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Global Virtual Team (GVT): Exploring the Challenges, and Potential Gaps in Research

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Abstract

Advancement in communication technology enables the organisation to expand its team-based structure from co-located teams to the global virtual team (GVT). In spite of that, most of the study on GVT performance encountered a few common problems. Firstly, it is difficult to identify a standard set of valid measures for GVT performance. Besides, the limitation in recent literature to capture the impact of different dimensions of diversity on GVT performance posed anther challenges.

Similarly, the problem of the elusive concept of the extent of virtuality in GVT study has also received little attention in the literature. In addition, a closer look is necessary on how team trust, team cohesion, team confidence, team knowledge, skills, and abilities (KSA), team creativity affect GVT performance. These factors frequently appeared in the literature, but the results are somehow contradictory and not integrated.

Keywords: Global Virtual Team, Team Performance, Diversity, Team Management

Introduction

Many factors like rapid globalization, unprecedented innovation in information and communication technology (ICT), culturally diverse workforce, increase employee participation and collaboration in decision-making have profiled a new competitive landscape for the global context. A recent survey indicated that 66% of the multinational companies use GVT extensively (Target Training, 2014). Also, 79% of the knowledge workers today always or frequently work in GVT (Ferrazzi, 2014). Johns and Gratton (2013) further assert that 1.3 billion of business professionals will enrol in virtual teams in the next few years. In spite of that, many researchers contend that research on GVT performance is still in its nascent stages (Hosseini & Zuo, 2015) and many areas of research have not been examined.

Challenges for GVT

Trust is espoused as the most vital factors in affecting team effectiveness (Pangil & Chan, 2014). Trust is complicated to build and sometimes it requires consistent face-to-face interaction. In light of these concerns, any GVT will have a hard time to build trust among the members as they are mainly lack of face-to-face interaction. Trust is essential to motivate individuals to be committed and their willingness to share knowledge and resources during their collaboration in GVT. GVT members lack nonverbal cues to generate shared understanding.

Team cohesion is indispensable in uniting individual contribution to become collective efforts. Thus, team performance and development is mostly depending on team cohesiveness. The lack of face-to-face interaction among GVT members has made it difficult for the enthusiasm of one member to inspire the others. Also, lacking face-to-face interaction, GVT members are restricted to fewer means to resolve the ambiguity. On the other hand, team coaching, performance monitoring, and team development are difficult to achieve, too, due to virtuality (Kaǵe, 2012). Consequently, deficiency of support among GVT members will lead to the feeling of isolation and subsequently compromising team commitment.

GVT offers an effective way of combining various talents within an organization regardless of geographical limitation. Nonetheless, the negative impacts of team diversity should not be underestimated. Problems like miscommunication, increased level of misunderstanding, increased conflict, differences in the value system, and decreased team cohesion are well documented in the literature (Pieterse, Van Knippenberg, & Van Dierendonck, 2013).

Over the past century, team confidence has been identified to be positively associated with team performance. Team confidence is developed when members familiarise themselves with the abilities and skill set which each member-owned. The problem with GVT is that the members are rarely met face to face and reply on ICT to communicate. Thus, communication tends to be less personal and limited to the formal discussion. As a result, it is particularly challenging to establish team confidence in GVT as members lack the opportunity to understand each other knowledge and skills. Thus, developing team confidence in GVT is a big challenge.

In the area of human resources management, selecting required knowledge, skills, and abilities (KSA) to fill a position is always critical. Assigning wrong KSA on the wrong area entails huge risk to team performance as well as organisation subsistence. Hence, selecting appropriate KSA regardless of location would be even more challenging. From GVT point of views, a critical KSA for GVT is the ability to balance the synergy devoted to task and relationship building. The ties among the members are relatively weaker, and trust among members are hardly built. On the other hand, computer communication skills would hinder other KSA as it is the linchpin of successful KSA delivery. Consequently, the ability to use ICTs to communicate and complete task would be directly impacted team performance.

GVT is a great way to enlarge a team capacity to generate novel and useful ideas. The essential factors contributing to this capacity rely heavily on team creativity. Bring together a vast array of individuals from different backgrounds and origins will not necessarily make the team creative. Therefore, how to create and enhance team creativity has always been a great challenge for GVT manager. However, recent development in team creativity has led to a renewed interest in examining the impact of social capital of individuals with creativity. Unfortunately, communication in GVT often less frequent and deprived compared to face to

face. Hence, the challenges of elevating team creativity are not limited to selecting the best fitted KSA but also how to mosaic all of them together as a functional unit.

