater the dispersal, the more trust was necessary. As the study was conducted with two countries, and within a single industry (software development), the findings might not be applicable to other countries and/or business sectors.

Mockaitis, Rose, and Zettinig (2012) used a student sample to study the relationship between GVT members' cultural orientation (collectivistic vs. individualistic) and their evaluations of trust, task interdependency, knowledge sharing and conflict during collaboration. Their findings demonstrated that GVT members from collectivist cultures were less likely to involve themselves in conflict situations than members from individualistic cultures, and also that GVT members with a collectivist orientation reported having more positive impressions about the team processes.

A qualitative study by Chang et al. (2011) looked at the influence of cultural factors such as cultural adaptation, quality of communication and trust on GVT performance. They conducted in-depth interviews with engineers that were actively involved in GVTs, and found that cultural differences created communication barriers and affected the teamwork process. On the other hand, the capability for cultural adaptation positively affected trust development among team members. Furthermore, when communication involved two people at different levels in the corporate hierarchy (e.g., a manager and his or her subordinate), trust was no longer a factor, as a subordinate must listen to a manager whether he trusts her or not.

Zakaria and Talib (2011) focused on distributive communicative behavior among GVT members in an MNC. Their study involved Malaysians working on GVTs with people from other cultural backgrounds. The interviews showed clear differences in intercultural communicative behaviors among GVT members, which were rooted in their cultural values. The findings of this study were similar to those of Mockaitis, Rose, and Zettinig (2012), who demonstrated the effect of cultural values on the GVT work structure. They also found that cultural values influenced management practices. For example, decision-making in GVTs was challenging due to different work and communication practices. Respondents reported significant differences in decision-making behavior between Asian and Western team members. When Asian team members made decisions, they considered their decisions preliminary, and they assumed top management would make the final decision. Western team members tended to make quicker and firmer decisions, and assumed their decisions would be final.

Zakaria and Talib (2011) also identified switching behavior by Malaysian GVT members, a unique finding that requires further investigation. On a similar note, Dekker and Rutte (2007) had identified prosocial behavior as among the 11 categories of effective communication in a virtual setting, which also included clear and complete communication, use of appropriate media, and active participation. These 11 categories indicate the existence of a set of communicative behaviors that are critical for to GVT effectiveness. In 2008, Dekker et al. (2008) expanded the set of communicative behaviors with study samples from the United States, India, and Belgium. (In their previous study, their samples came from the Netherlands, the United States, and Finland). They found that the perception of what makes for communicative behavior differs across cultures. As a result of this study, the "respectfulness" category was added to the set of critical communicative behaviors. Both studies concluded that the set of communicative behaviors was applicable to both virtual and face-to-face communication. The researchers emphasized the importance of critical-interaction behavior in a GVT because communication is

strongly influenced by cultural differences (Daim et al., 2012; Lockwood, 2015; Shachaf, 2008; Zakaria & Talib, 2011).

2.5 GVTs and Swift Trust

Trust takes on a whole new meaning in global virtual teams. The cultural diversity within global virtual team contributes to challenges in communication, relationship building, trust development and teamwork. Mockaitis, Rose, and Zettinig (2012) found that developing trust and loyalty towards group are time consuming in GVTs because of different cultural values among team members. Pinjani and Palvia (2013) agreed that time zone differences, language and cultural differences were barriers to trust development and mutual understanding among GVT members. However, findings from Jarvenpaa and Leidner (1999) demonstrated that in a GVT, culture had no significant effect on trust development. Findings by Sobrofski (2004) supported Jarvenpaa and Leidner, (2004) and highlighted the impact of cultural issues in trust formation within an intercultural, virtual partnership. In Sobrofski's findings, the quantitative results appeared to contradict the qualitative results. Quantitative results using a Value Survey Model showed no cultural impact on trust formation; however, qualitative findings demonstrated that culture did influence trust formation.

According to Robert, Denis, & Hung (2009), trust is gradually developed over time; however, in a GVT, trust formation has to occur swiftly in order to achieve organizational goals. According to Adler (2007), swift trust formation usually takes place during the inception stage of the project. A meta-analysis conducted by Yusof and Zakaria (2012) proposed that swift trust in a GVT is more challenging than in a collocated work setting due to the diverse cultural backgrounds of team members. However, their findings were based on a review of other studies, and had no empirical component. More recently, Zakaria et al. (2016) conducted a qualitative study using focus group interviews to explore the challenges in swift trust formation in a GVT. They found that delays in communication due to time zone differences, cultural clashes, technical problems and passive team members influenced team collaboration, and thus hindered swift trust formation. However, as their study used a student sample, their findings might not be representative of a corporate GVT.

2.6 Tuckman and Jensen Teamwork Framework

A teamwork model by Tuckman and Jensen²⁰ is used to explore how swift trust is developed, from the initial phase in which teams are formed through the project-completion phase. In the first phase, "*forming*," members begin the process of getting to know each other. In this "ice-breaker" stage members begin as strangers; they have little or no understanding of other team members or of their past performance. Trust may be difficult to achieve during this phase.

In the second stage, "*storming*," members may experience conflicts or difficulties in adjusting to their tasks. Team members may undergo a negotiation process in which roles, deadlines, responsibilities, and tasks are spelled out and a leader is assigned or emerges. At this stage, conflict can damage the trust that is beginning to develop; a mishandled crisis can lead to mistrust. The third stage, known as "*norming*," is when team members evolve a clearer understanding of what needs to be done. Norms, procedures, and routines are established and conflicts are resolved. During the fourth stage, called "*performing*," teams become more comfortable; at this stage trust is fully developed and people work cohesively. This model illustrates the typical process of teamwork –i.e., how a viable team is formed and structured.

However, in the context of a GVT, team formation and cohesion may pose unexpected challenges

To sum up: Once the initial problem of team members' adjustment to one another has been solved, norms are established, team members perform optimally as trust strengthens, the dynamic of the team evolves, and collaboration becomes more solid. The accomplishment of intermediate goals further reinforces trust. In the final stage, team members disperse after their tasks have been accomplished. Since teams can be a short-lived phenomenon, the last stage may result in a successful project or it may not. At this stage also, team members may experience feelings of loss, since they have developed relationships with fellow team members. By using Tuckman & Jensen's model as shown in Figure 1, we hope to understand the level and speed of trust formation in each of the four stages. For GVTs, we need to understand how the process of forming swift trust can be mapped against this teamwork model, so that for each of the stages we can identify the speed of trust formation and the specific challenges to forming trust.

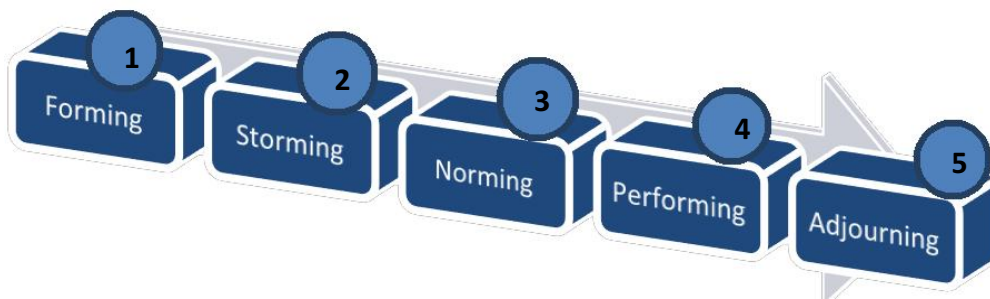


Figure 1. Model for Stages of Group Development (Tuckman & Jensen, 1977)

3.0 METHODS

3.1 Research setting: Virtual collaborative learning environment

The research setting for this study was the X-culture project, an academic-based platform to introduce global virtual teams. The X-culture project gathers people from across the globe to work in global virtual teams. Participants experience cross-cultural collaboration with team members from approximately 40 different countries (<http://x-culture.org/>). Participants in the X-culture project are undergraduate and graduate business students, educators, and professionals.

