ABSTRACT

This chapter explores the role media effects and familiarity play in the development of trust in CMC environments. As team members interact with one another via technology, each team member assesses information and makes assessments about the trustworthiness of their teammates. Such trustworthiness assessments are known to influence trust, a factor that has been established to have significant effects on the functioning of teams. This research uses media synchronicity theory and the concept of interpersonal familiarity to examine virtual team interactions and the formation of trust. Implications are drawn for researchers and managers as they seek to understand how teams operate in virtual environments.

INTRODUCTION

U.S. corporations commonly use some form of team structure in their organizations. In a global environment, they increasingly have to use more distributed teams using computer-mediated communication (CMC). CMC teams, sometimes referred to as virtual teams, perform substantial portions of organizational work (Townsend, De-Marie, & Hendrickson, 1998, p. 18). They have
the potential to draw upon the skills of a widely dispersed workforce and can function better in today’s complex and dynamic environment (Townsend et al., 1998, p. 23).

Past research has acknowledged that a crucial determinant of successful team functioning is trust. Trust reduces the uncertainty that permeates technology-mediated environments (Jarvenpaa & Leidner, 1999, p. 792) by, for example, minimizing the effects of misunderstandings that arise from communication delays (Jarvenpaa, Shaw, & Staples, 2004, pp. 262-263). Further, the geographic and cultural diversity often characteristic of CMC-based teams creates additional complexity and enhances the likelihood of misunderstandings, making trust even more important. Overall, trust helps team members cope with uncertainty and maintain positive attitudes about team members in computer-mediated environments.

Trust is most commonly regarded as an interpersonal phenomenon, created (or diminished) as one party forms impressions about the trustworthiness of another (Mayer, Davis, & Schoorman, 1995). In large part these impressions are formed based on the interactions of the parties. In CMC (i.e., virtual) environments, the behaviors that give rise to these impression of trustworthiness are observed through cues conveyed by the media used for communication. The specific capabilities of the communications media used can thus play a major role in determining the types of cues that are conveyed between team members. A medium, in other words, has the potential to play a crucial role in trust formation.

The purpose of this chapter is to explore how media characteristics influence the development of trust and how interpersonal familiarity may influence these media effects. More specifically, employing media synchronicity theory (Dennis & Valacich, 1999), this chapter discusses how different media capabilities, including feedback immediacy, symbol variety, parallelism, reusability, and reprocessability, affect the ability of team members to form appropriate levels of trust, that is, trust based on accurate impressions of how trustworthy other members of the team are. Further, this chapter also explores how media can have potentially detrimental effects on trust formation by diminishing the ability to form accurate impressions and creating overconfidence about the accuracy of incorrect impressions. Finally, we also explore how a medium’s influence on enhancing or diminishing the accuracy of trustworthiness perceptions depends on the concept of interpersonal familiarity.

As media capabilities continue to evolve and as teams continue to use these media to accomplish tasks, understanding how trust is formed in teams will be an important topic for organizations. In addressing this topic, we first turn our attention to a discussion of trust and trustworthiness, which will serve as a foundation for examining how media capabilities can influence trust formation between teammates in CMC environments.

TRUST

Scholars in the organizational sciences have been examining trust for about half a century (Deutsch, 1958). Researchers have defined the term in a variety of ways, leading to some confusion with the construct. In an attempt to clarify the construct and provide a solid basis for future research, Mayer et al. (1995) developed a model of trust, its causes, and its outcomes (see Figure 1). Mayer et al. defined trust itself as a “willingness to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (p. 712). Trust is distinct from the concept of trustworthiness because trustworthiness involves the trustor’s perceptions of the trustee’s ability, benevolence, and integrity. Trustworthiness thus refers to the sum of the trustee’s attributes that are assessed by thetrustor in deciding how much trust is warranted.