Besides, social media is used extensively for knowledge sharing and collaboration in GVT. In short, all this technological innovation is designed to close the gaps between virtuality and reality. However, how effective is this technology can reduce the extent of virtuality is remained in doubts. Some issues related to communicating via electronic medium are remained unsolved, for instance, challenging to interpret knowledge (Gibson & Gibbs, 2006), decreased team cohesion (Hill, Kang, & Seo, 2014), lack of social cues (Orhan, 2014), etc. Thus, the challenges are stemming from managing the whole spectrum of communication in GVT.

Research Gaps

The IPO model (McGrath, 1964) has been extensively used in the study of team performance for all accounts (Mathieu, Maynard, Rapp, & Gilson, 2008). Although the IPO model guided the way researchers contemplate about team performance. However, some thought-provoking findings proved that in certain extents IPO model is limited in depicting team performance (Franz, 2012). Ilgen et al. (2005) argued that the mediational construct that transfers the influence of input into outputs are not essential to be a process but sometimes emergent cognitive or affective states. Although Ilgen et al. had identified this subtle area where the IPO model gone overlooked. Nonetheless, researchers' solutions to this imprecision used of the term processes are not integrated. On the other hand, some researchers, critics that the IPO model illustrated statics and single-linear progression from inputs through outputs, which unable to capture the dynamic changes in the team functioning (Mathieu et al., 2008). Researchers advocated that feedback loops should be added into the original IPO model, stemming from the outputs back to the inputs, in the interest of incorporating the reality of dynamic change (Fransen et al., 2015). In spite of that, most of the empirical research today still emphasized the single linear path IPO model (Bedwell et al., 2012). Thus, the exploration of the IPO model is made even more important because of recent literature on extending and modifying the IPO model is relatively scare and not integrated.

With the propagation of GVT in the organisation today, the study of how team creativity affects GVT performance has gained relatively close attention recently. Despite the wealth of studies which reacted promptly towards this trend, the understanding on how team creativity can be supported and how it will impacts team performance is still ambiguous (Wang, Schneider, & Valacich, 2015). Researchers have found that team creativity is positively associated with team performance (Chung, Lee, & Choi, 2014). In spite of that, the relationship between team creativity and team performance is not consistent and vary across different contexts. In the same way, the study illustrated that factors which kindle team creativity are unlike factors conducive to work performance (Chiang, Hsu, & Hung, 2014). Baer (2012) argued that team creativity would be improved if they maintained a strong relationship among the members. Chang, Hung, and Hsieh (2012) proposed that knowledge will affect performance through creativity. In spite of that, empirical findings on this relationship remain inconsistent (Hoever, Van Knippenberg, Van Ginkel, & Barkema, 2010).

Dul, Ceylan, and Jaspers (2011) emphasized that the contribution of each different factors on upholding team creativity is not necessarily the same. This has called for future studies to investigate the determinants of team creativity, and also delineated the relative contribution of each factor towards team performance through team creativity. Furthermore, reviews on the mechanism in which team creativity mediated the influences of the various elements on team performance have received little attention. In general, more

research needs to be done on understanding how team knowledge, team confidence, team cohesion, and trust influence team creativity. Also, how team creativity mediated this influences team performance.

A considerable amount of literature has been published to examine the relationship between trust and team performance. Trust has been identified to be the determining factors in the effectiveness of activities which required coordination. Trust is preeminent in GVT to prevent the drawbacks from physical dispersion, coupled with dynamic membership, diversity, and lack of interaction. Current research on how trust affects GVT performance showed diverging results with some reporting positively while others question the importance of trust to performance. This inconsistency finding is mainly rooted in the problem of how to conceptualize trust. It has been suggested that trust is derived from the perception of the KSA to overcome task uncertainty. Trust is instilled when the team perceived that they have sufficient KSA to handle the task. Hence, KSA posits a relationship with trust. However, to date, there has been little attention to how KSA influences trust.