The project is 10 weeks in duration (refer to Figure 2.0). Each project consists of 5-8 team members working together to develop a business proposal. The X-culture project is carried out each semester on two different tracks, early and late, to accommodate different academic calendars. Each participating university is represented by one instructor. Students are enrolled by their instructor, who notifies the X-culture project coordinator, Dr. Vasly Taras. Dr Taras assigns students to teams.

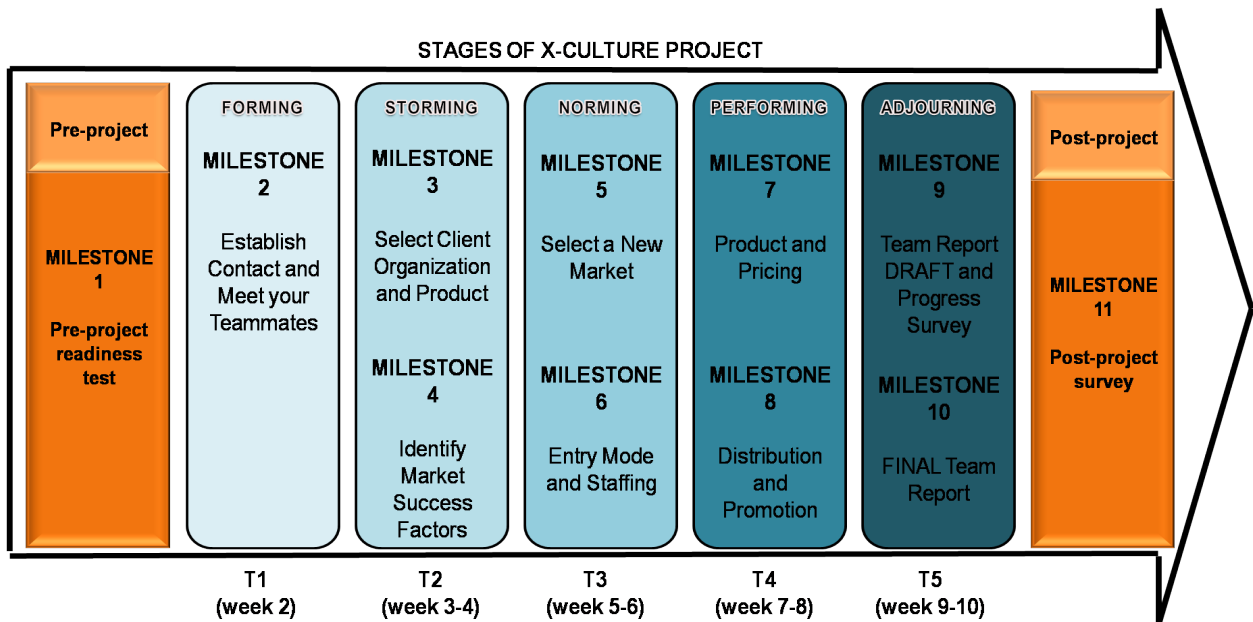


Figure 2.0: Stages of X-culture Project

Each team chooses between two available options:

- 1) The team can choose any organization to be their consulting client, but they have to contact the company and confirm that the company is interested in their business proposal, *or*
 - 2) The team can select one of the real-life challenges by offered by X-culture corporate partners.
- Prior to project commencement, instructors and students are required to take a readiness test and read the training materials. There are rigid guidelines that teams must follow each week, and teams must submit a weekly progress report for each milestone as illustrated in the Figure 2. Descriptions of milestones are shown in Table 1.

In addition to monitoring tasks developed by the X-Culture project, we had our students engage in several additional project-related activities, such as thematic-based lab sessions and follow-up blogging activities, and individual end-of-the-semester presentations.

- 1) **Thematic-based lab:** Every other week, in the computer lab, students watched theme-based videos for 10-15 minutes and reflected on what they saw. Then they went to a specific blog site, read a blog post and completed three written tasks based on the videos and their X-culture project.
- 2) **Individual Presentations:** After students submitted their final reports to the X-culture coordinator and finished all written tasks on the blog, they were required to give 15-minute individual presentations about the project. The goal of the presentation was to share thoughts about their experience working with people from different cultural backgrounds, and discuss the challenges they encountered during their 10-week projects.

Table 1: X-culture project management schedule

Tuckman and Jensen stages	Milestone	Task descriptions
PRE-PROJECT	Milestone 1—Pre-project readiness test	<ul style="list-style-type: none"> All participants are provided with project materials such as guidelines, report format and access to the readiness test. Teams pass the readiness test before they can proceed to the next milestone. If they fail their first attempt at the test, they must notify the X-culture project administrator and request a second attempt.
FORMING (T1)	Milestone 2—Establish Contact and Meet your Teammates	<ul style="list-style-type: none"> All team members are expected to establish contact. Once they have established contact, they must get to know their team members or begin the ice-breaking session.
STORMING (T2)	Milestone 3—Select Client Organization and Product	<ul style="list-style-type: none"> Teams start to work together and establish a brief history of their company, including existing products or services. Teams conduct a SWOT (strengths, weaknesses, and opportunities) analysis.
	Milestone 4—Identify Market Success Factors	<ul style="list-style-type: none"> Teams discuss key market characteristics that are critical to the company’s economic success based on factors such as geography and demographics, economics, political and legal environment, and cultural environment.
NORMING (T3)	Milestone 5—Select a New Market	<ul style="list-style-type: none"> Teams come up with a list of markets that satisfy their success criteria from the previous milestone. The teams conduct an analysis on two or more markets with each success criterion.
	Milestone 6—Entry Mode and Staffing	<ul style="list-style-type: none"> Each team discusses and analyzes an optimal new-market entry mode and potential staffing for its operations in the new market. A thorough analysis is recommended. Teams need to clearly specify a viable entry mode and staffing strategy.
PERFORMING (T4)	Milestone 7—Product and Pricing	<ul style="list-style-type: none"> Each Team decides how the product it selects should be presented to consumers in the new market. The teams discuss marketing strategy, product pricing and other marketing-related issues.
	Milestone 8—Distribution and Promotion	<ul style="list-style-type: none"> At this stage, teams decide how their products will be distributed. They develop a promotion strategy and explain it in detail.
ADJOURNING (T5)	Milestone 9—Team Report DRAFT and Progress Survey	<ul style="list-style-type: none"> Teams compile all writing from previous milestones to draft a final report. They must submit the draft to TurnItIn and obtain a plagiarism status of less than 20%. If the TurnItIn report shows above 20% for plagiarism, the team must correct the report and submit it again.
	Milestone 10—FINAL Team Report	<ul style="list-style-type: none"> The team leader or one of the team members submits a final copy of the report.
POST-PROJECT	Milestone 11— <i>Post</i> -project survey	<ul style="list-style-type: none"> All participants are required to complete a Post-project survey in which they share their experiences and evaluate their team members’ performances throughout the project.

