

Bringing Out the Best in Virtual Teams

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INTRODUCTION

The use of computer-mediated communication (CMC) is more popular than ever in both educational and corporate settings. Schools and corporations are using virtual communication to replace or supplement in-person classes and meetings. Many educators and managers are taking it a step further, having teams work in a virtual setting with members rarely or never meeting each other in person. Can a virtual team be as successful as a team where everyone works in the same physical location? Does anything different need to be done to compensate for the lack of face-to-face contact? This article identifies unique factors for virtual teams, and then provides recommendations and guidelines that can help virtual teams be successful. With the right planning, virtual teams can equal or exceed the performance of face-to-face teams.

PURPOSE OF TEAMS

Teams are used in both educational and corporate settings for tasks such as process management, problem solving, and project work. In a team, the leadership is shared and the members are mutually responsible for the outcome of the team. Team tasks are interdependent; they require collaboration among the team members, and teams are empowered to control how they reach their goals (Yancey, 1998).

What is a virtual team? What makes it different from any other team? A team is considered virtual because much or all of its communication takes place outside traditional in-person meetings, instead using electronic technologies such as e-mail or video teleconferencing (Grosse, 2002). Common characteristics of virtual teams are:

1. The participants are physically separated.

2. They are dependent on communicating using some form of CMC.
3. They have no prior history together (Jarvenpaa & Leidner, 1998).

The context, as it relates to the work environment, also makes a virtual team unique from a traditional team (Gluesing et al., 2002). Language and cultural differences that exist in geographically dispersed teams also present challenges to virtual teams (Grosse, 2002).

Many variables have been considered in researching team effectiveness and its impact on team performance. Alge, Wiethoff, and Klein (2003) studied the impact of a team's past history or intended future on a team's ability to communicate effectively and make good decisions. The research focused on whether the fact that a team had worked together in the past or expected to work together in the future affected the team's performance in both in-person and virtual team environments. Panteli (2003) categorized teams as short-term and long-term teams and studied situational factors that affected team performance. Grosse (2002) examined the pros and cons of communication methods for virtual teams and the impact of cultural differences. These research efforts have attempted to characterize teams and then determine the variables that affect virtual team performance.

TEAM SUCCESS FACTORS

While virtual teams face many more unique challenges than a traditional team that has geographic proximity, the two do have similar goals. According to Rubin (2002), there are four key principles that are important to follow when creating a team environment:

1. Team members must have relevant assignments. In other words, they must feel that their participation matters.

2. Goals are interdependent and shared accountability exists for the team's results.
3. The team is provided a clear and gradual path to self-sufficiency.
4. Team members are provided with the tools and time that they need to continually improve business performance.

Rubin (2002) recommended that a design document be created that provides something concrete for team members to reference that includes team goals, meeting formats, communication methods, deadlines, and team roles. This document then becomes a blueprint for everyone to follow and provides a medium that will withstand changes in personnel and time.

Good communication is one of the most critical elements of a successful team (Gundry, 2000). Beranek (2000) stated, "a virtual environment fundamentally transforms the ways in which teams work, making communication and collaboration even more critical to team success" (p. 1). According to Alge et al. (2003), the level of openness and trust, the quality of team-member exchanges and interactions, and the degree of information sharing are critical to team performance. Lack of trust will reduce the amount of communication within a team, and decrease team members willingness to share information (Alge et al., 2003). Existing research indicates that communication and trust are vital to virtual team success as well (Beranek 2000; Jarvenpaa & Leidner 1998; Snyder, 2003). It is important to attend to the human factors involved when people are expected to work as part of a virtual team (Snyder, 2003). With cultural and language differences involved, understanding the human factors is even more critical to team success.

CHALLENGES FACING VIRTUAL TEAMS

To understand the challenges facing virtual teams, it is helpful to review the key requirements identified as essential to good communication for any team. The three key requirements are openness and trust, high quality interactions among team members, and a high degree of information sharing (Alge et al., 2003). Can virtual teams achieve these communication levels important to good teamwork with the constraints brought on by technology and distance?

Establishing openness and trust among team members has many challenges and can be extremely difficult when the timeframe for the team to complete their work is short. Trust is often developed in stages. At first, trust is established based on social communication through introductions and exchanges about backgrounds and sharing of personal information (Snyder, 2003). This type of trust creates expectations of how a person will perform during the project. After this initial phase, trust is developed based on actual performance. Jarvenpaa and Leidner (1998) suggested that something that might be endemic to virtually communicating temporal teams was the role of response. This described a person's strong desire when communicating electronically, or virtually, to receive a response to his or her communication. Receiving validation to communication and idea generation were important to the development of trust. Temporary teams must find ways to establish trust quickly and may need to find commonality among members such as shared values and attitudes to build trust (Panteli, 2003). Frye (2000) proposed that forming agreements is critical. She emphasized that if a team cannot work out issues on what tools the group will use to communicate (such as e-mail, chat, or voice mail) or the frequency of updates, discussions, and deadlines, the team will flounder.

Technical challenges exist that can interfere with providing high-quality interactions among team members. Common obstacles for virtual team members include lack of experience using the technology required and also lack of an awareness of how to incorporate the technology into the team's work (Grosse, 2002). Ocker and Fjermestad (2000), in their study of high- and low-performing teams, found that high-performing teams used the technology to their advantage, while the low-performing teams struggled in this regard. This can be explained using the Structuration Theory that proposes that the richness of a medium is not static, but changes through the appropriation process or through how it is used. Therefore, high-performing teams may be better at using the technology to their advantage than low-performing teams (Ocker & Fjermestad, 2000). Jarvenpaa and Leidner (1998) researched low- and high-performing virtual teams. They categorized the teams' level of trust at the beginning of the project and the level of trust upon completion. Teams that ended on a low note had difficulty determining how to work with others at a distance and often blamed technology as a reason. The teams that ended with

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