Trust is the product of the synergy of cooperation and collaboration among team members. In GVT, good team performance is instead a sum of individual works, but through a dynamic process which unite all the members in the pursuit of team goals. The research highlighted that team cohesion is the preliminary stage of trust (DeOrtentiis, Summers, Ammeter, Douglas, & Ferris, 2013). The more cohesive the team, the higher the trust level among them. However, the direction of the relationship between cohesion and trust is not clearly outlined in the literature. Some research indicated that cohesion affects trust (Joo, Song, Lim, & Yoon, 2012), while the other mentioned the vice versa (Fung, 2014). In short, the findings of team cohesion on trust are relatively limited and scattered. Hence, more works need to done to clarify the relationship between the two constructs.

Team diversity is compositional and comprised of three major components which include demographic diversity, functional diversity, and attitudes/values diversity (Mathieu et al., 2008). Gilson and Maynard (2015) stipulated that demographic cohorts (i.e., millennial) play a significant role in moderating the prevailing relationship between the antecedent and the descendent of GVT performance. Morris and Venkatesh (2000)conclusively shown that members from different generations demonstrated dissimilar attitude and values towards technology. Thus, as the millennial enters the workplace and this may remark previously hypothesized relationship may be no longer valid. General readjustment is needed as millennial is the first generation to grow up with computers and access to different ICTs.

Another essential point to study diversity is to understand how functional diversity affects team performance. Functional diversity means how the team member differs concerning their functional background. Scholars have seen functional diversity contributes to the synergy to encourage innovative ideas, depress group thinking, and increase the quality of decision making through the breadth of expertise, knowledge, and perspectives with them. However, there is inconsistent with this argument, given the functional diversity has not always been positively related to the team performance (Cai, Liu, & Yu, 2013). Some studies have argued that functional diversity is positively associated with team performance (Yuan, Guo, & Fang, 2015; Piragasam & Unoon, 2018; Liazos & Markati, 2018; Muthoka, Oluoch, Muiruri, 2018)

Nonetheless, some researchers assert that functional diversity may both facilitate and impede team performance (Buyl, Boone, Hendriks, & Matthyssens, 2011). Very little research has been done to study the relationship between functional diversity and team performance

from GVT perspectives. Much like the findings associated with functional diversity, team member attitudes diversity has yielded a vast array of mixed results.

Earlier research showed that the actual perception of diversity would have a direct impact on diversity-related outcome (Harrison, Price, Gavin, & Florey, 2002). At the same time, the majority of GVT members is sceptical about whether being diversity is something beneficial (Thomas & Plaut, 2008). Suh, Shin, Ahuja, and Kim (2011) emphasized that it is essential to take contextual influence into account when studying affective diversity within organizational research. The research to date has tended to focus on studying attitude diversity within colocation team. Therefore, more research endeavour is needed to address the limitation in the literature on how attitude diversity will affect GVT outcome.

Most GVT studies treated the extent of the virtuality of each GVT to be equal. The concept of virtuality in GVT has remained elusive in the scope of literature (Hosseini & Zuo, 2015). Kirkman (2005) argued that the extent of team virtuality depends on three dimensions which are the degree of reliance on virtual tools, the synchronicity of interactions, and the informational value of the medium used. Empirically, the extent of virtuality is moderating the relationship between team empowerment and team performance (Kirkman, Rosen, Tesluk, & Gibson, 2004). However, recent literature on the extent of virtuality has seemed to be scattered and not integrated. Orhan (2014) showed that task virtuality has a direct relation with team virtuality and further claimed that it is the reason why people require virtual collaboration. Suh et al. (2011) recognised that the extent of virtuality highly depends on two dimensions which are group-level virtuality and individual level of virtuality. In spite of that, the authors do not explain how this extent of virtuality will affect the team outcome. More research needs to be done to take into account any unique dimensions which contour the extent of virtuality in GVT and empirically examine how it will interplay with other variables in affecting the team outcome.

Conclusion

In conclusion, organisations today faced many challenges due to the dynamic conditions in the business environment. Rapid globalization, unprecedented innovation in information and communication technology (ICT), culturally diverse workforce, increase employee participation and collaboration in decision-making have profiled a new competitive landscape for the global context. This unique environment required strategic flexibility of organisations in developing a collaborative environment and networks to increase their competitive capabilities.

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