3.2 Data collection procedures

The data collection process took place just before the project ended. The researchers emailed all instructors asking them to participate in an online survey. 1. Figure 3 depicts the data collection process in this study.

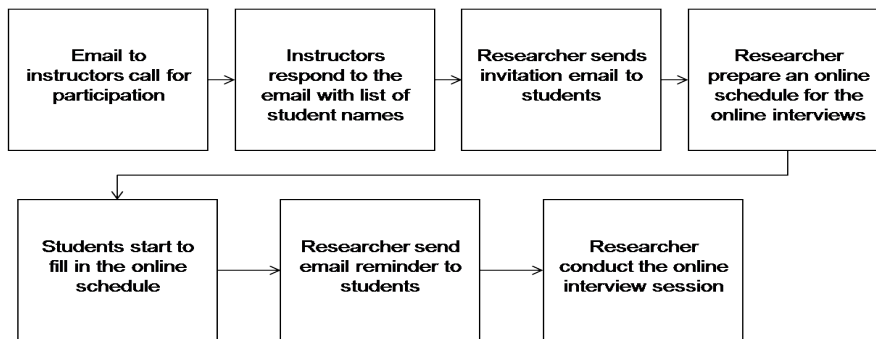


Figure 3: The overall data collection process

Respondents for the online survey and interview were recruited before the X-culture project was completed. We initially emailed X-culture instructors to see if their students would be willing to participate. Instructors responded to the email with a list of volunteers. Next, researchers emailed an official invitation to volunteers with details about the interview and a link to the online scheduling system (<http://doodle.com/>). For students from the USA, the online schedule was set to Central Time (UTC-6 hours); for students from the UAE, the schedule was set to GST (Gulf Standard Time; UTC +4 hours) and for other countries, the schedule was set to UTC +8 hours (Kuala Lumpur, Singapore). Students received the link to the online scheduling system for their time zone via email in order to reserve their interview session.

A confirmation email was sent to all respondents to finalize their choice of date and time for an online interview. A reminder email was also sent to all students. Throughout the data collection process, communication between researchers and online interview participants was done solely by email. As all participants had separate university email accounts, one dedicated Gmail account was created in order to synchronize communication for all users. In their reminder email for the online interview, students were provided login information for the dedicated Gmail account. Simple instructions were included in case students had problems accessing the Google Hangout account.

The online interview was conducted via Google Hangout, a built-in instant messaging application, previously known as Google Talk. The communication between the researchers and participants were purely text-based. The interview lasted between 60 to 90 minutes, which allowed time for respondents to read the questions, reflect, and type their answers. After the conversation ended, the researcher saved the conversation in a PDF file. Table 2 shows the demographic information for the online interviewees. The total number who volunteered to be interviewed was eighty-seven (n=87) from year 2014 to 2016.

Table 2: Demographic information of the online interviews

Respondent's Demographic		2014	2015	2016	Total
Gender	Male	7	22	6	35
	Female	7	34	11	52
Countries of origin	USA	8	8	0	16
	Malaysia	0	38	4	41
	Others (Indonesia, Thailand, Pakistan, China, Haiti, Nigeria, India, Italy, Croatia, Canada, New Zealand, Latvia, Brazil, UAE, Saudi & Oman)	6	10	13	29
Total number of respondents		14	56	17	87

a. Data analysis

After the transcriptions were collected, several steps were taken to prepare for data analysis. In this study, we conducted a qualitative content analysis. This analysis technique was chosen because it provides a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding. Graneheim and Lundman (2004) asserted that content analysis can be used to interpret latent content. Hsieh and Shannon (2005) described a qualitative content analysis as a “research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns” (p. 1278). Qualitative content analysis output provides a broad and rich description for the phenomenon being studied. Figure 4 illustrates the overall steps for data analysis in this study.

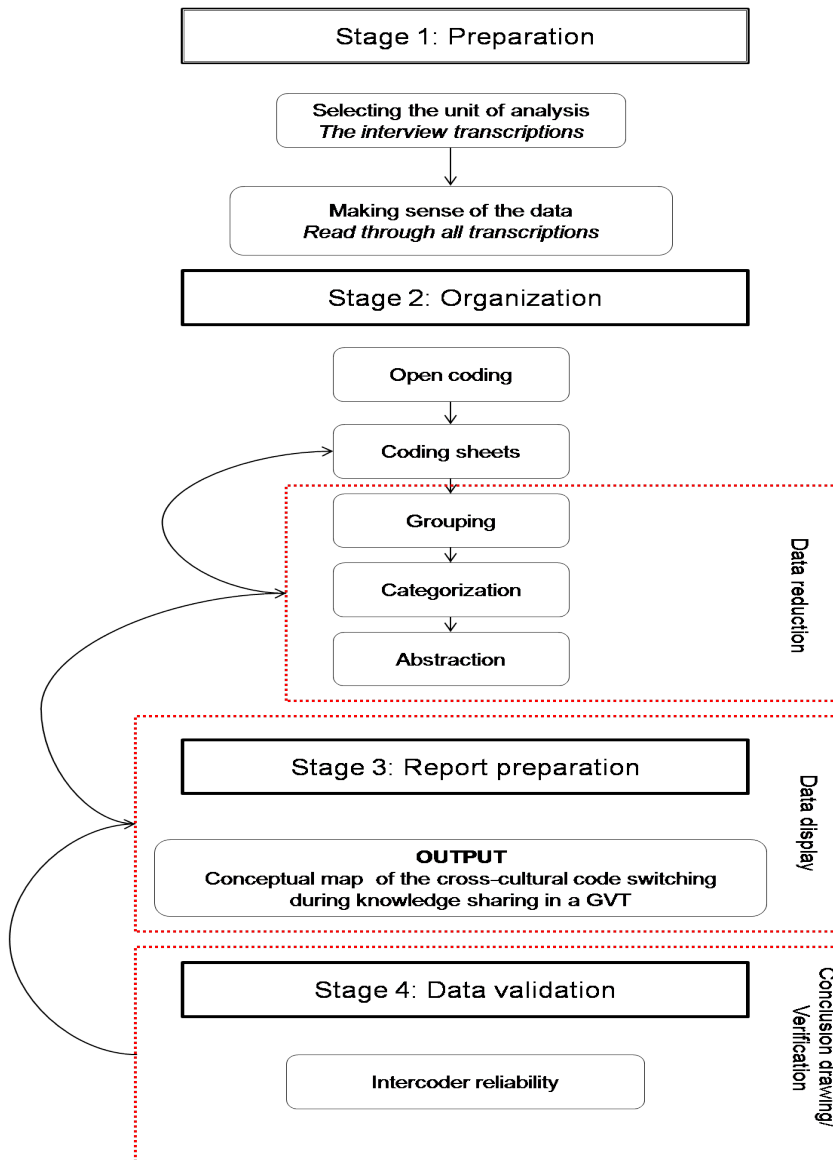


Figure 4: Overall inductive content analysis process

Stage 1: Preparation

Preparation deals with selecting the unit of analysis. According to Graneheim & Lundman (2004), the most suitable unit of analysis in qualitative content analysis is the whole interview or observational protocols so that it will be large enough to be considered as a whole and small enough to be kept in mind as context. The unit of analysis can also be a letter, word, sentence or paragraph depending on the research question (Elo & Kyngäs, 2008). In this research, the whole interview transcriptions were chosen as a unit of analysis. We compiled all electronic interview transcriptions and all transcriptions were relabeled and sorted. The purpose of relabeling was to know when the interview was conducted and who the respondent was. Then, we created a database to easily find the data. Mendeley software was used to archive all the interview transcriptions. All transcriptions and their summaries were read critically and coded manually. In

this step, we began to make comments about the initial codes, patterns and themes within the data. For the first phase of the coding process, manifest coding was carried out. Manifest coding was used as it is easy to identify. For example, a particular word in the transcriptions and the manifest codes became the basis for the next coding process.

