

## Chapter 9

# E-Collaboration in Virtual Teams: Trust as a Facilitator of Development

**David Kauffmann**

*Jerusalem College of Technology, Israel*

**Golan Carmi**

*Jerusalem College of Technology, Israel*

### **ABSTRACT**

*This chapter examines the relationship between task-communication and five collaborative processes by exploring the mediating effect of interpersonal trust in a virtual team's environment. First, 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 five processes of collaboration. Then, employing qualitative thematic analysis, authors constructed a conceptual model to identify factors that generate lower or higher level of collaboration. The main results of this study show a significant correlation with a large effect size between task-oriented communication, trust, and collaboration. Also, interpersonal trust is playing an important role as a mediator in the relationship between task-oriented communication and collaboration, when the emotional side of trust is no less important than the rational side, if not even more, in some collaborative processes.*

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## **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-oriented 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, & KonrFadt, 2005).

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