

# Chapter 5.10

## How Do Virtual Teams Work Efficiently: A Social Relationship View

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### **ABSTRACT**

Virtual teams are groups of members collaborating in the execution of a specific task from disperse locations. Increasing use of virtual teams has highlighted the need for organizations to focus on ways to improve their performance. The key issues of concern include both technical and social dimensions, and this research study addresses the latter. Hence, this study derives a social relationship model from a comprehensive literature review and conducts an experiment to validate this through SEM (structural equation modeling). The results reveal: (1) communication has a direct positive impact on relationship building, but indirect positive effects on performance and satisfaction; (2) relationship building impacts directly with strong and positive impacts on cohesion and trust, but indirectly with strong impacts on performance and satisfaction; (3) co-

hesion has a direct, strong, and positive impact on performance, but a strong indirect impact on satisfaction; (4) trust has a positive direct impact on performance, but an indirect positive impact on satisfaction; and (5) performance has a strong and positive impact on satisfaction. In addition, this study confirms that relationship building is a vital mediator in the social relationship model. Managerial implications and future research directions are identified.

### **INTRODUCTION**

The Internet has changed the way people and organizations work and communicate. Increasingly, teams must work across a geographically dispersed environment promoting the use of virtual teams. However, the use of virtual teams has not always met with success, and typically it

has been found that their performance is lower when compared with traditional face-to-face teams. Issues addressed in virtual team research are broad and cover areas such as task, technology, and team composition. However, Driskell and Radtke (2003) suggest that past research on virtual teams has paid too much attention to the development of advanced technological environments instead of to the social and psychological dimensions of team building. With complex and different interactive styles of human behaviors communicating over the Internet, there is a need to explore the social dimensions of virtual teams in greater depth.

From a review of past studies, it can be seen that social relationships are considered highly problematic within virtual teams (Nandhakumar & Baskerville, 2006; Zolin, Hinds, Fruchter, & Levitt, 2004; Anderson & Shane, 2002; Kirkman, Rosen, Gibson, Tesluk, & McPherson, 2002; Newell, David, & Chand, 2007). Computer-mediated communication (CMC) technologies limit the extent of contributions and reinforcement of social relationships between virtual team members. For example, it is difficult to transfer the necessary information and knowledge between workers located in a geographically dispersed environment (Newell et al., 2007), and information provided via CMC was felt to be less reliable, inadequate, and difficult to interpret (Zolin et al., 2004). This hinders the sharing of knowledge between workers, preventing them from completing their part of the tasks and inhibiting the development of social relationships, thus creating obstacles against building relationships and trust within the virtual team (Nandhakumar & Baskerville, 2006). In addition, cohesion among virtual team members is generally found to be weak since members find it easier to contribute nothing and let others carry their workload, resulting in feelings of anger, frustration, and dissatisfaction, with lower productivity overall (Anderson & Shane, 2002). In summary, research has shown that it is hard to develop feelings of intimacy and build

social relationships through CMC without regular FTF (face-to-face) meetings leading inevitably to poorer levels of performance and satisfaction in virtual teams.

For some time, researchers have been aware of the importance of social relationships in virtual teams and have developed theories to address this issue. Walther's (1996) Hyperpersonal Communication Theory and Social Information Processing perspective (1992) assert that virtual teams, which are deficient in face-to-face meetings, are able to adapt themselves to this environment and achieve high levels of performance if sufficient time is allowed. The SIDE (social identity and deindividuation) model developed by Lea and Spears (1991) provides a more comprehensive model by focusing on social identity (SI) theory and a re-conceptualization of de-individuation. This model suggests that the reduction of social cues in a virtual environment does not equate to the reduction of social context. Although there are less social cues, CMC can still support the formation of an impression of partners. It can convey social information, aid in regulating behavior, and provide a social context for communication and relationship building. In other words, while communicating through CMC may bring many problems particularly in the area of building social relationships, the problems are not insurmountable and are worthy of further study.

Thus, the intent of this study is to build a model to explore social relationships and their effects on the effectiveness of virtual teams. We conceptualize virtual teams as interdependent groups working on a temporary project across time and boundaries dependent solely on CMC. Effectiveness in this study relates to the perceived performance and satisfaction of virtual team members. The model is formed from a comprehensive literature review and is then validated through a survey of virtual team participants.

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