Stage 2: Organization.

In the second stage, we used Atlas.ti version 7.0, a Computer Aided Qualitative Data Analysis Software (CAQDAS) to perform the data analysis process. The first step was to upload all interview transcriptions to the Atlas.ti software package and start the coding process with *open coding*. Open coding refers to the process of reading through all interview transcriptions several times, and based on the text, defining the initial codes. This step is based on the data only and not based on underpinning theories.

After open coding, all initial coding was collected, and we began to create *coding sheets* and develop categories to group similar codes. At this phase, categories were freely generated. Next, we identified themes or patterns to represent the categories, codes and verbatim. The following steps--grouping, categorization and abstraction--are known as data reduction, based on Miles and Huberman's data analysis interactive model (Miles & Huberman, 1994). During the data reduction process, we *grouped* the codes to reduce the number of similar codes into subcategory, generic category and main category (Elo and Kyngäs, 2008). The different levels of categories were meant to provide a meaningful description of the phenomena from specific to broader categories; hence, categories should increase the understanding of the data. Next, the *categorization* process took place. In this process, we classified data from specific to broader categories or themes. Once all data was classified into sub-theme, generic theme and main theme, we reviewed all data to ensure it was categorized as it should be.

Miles & Huberman (1994) emphasized that the data reduction process is a continuous process throughout the data analysis phase. The next step after categorization was *abstraction*, which refers to the process of formulating a general description of the research topics based on the generated themes (Elo and Kyngäs, 2008). In this step, all sub-themes, generic themes and main themes were appropriately renamed and this process was carried on until the data enabled the researchers to interpret and understand the phenomenon. Additionally, the interviews summaries, notes and memos were used to help us with the codebook. We read all codes, verbatim and summaries critically, multiple times, to familiarize ourselves with the data. We reflected on the data and did mind mapping of the codes in layers.

Stage 3: Report Preparation.

The next stage, *report preparation*, involved the data display process (Miles & Huberman, 1994). The data can be interpreted in many forms such as a model, a conceptual system, a conceptual map, a network diagram—or as graphs and charts. (Elo & Kyngäs, 2008; Miles & Huberman, 1994). A conceptual map seemed best for answering the study's key research question: How does culture impact the formation of swift trust in global virtual teams (GVTs)? The conceptual map describes the study's overall findings in pictorial form. Daley & Milwaukee (2004) strongly agreed that using a conceptual map in a qualitative study helps researchers to interpret the meaning of data and that good mapping allows researchers to discuss findings with the general viewer.

Stage 4: Data Validation.

The final stage, *data validation*, requires the researcher to reconsider data plausibility, sturdiness, validity and reliability. Graneheim and Lundman (2004) emphasized the importance of data trustworthiness, and they felt that the trustworthiness of findings increases when findings can be presented in such a way that allows the general reader to look for alternative interpretations. Findings should also be flexible and transferable to other contexts. After considering all recommendations, to validate our findings, we first used a data saturation point and intercoder reliability. As mentioned earlier, a data saturation point during data collection refers to a point at which no new additional data are found. During qualitative content analysis, the data saturation refers to the point when no additional new data emerges during the data analysis in stages 1, 2 and 3 (refer to Figure 4). The final conceptual map was validated using the intercoder reliability approach.

4.0 FINDINGS AND DISCUSSION

Due to the nature of the GVT work structure in which people are not constrained by geographical boundaries, teams must cope with conflicting cultural values, time zone differences and diverse intercultural communication styles. The analysis yielded two important insights into the initial process of GVT teamwork and swift trust formation. Based on our findings, team members experienced key challenges such as delayed communication due to time differences, misunderstanding of assigned tasks, and technical difficulties with the use of various collaborative tools . There were also problems with relationship-building, , work attitudes, responsibility and motivation among team members.

Our findings showed that GVT members from high context cultures demonstrate indirect communication styles, use non-verbal approaches and employ silence and polite gestures in certain situations, whereas low context GVT members are more prone to direct and straightforward communication styles with many verbal responses in online team discussions. The findings will benefit MNCs, as they need to train workers in cross-cultural literacy to make GVTs successful. Furthermore, MNCs must determine whether the cultural backgrounds of GVT members are homogenous or heterogeneous. Such knowledge will enable managers to understand what is required for global virtual cross-border team members to work well together because different cultures perceive trust and trustworthy behavior differently.

4.1 Teamwork formation based on the Tuckman and Jessen (1977)

In this section, we describe our findings regarding the process of teamwork formation and its challenges to GVTs based on the Tuckman and Jessen (1965) model for swift trust formation. This initial understanding centred on two key challenges: communication efficacy and team motivation, with several trust-related issues (as in Table 3).

Table 3: Challenges of Working in GVTs

Main Challenges	Swift Trust Issues
1. Communication Efficacy	<ul style="list-style-type: none"> • Delayed communication due to different time zones • Misunderstanding of the tasks to be undertaken and the roles assigned • Technical problems because of varied collaboration tools, i.e.

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2. Team Motivation	WhatsApp, Skype, Facebook
	<ul style="list-style-type: none">• Work attitude toward group project –decline in motivation• Lack of responsibility to group project--not dedicated and committed• No history of working together and failure to develop strong bonds

Overall, based on the teamwork model (refer to Figure 5), we found that GVT members went through all five stages but much more quickly than traditional teams. Some of the stages, in fact, overlapped due to the GVT dynamics. For instance, during the first stage of “forming,” team members exchanged introductory emails with each of the non-located members. Asian team members were surprised that some of their colleagues had engaged in a task-oriented process rather than taking the time to get to know them, skipping the relationship-building phase. In the introductory emails, members began to set the tone for how they felt work needed to be conducted and what communication tools ought to be used to complete the team’s work. For example, immediately after a brief introduction, Asnida said “We discussed which communication tools to use, and we decided to use Whatsapp.” Shikin added that “The first week, we just communicated via email, introduced ourselves, and asked what time they preferred to have the discussion, and what mode of communication.”

According to some respondents, early ice-breaker sessions couldn’t take long, as members needed to share task-related information to get the project moving. Each of the milestones needed to be completed within a short timeframe. The respondents observed that the first three stages were completed quickly because the milestones were not far apart. They learned the ropes while experiencing conflict and confusion. Only after milestone 4 or 5 did they begin to develop trust based on established relationships, which enhanced their performance (stage four).

Others expressed their perceptions about the conflicts and challenges they faced over the ten-week project. Instead of experiencing the conflicts intensely during the second phase only, they unanimously agreed that even at the fourth stage (performing), they were experiencing conflicts; some members suddenly disappeared or fell silent due to decreased motivation or a lack of interest. As a result tasks were not completed on time, which was frustrating to those who were hardworking and diligent. The “adjourning” phase naturally occurred when the deadline was past. Some members continued to keep in touch, whereas others treated their time together as purely task-oriented, for the term of the project only without any further relationship.

