The Mediating Effect of Interpersonal Trust on Virtual Team’s Collaboration

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ABSTRACT

This article examines the relationship between task-communication and five collaborative processes by exploring the mediating effect of interpersonal trust in a virtual team’s environment. A multiple mediation model was developed to examine this relationship where cognitive-based trust and affective-based trust are defined as mediation variables between task-communication and the five processes of collaboration. The main results of this study show a significant correlation with a large effect size between task communication, trust and collaboration. Also, interpersonal trust is playing an important role as a mediating element in the relationship between task communication and collaboration. This is where the emotional side of trust is no less important than the rational side, if not even more, in some collaborative processes.

KEYWORDS

Affective-Based Trust, Cognitive-Based Trust, Collaboration, Task Communication, Virtual Environment, Virtual Teams

INTRODUCTION

With the development of the communication technologies of the last decades, the world transformed into a global village. These communication technologies, such as the Internet revolution of the 90s and the mobile revolution on the recent years, have provided the necessary infrastructure to support the development of new organizational structures. One of the changes that this revolution brought to organizations is the creation of a new kind of team engagement, in addition to the conventional face-to-face team: the virtual or distributed team. Thanks to information and communication technology systems, these teams can communicate, work together, share knowledge, solve problems, and make decisions across the globe.

However, these virtual teams have created new challenges for organizations. One of these challenges is the lack of interpersonal relationships based on face-to-face communication and not technology-mediated. This lack may affect the level of trust within the teams, which is depending on interpersonal relationships and critical to the proper functioning of the teams.

Better understanding of the impact of the communication and trust on collaboration process in virtual team is the main contribution of this study. The results of the research can help organizations to increase their efficiency, their performance and their quality of outcomes, enabling organizations to be more competitive.
This paper examines the interrelations between task communication, trust and collaborative processes. Following, a review of the relevant literature, a presentation of the methodology and an outline of the research findings. Subsequently, discussion of the study results by reference to previous research and reflect on their relevance for management practice and future research.

LITERATURE REVIEW

There are several definitions in the literature for virtual teams. Virtual teams have been commonly defined as functioning teams that rely on ICT-mediation that crosses several boundaries (Bell & Kozlowski, 2002; Kirkman et al., 2002; Peters & Manz, 2007; Ebrahim, Ahmed, & Taha, 2009). It is widely agreed by scholars, that the main element that defines virtual teams is its composition of individuals who communicate and are dispersed across space, time, and/or organizational boundaries (Peñarroja et al., 2015; Huang, 2010). Thus, a working definition of virtual teams is distributed work teams whose members are geographically dispersed and coordinate their work predominantly with electronic information and communication technologies (ICTs) (Hertel, Geister, & Konradt, 2005).

Duarte and Snyder (2011) identified communication and collaboration as two of the most important factors in teams’ success. Schultzze and Orlikowski (2010) noted that the virtual setting has been shown to be a promising and powerful environment for team performance. However, virtual teams, because of distances separating the team members, need to develop ways to create successful collaboration. The availability of e-collaboration tools, such as social networks, wiki, and collaborative sharing files (e.g., Google Docs and Office 365), video conference (e.g., Skype) can contribute to this effort (Hosley, 2010; Kauffmann & Carmi, 2014).

Collaboration

Collaboration among teamworks is an essential ingredient to the success of organizations (Boughzala, de Vreede, & Limayem, 2012). Many of them organize training and seminars to their teams on a periodical base in order to increase the level of collaboration. Collaboration can create outcomes that cannot be achieved by an individual alone (Peters & Manz, 2007). Collaboration is a complex process, which, because of communication and interaction between parties, creates relationships between them. It allows sharing and synchronizing information for the purpose of decision making and achieving common matters or goals (Hosley, 2010). In general, collaboration results from a need to solve a problem, create, or innovate (Peters & Manz, 2007). It is defined as a process in which autonomous actors interact, through formal and informal negotiation. They jointly create rules and structures governing their relationships and ways to act or decide on the issues that brought them together. It is a process involving shared norms and mutually beneficial interactions (Thomson & Perry, 2006). We identified five common collaborative processes complementing each other (Bell & Kozlowski, 2002; Osman, 2004; Casalini, Janowski, & Estevez, 2007; Turban, Liang, & Wu, 2011; Evans, 2012; Atteya, 2013; Ghaznavi et al., 2013).

Following, the definitions of each of the five common collaborative processes as reflected in the literature.

1. **Knowledge sharing** is defined as the willful application of one’s ideas, insights, solutions, and experiences to another individual, either through an intermediary, such as a computer-based system, or directly (Turban et al., 2006). Hence, collaborative knowledge sharing can play a critical role in bringing together the knowledge, experience, and skills of multiple team members.
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