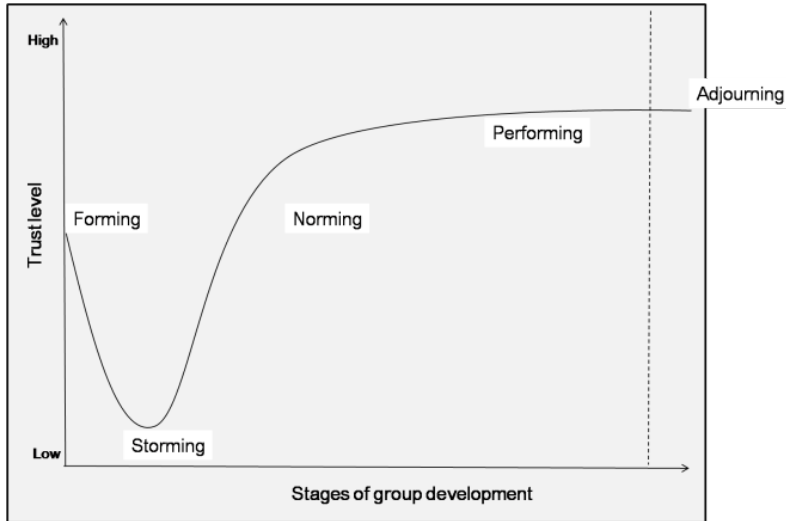


Figure 5: Global Virtual Teamwork Process and Swift Trust Formation

4.1.1 Communication Efficacy

Team members in the study mentioned several communication issues that reduced their effectiveness, such as delayed communication, misunderstandings, and technical problems. For example, one respondent was frustrated when her team members kept silent and did not reply for weeks, then suddenly emailed near the deadline. Some members skipped phases of the teamwork cycle. They began with introductions—forming—and then jumped into the norming and performing stages. Nurfida¹ reported, “It was very difficult. I wanted to give up when all my team members were very quiet, and then they made suggestions at the last minute. The different time zones made it difficult.”² Another respondent said that one of her team members failed to respond to several emails, finally answering after two weeks. The lack of efficient communication exacerbated problems when meeting dates were postponed, resulting in limited time for discussion about the project. Mashitah said, “Sometimes discussions were postponed. When we did not have time for discussion, we would finish our parts by ourselves”

Technical issues further hindered communication among members. Rosnani expressed dissatisfaction that her work was not accepted by other team members. Though this occurred due to technical problems, she felt frustrated that her work was rejected. She said, “My trust level dropped when they did not want to accept my part. .She said she did not get my edited part, but in my email, it said ‘submitted.’ ...That time my trust level....hmmm....We had some argument....At last it still the same.”

When team members had difficulties with the network due to weak Internet coverage, their communication suffered and miscommunication occurred. For instance, Delia was surprised to discover that her work was rejected because of a network problem, which prevented her submission from arriving on time. Similarly, respondents expressed frustration that technical problems caused varying forms of miscommunication with one team member who did not have access to the Internet for team discussions.

¹ All names are fictitious to protect the confidentiality of the respondents.

² Statements are lifted directly from the interview transcriptions, thus no corrections of grammatical or spelling errors have been made.

4.1.2 Team Motivation

All the respondents agreed that team motivation is one of the challenges of working in GVTs, since it is affected by trust issues, team member irresponsibility towards the group project and team members' attitudes toward the group. As the Tuckman and Jessen model (1965) suggests, respondents felt that team motivation seemed to decline over time. At first, in the forming phase, everyone approached the project with high enthusiasm and excitement, and the trust level was perceived as high. Respondents agreed that they felt anxious as well as excited at the same time. Maya said, "...Worried at first. Because I never had the experience of working with people from different continents before. But then it's quite exciting." However, between the next two phases (storming and norming) the level of excitement and engagement dropped, and the trust level seemed to suffer as well.

Anita*³ said she was labelled as inactive due to computer problems that limited her participation in team activities. She explained the problem to the team members, yet it did not seem to change their perception of her. This rejection made her feel that team members saw her as untrustworthy and her work as unreliable. As she said, "There are times, I made suggestions; they didn't take them, and then I just agreed with them."*⁴

According to Maya, her group contained a partner who seemed to be "inactive or passive" as well as team members who refused to respond to email even at the beginning of the project. Maya recalled that one of her team members maintained silence, not keeping other members informed as to his progress on tasks assigned to him. Aida said that one of her team members consistently gave excuses for not doing his work; as a result the other team members had to take responsibility for completing his part. She said, "Near to the end of the project, Taylor from Canada always made excuses. Maybe because he didn't get his job done. So Famen and I had to work on his part. So my trust in Taylor was gone." All respondents also emphasized the challenge of working with people with whom they had no past history.

All in all, our study suggests that the basic underlying factor for swift trust formation is efficient communication to ensure that members retain a high level of motivation and feel a strong sense of belonging to a "trusted circle" of GVT members.

³ * All names are fictitious to protect the confidentiality of the respondents.

⁴ * Statements are lifted directly from the interview transcriptions, thus no corrections of grammatical or spelling errors have been made.

4.2 Contravening Patterns of Intercultural Communication Styles in a GVT

In this section, we describe our findings based on three aspects of Hall’s theoretical lens (refer to Table 1): 1) Implicit vs. explicit, 2) polite vs. blunt responses, and 3) use of non-verbal cues vs. textual statements.

Table 4: Intercultural communication styles: High context vs. low context

Contextual level	Description
High context	<ul style="list-style-type: none"> ▪ Implicit and unclear statements ▪ Use silence when disagree and rely on polite and subtle gestures ▪ Employ non-verbal cues (e.g. emoticons/emoji)
Low context	<ul style="list-style-type: none"> ▪ Explicit and clear statements ▪ Rely heavily on textual statements and less on emoticons ▪ Provide opinions and discussion contributions bluntly and straightforwardly

4.2.1 Implicit vs. explicit communication

Based on Hall’s HC-LC context dimension, we found that virtual team members from HC cultures used indirect communication styles in which they did not express their opinions directly; as a result, their statements were sometimes unclear. As the project duration was short with weekly milestones, LC team members preferred to be direct during discussions, staying focussed on tasks. Clara, a team member from an HC culture, noted, “Eastern cultures will sugar-coat and not say exactly what they mean all the time.” She added, “The member from Romania was committed and submitted his parts on time, but he was not very outspoken, and he also liked to talk about his personal circumstances before getting to the subject of work.” Vanitha mentioned that she did not express her dissatisfaction during the discussion: “ I was interested in selecting Daffodil GP as the company of choice but my option was not considered at all as two of my team members had their hearts set on Mobius Slip. I agreed to their selection even though I was not satisfied with their selection.”

Furthermore, HC team members preferred to deliver private messages to team members instead of voicing opinions publicly to the entire team. Anna, a team member from an LC culture, said, “I did have an instance where it seemed one team member would only talk in private messages, so you never knew what they were saying to other team members. It was just odd that they were not willing to communicate in the group.” Another LC respondent, Steve, agreed. He said, “In fact, I found some of the members started to communicate privately with each other. A member from Brazil and another a member from Malaysia contacted me to discuss an issue privately” Both Brazil and Malaysia are considered HC cultures.

Some team members from Asian countries felt that Western team members did not “beat around the bush.” As Margaret put it, they were less likely to imply things, instead saying exactly what they were thinking. Team members from Eastern countries (which are generally HC) seemed to be more collective in their approach; if someone gave an opinion, it would be considered an option, but not final. Team members from Western countries, by contrast, used a more direct approach. “If they agree they will say ‘Yes,’ but if they disagree, they just simply say

‘No’ and that’s the end.” Susie affirmed that her team member from the US emphasized straightforwardness in communication. She said, “I would give US culture as an example from my own experience in my group. Angie from the US is very direct person. She values logic and linear thinking and expects people to speak clearly and in a straightforward manner. To her if you don’t “tell it how it is” you simply waste time, and time is money.”

Asian team members found the direct communication styles of Western team members challenging. They had to take in “honest” opinions and learn to decipher their meanings. It is crucial for Eastern and Western GVT members to recognize each other’s communication styles and mannerisms.

4.2.2 Polite vs. blunt responses

According to Hall, HC individuals tend to use “silence” when they disagree. This study also found a few examples of “silence” among team members due to an inability to converse in English. Lindsey said, “I expected, for example, the Russian team member to have a stronger influence. But she didn’t. She did the work, but she was silent.” Lindsey added that she preferred people who were verbal and got involved in the project instead of doing their work in solitude. Farah stated that she used polite communication and was considerate in order to avoid confrontation with her team members. She said, “Coming from a high-context culture, I attempted to imply or express my dissatisfaction and frustration in a polite and non-offensive manner, so as not to offend other team members”

Another respondent reported that one Asian member did not respond to the discussion posts and became a silent reader. (The team communicated primarily via Facebook and all thoughts and opinions were posted to the group.) Vivian said that the Asian team member would post but would never reply to posts by others. She said, “I also feel that this has a lot to do with each person’s English level and how much they know about other cultures.” Another respondent reported that one of his team members did not contribute to the project discussion. The team member became a silent reader; when other team members asked where she was, she responded to their question but not to the discussion.

Straightforward communication and blunt responses, were common among Western team members. One Asian team member felt that Western team members’ straightforward manner of conveying messages was better than his own less direct communication style. Another respondent reported that her Western team member was very punctual, and she felt that culture played a role in that. However, some of the Asian respondents felt that the blunt responses and straightforwardness were too harsh. Izzah said, “ One day where we were busy discussing ideas that we came up with. I made a point about packaging, and they started to argue with me directly. I was shocked because they were being direct compared to me.”

According to some respondents, the nature of GVTs and the fact that they never met each other in person encouraged them to be direct in their communication. The purpose of their communications during the project was to complete the project and receive a good grade. Thus, they said things clearly and directly, not caring what others thought about their opinions or ideas.

4.2.3 Use of non-verbal cues vs. textual statements

Non-verbal cues were highly important for most HC respondents. Lisa said that the use of emoticons helped her convey feelings when expressing her opinions: “Whenever I said something, I would always use the smiley face icon at the end so that my team members knew I was feeling happy, besides creating a good atmosphere.” She added that it was difficult for her to communicate with her virtual team members when she could not gauge what or how they were feeling. She saw relationships as an essential part of teamwork, and without adequate non-verbal cues many important messages were not effectively delivered. One of respondents said that LC team members did not bother to use emoticons; every statement was purely text, whether it was detailed instructions or short concise statements.

Chin Ai Leng explained her habit of using emoticons in context. She said she is selective about what emotion she wants to convey. When she feels it is the right time to inject non-verbal cues to enhance her meaning, she does so. She felt that sometimes merely putting the emoticon for “happy” ☺ or “annoyed” ☹ could easily make a point. However, Kelsey did not seem to agree with the use of non-verbal cues. She felt that words are more powerful: “Easily I could say what I intended in few words, such as, “Please submit as soon as you can.”

Some respondents exhibited a mix of communication styles; they used non-verbal cues when being indirect and straight text when they wanted to be direct in conveying the message. One respondent who was originally from an Eastern country but currently studying in the United States provided an example of both indirectness and directness in her communication styles. During the project, she politely asked one team member to submit his part but received numerous excuses from him. She then decided to be direct by using bold-face text as a non-verbal cue to urge him to submit the work. She saw bold face as comparable to using a firmer tone of voice to indicate seriousness, as tone of voice is missing in the virtual space.

Unfortunately, this led to the misconception that she was being rude, and the delinquent team member replied with a rude tone in his chats. This led to a breakdown in communication, and the HC team member did not submit her part. She pointed out that understanding communication styles is crucial, and that culture matters in understanding both stated and implied messages, whether on Facebook or Whatsapp.

5.0 IMPLICATIONS AND CONCLUSION

Due to the nature of the GVT work structure in which people are unconstrained by geographic boundaries, teams must also cope with conflicting cultural values, time zone differences and diverse intercultural communication styles. The qualitative analysis yielded two important insights into the initial process of teamwork and swift trust formation and the contravening patterns of intercultural communication styles in GVT collaboration. Based on our findings, team members experienced key challenges such as delayed communication due to time differences, misunderstanding of tasks assigned, technical problems with the use of varied collaborative tools, work attitude, lack of responsibility and motivation among teams and difficulty to establish relationships. In a different perspective, GVT members from high context cultures demonstrate indirect communication styles, use non-verbal approaches and employ silence and polite gestures in certain situations, while low context GVT members are more prone to direct and straightforward communication styles with many verbal responses in online team

discussion. The findings will benefit the multinational corporations (MNCs) as they need to train their people in cross-cultural literacy, a crucial intercultural communication competency in any virtual project that will include members who are strangers to one another and who will have no opportunity to meet face-to-face. Furthermore, MNCs must determine whether the cultural backgrounds of GVT members are homogenous or heterogeneous. Such knowledge will enable a manager to understand what is required for the global virtual cross-border team collaboration to be successful, because different cultures perceive trust and trustworthy behavior differently.

We hope that our qualitative teamwork model will provide new practical implications. MNCs that desire to use GVTs as part of an innovative and competitive work structure will benefit in terms of theoretical data that will help them improve their GVT solutions and strategies. For example, MNCs must determine whether the cultural backgrounds of GVT members are homogenous or heterogeneous. Such knowledge will enable a manager to understand what is required for a global, virtual, cross-border team collaboration to be successful, given that different cultures perceive trust and trustworthy behaviour differently. Since trust is the glue for effective performance, the compatibility of cultures must be accurately assessed and action taken to address any potential points of conflict. If the team members are heterogeneous in nature, development of cross-cultural competencies is crucial.

6.0 FUTURE RESEARCH DIRECTIONS

Choosing the right communication platforms for virtual collaboration is also important. In our study, GVT members heavily relied on Facebook and Whatsapp. Everyone could be reached anytime and anywhere, yet it was still a challenge to achieve high-performing teams. In this study, using Hall's theoretical lens, we found that GVT members exhibited three distinctive communication patterns and behaviors. This is significant for MNCs because teams cannot be successful without good, clear communication. Members of GVTs need to be aware of, sensitive to, and competent at interacting with other cultures. They may not have the opportunity to meet face-to-face to rectify any miscommunications or misinterpretations that surface in the course of a project. Team members also need to be aware of their own cultural habits and how they impact their ability to communicate and to achieve goals in a short period of time.

The implication of this study is that individuals with accommodating and diverging learning styles tend to be those with high-context cultural values, while individuals with converging and assimilating learning styles tend to be those with low-context cultural values. Furthermore, each individual also has his or her own communication style, which may contribute to or detract from working effectively on a GVT. MNCs need to train their people in cross-cultural literacy, a crucial intercultural communication competency for any global virtual project. In sum, future research should focus on aspects that tie intercultural communication patterns and styles to high performing team behaviours. Two key questions for future research could be: 1) To what extent do GVTs integrate HC and LC communication styles to improve performance? 2) What are the motivations for engaging in switching behaviours between HC and LC styles? and 3) In what ways do the switching behaviours of GVT influence the way HC and LC members develop swift trust in order to achieve high performing teams?

REFERENCES

- Adler, T. R. (2007). Swift Trust and Distrust in Strategic Partnering Relationships: Key Considerations of Team-Based Designs. *Journal of Business Strategies*, 24(2).
- Alsharo, M. K. (2013). *Knowledge Sharing in Virtual Teams: The Impact on Trust, Collaboration, and Team Effectiveness*. University of Colorado.
- Byron, K. (2008). Carrying too Heavy a Load? The Communication and Miscommunication of Emotion by Email. *Academy of Management Review*, 33(2), 309–327. doi:10.5465/AMR.2008.31193163
- Chang, H. H., Chuang, S., Chao, S. H., Hsin Hsin, C., Shuang-Shii, C., & Shu Han, C. (2011). Determinants of cultural adaptation, communication quality, and trust in virtual teams' performance. *Total Quality Management & Business Excellence*, 22(3), 305–329. doi:10.1080/14783363.2010.532319
- Crisp, C. B., & Jarvenpaa, S. L. (2013). Swift Trust in Global Virtual Teams. *Journal of Personnel Psychology*, 12(1), 45–56. doi:10.1027/1866-5888/a000075
- Daim, T. U. A., Ha, A., Reutiman, S., Hughes, B., Pathak, U., Bynum, W., & Bhatla, A. (2012). Exploring the communication breakdown in global virtual teams. *International Journal of Project Management*, 30(2), 199–212. doi:10.1016/j.ijproman.2011.06.004
- Daley, B. J., & Milwaukee, W. (2004). Scholarship of Teaching and Learning includes Systematic inquiry into teaching and learning issues includes Critical reflection on strategies , possibilities leads to such as Development of constructivist learning thus need strategies Adults use .
- Dekker, D. M., & Rutte, C. G. (2007). Effective versus ineffective communication behaviors in virtual teams. *Proceedings of the Annual Hawaii International Conference on System Sciences*. doi:10.1109/HICSS.2007.195
- Dekker, D. M., Rutte, C. G., & Van den Berg, P. T. (2008). Cultural differences in the perception of critical interaction behaviors in global virtual teams. *International Journal of Intercultural Relations*, 32(5), 441–452. doi:10.1016/j.ijintrel.2008.06.003
- Duran, V., & Popescu, A.-D. (2014). The challenge of multicultural communication in virtual teams. *Procedia - Social and Behavioral Sciences*, 109, 365 – 369. doi:10.1016/j.sbspro.2013.12.473
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. doi:10.1111/j.1365-2648.2007.04569.x
- Ferraro, & Ferraro, G. P. (1997). *The cultural dimension of international business*. *Collection Building* (Vol. 16). doi:10.1108/01604959710156925
- Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. doi:10.1016/j.nedt.2003.10.001
- Greenberg, P. S., Greenberg, R. H., & Antonucci, Y. L. (2007). Creating and sustaining trust in virtual teams. *Business Horizons*, 50, 325–333. doi:10.1016/j.bushor.2007.02.005
- Hall, E. T. (1959). *The Silent Language*. New York: Anchor Books.
- Hofstede, G. (1991). *Cultures and Organizations: Software of the Mind*. New York: McGraw Hill.
- Holtbrugge, D., Weldon, A., Rogers, H., Holtbrugge, D., Weldon, A., Rogers, H., ... Rogers, H.

- (2012). Cultural determinants of email communication styles. *International Journal of Cross Cultural Management*, 13(1), 89–110. doi:10.1177/1470595812452638
- Hsieh, H.-F. H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277–1288. doi:10.1177/1049732305276687
- Jarvenpaa, S. L., Knoll, K., & Leidner, D. E. (1998). Is Anybody Out There? Antecedents of Trust in Global Virtual Teams. *Journal of Management Information Systems*, 14(4), 29–64. doi:10.1080/07421222.1998.11518185
- Jarvenpaa, S. L., & Leidner, D. E. (1998). Communication Virtual Trust Teams in Global Virtual Teams. *Journal of Computer-Mediated Communication*, 10(6), 791–815. doi:10.1111/j.1083-6101.1998.tb00080.x
- Jarvenpaa, S. L., & Leidner, D. E. (1999). Communication and Trust in Global Virtual Teams. *Organization Science*, 10(6), 791–815. doi:10.1287/orsc.10.6.791
- Joy, S., & Kolb, D. a. (2009). Are there cultural differences in learning style? *International Journal of Intercultural Relations*, 33, 69–85. doi:10.1016/j.ijintrel.2008.11.002
- Kankanhalli, A., Tan, B. C. Y., & Wei, K.-K. (2007). Conflict and Performance in Global Virtual Teams. *Journal of Management Information Systems*, 23(3), 237–274. doi:10.2753/MIS0742-1222230309
- Kayworth, T., & Leidner, D. (2000). Manager : A Prescription for Success. *European Management Journal*, 18(2), 183–194.
- Klitmøller, A., & Luring, J. (2013). When global virtual teams share knowledge: Media richness, cultural difference and language commonality. *Journal of World Business*, 48(3), 398–406. doi:10.1016/j.jwb.2012.07.023
- Kroeber, A. L. L., & Kluckhohn, C. (1952). Culture : A Critical Review of Concepts and Definitions. *Vintage Books*, 47(1), 223. Retrieved from http://books.google.co.uk/books?id=cn4GAQAIAAJnhttp://archive.org/stream/papersofpeabodymvol47no1peab/papersofpeabodymvol47no1peab_djvu.txt\nhttp://www.questia.com/PM.qst?a=o&d=100067373
- Lee-Kelley, L., & Sankey, T. (2008). Global virtual teams for value creation and project success: A case study. *International Journal of Project Management*, 26(1), 51–62. doi:10.1016/j.ijproman.2007.08.010
- Lockwood, J. (2015). Virtual team management: What’s causing communication breakdown? *Language & Intercultural Communication*, 15(1), 125–140. doi:10.1080/14708477.2014.985310
- Martins, L. L., & Schilpzand, M. C. (2011). *Global Virtual Teams: Key Developments, Research Gaps and Future Directions. Research in Personnel and Human Resources Management* (Vol. 30). Bingley: Emerald Group Publishing. doi:10.1108/S0742-7301(2011)0000030003
- Maznevski, M. L., & Chudoba, K. M. (2000). Bridging Space over Time: Global Virtual Team Dynamics and Effectiveness. *Organization Science*, 11(5), 473–492. doi:10.1287/orsc.11.5.473.15200
- Meyerson, D., Weick, K. E., & Kramer, R. M. (1996). Swift trust and temporary groups. In R. M. K. T. R. Tyler (Ed.), *Trust in organizations: Frontiers of theory and research* (pp. 166–195). Thousand Oaks, CA, US: Sage Publications, Inc.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis : An expanded sourcebook*. (R. Holland, Ed.) (2nd Ed.). Sage Publications.
- Mockaitis, a. I., Rose, E. L., & Zettinig, P. (2012). The power of individual cultural values in global virtual teams. *International Journal of Cross Cultural Management*, 12(2), 193–210.

- doi:10.1177/1470595812439868
- Muethel, M., Siebdrat, F., & Hoegl, M. (2012). When do we really need interpersonal trust in globally dispersed new product development teams? *R & D Management*, 42(1), 31–46. doi:10.1111/j.1467-9310.2011.00667.x
- Nurmi, N., & Hinds, P. J. (2016). Job Complexity & Learning Opportunities: A Silver Lining in the Design of Global Virtual Work. *Journal of International Business Studies*, 1–24. doi:10.1057/jibs.2016.11
- Pinjani, P., & Palvia, P. (2013). Trust and knowledge sharing in diverse global virtual teams. *Information & Management*, 50(4), 144–153. doi:10.1016/j.im.2012.10.002
- Polistina, K. (2009). Cultural literacy. *The Handbook of Sustainability Literacy Skills for a Changing World*, 64, 224. doi:10.1097/00001888-198902000-00012
- Ramírez-Alesón, M., & Fleta-Asín, J. (2016). Is the Importance of Location Factors Different Depending on the Degree of Development of the Country? *Journal of International Management*, 22(1), 29–43. doi:10.1016/j.intman.2015.10.002
- Robert, L. P., Denis, A. R., & Hung, Y.-T. C. (2009). Individual Swift Trust and Knowledge-Based Trust in Face-to-Face and Virtual Team Members. *Journal of Management Information Systems*, 26(2), 241–279. doi:10.2753/MIS0742-1222260210
- Samovar, L. A., Porter, R. E., & McDaniel, E. R. (2007). *Communication between cultures*. Belmont CA: Thomson Higher Education.
- Shachaf, P. (2008). Cultural diversity and information and communication technology impacts on global virtual teams: An exploratory study. *Information & Management*, 45(2), 131–142. doi:10.1016/j.im.2007.12.003
- Smircich, L. (1983). Concepts of Culture and Organizational Analysis. *Administrative Science Quarterly*, 28(3), 339–358.
- Sobrofski, S. (2004). *Trust Formation in Global, Virtual Partnerships: Russia and The United States Examined*.
- Trompenaars, F., & Hampden-Turner, C. (2000). *Riding the Waves of Culture Understanding Cultural Diversity in Business*. Naperville, IL: Nicholas Brealey Publishing. Retrieved from https://books.google.co.ke/books?id=vyZ_C-xpnjMC
- Tuckman, B., & Jensen, M. (1965). 5 Stages of Group Development. *Psychological Bulletin*, 63, 384–399.
- Tuckman, B. W., & Jensen, M. A. C. (1977). Stages in small group development revisited. *Group and Organizational Studies*, 2, 419–427.
- Yusof, S. A. M., & Zakaria, N. (2012). Exploring the State of Discipline on the Formation of Swift Trust within Global Virtual Teams. *2012 45th Hawaii International Conference on System Sciences*, 475–482. doi:10.1109/HICSS.2012.272
- Zakaria, N., Amelinckx, A., & Wilemon, D. (2004). Working Together Apart? Building a Knowledge-Sharing Culture for Global Virtual Teams. *Creativity and Innovation Management*, 13(1), 15–29. doi:10.1111/j.1467-8691.2004.00290.x
- Zakaria, N., & Talib, A. N. A. (2011). What did you say? A cross-cultural analysis of the distributive communicative behaviors of global virtual teams. *Proceedings of the 2011 International Conference on Computational Aspects of Social Networks, CASoN'11*, 7–12. doi:10.1109/CASON.2011.6085910
- Zakaria, N., Yusof, S. A. M., Hiroshi, Y., & Muton, N. A. R. (2016). Why the Different Tone ? Contravening Patterns of Intercultural Communication Styles in Global Virtual Teams. In *Proceedings of 10th Asia - Pacific Business and Humanities Conference* (pp. 1–9).

List of Publications and Significant Collaborations that resulted from your AOARD supported project: In standard format showing authors, title, journal, issue, pages, and date, for each category list the following:

1. Zakaria, N., Yusof, S. A. M., & Muton, N. A. R. (Submitted). Should I Accommodate You? Cross Cultural Code-Switching Behaviors of Global Virtual Team Members During Swift Trust Formation, *Academy of International Business (AIB) Meeting/International Conference*, Dubai, July 2-5, 2017.
2. Zakaria, N. (2017). What Does It Take? New Praxes of Cross-Cultural Competency for Global Virtual Teams As Innovative Work Structure. In S. Kundu, V. Pereira, S. Munjal (Eds). *Human Capital and Innovation: Examining The Role of Globalisation*, Palgrave Macmillan, NY. Pp. 131-160. Doi:10.1057/978-1-137-56561-7_6
3. Zakaria, N., Yusof, S. A. M., Hiroshi, Y., & Muton, N. A. R. (2016). Why The Different Tone? Contravening Patterns of Intercultural Communication Styles in Global Virtual Teams. In Proceedings of 10th Asia - Pacific Business and Humanities Conference (Pp. 1–9).
4. Zakaria, N. & Muton, N.A.R. (2016). It's Not That Simple! Intercultural Communication Adaptive Behaviors of High-Context Global Virtual Team Members, *The International Journal Information*, 19 (8A), 3143-3148.
5. Zakaria, N. & Mohd Yusof, S.A. (2015). You Said It Differently! Patterns and Characteristics of Intercultural Communication Styles in Global Virtual Teams, In 29th Annual Conference of the Australian and New Zealand Academy of Management (ANZAM) (pp. 1–11), Dec 2-4.
6. Mohd Yusof, S. & Zakaria. N. (2015). Understanding Swift Trust Behaviors Within Global Virtual Teams: A Qualitative Meta Analytic Review. In 29th Annual Conference of the Australian and New Zealand Academy of Management (ANZAM) (pp. 68–75), Dec 2-4.
7. Zakaria, N., & Mohd Yusof, S.A. (2015). Can We Count On You at A Distance? The Impact of Culture On Formation of Swift Trust Within Global Virtual Teams. In J.L. Wildman and R.L. Griffith (Eds.) *Leading Global Teams: Translating Multidisciplinary Science to Practice*. Springer, NY. pp. 1-13. 253–268. Doi:10.1007/978-1-4939-2050-1
8. Zakaria, N., Yusof, S. A. M., & Muton, N. A. R. (2015). Virtually, You Are There! Exploring The Teamwork Challenges to Swift Trust Formation When Working in Global Virtual Team. *Advanced Science Letters*, 21(5), 1206–1210. doi: 10.1166/Asl.2015.607
9. Zakaria, N. (2015). What Does it Take? Building Swift Trust through Cross-Cultural Competencies for Global Virtual Teams.' Invited Speaker at *International and Global Business: Communication, Organization, and Satisfaction Workshop*, Graduate School of Literature and Human Sciences, Osaka University, 24-26th July.
10. Zakaria, N. (2014). Culture, Swift Trust, and Global Virtual Teams: Virtual-Based Experiential Learning to Promote Internationalization. In Professional Development Workshop entitled: Fostering international teaching and research collaboration. The 74th *Academy of Management Conference*, Philadelphia, USA, 1-5th August, 2014.
11. Zakaria, N. (2014). Building cultural competencies: Challenges, Opportunities and Pragmatic Learning in Global Virtual Teams, 5th Asian Conference on Social Sciences, Rihgha Hotel, Osaka, Japan, 12-15th June, 2014.