Chapter 12
From Software to Team Ware
Virtual Teams and Online Learning Culture

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ABSTRACT
Social interaction technologies have made it possible for teams to exist in a virtual reality. Such change to the workplace status quo requires a new appreciation of the ways in which team members can create, maintain, transmit and influence their competitiveness and effectiveness. This chapter explores the concepts of virtual teams and online culture; it analyses the key requirements for the successful functioning of virtual teams: for instance, building trust, consolidating authentic communication flows and thinking critically. Commencing with a review of the current research, the chapter concentrates on the rise of virtual teams, the key dimensions, and the importance of establishing online learning cultures to ensure high performance. Additionally, pitfalls of virtual teams and recommendations for enhancing their work are presented.

INTRODUCTION
The emergence of social interaction technologies (SIT) has drastically altered the way in which individuals relate to each other, particularly with regard to team work and group membership. A team used to be constrained by the geographical location of its members, and the quality of the face-to-face interaction and interdependence was largely reliant on the close proximity through which members worked. In recent years, teams have evolved to become virtual entities consisting of teleworkers, telecommuters and individuals situated in countries around the world who are linked together through collaborative work. This shift has seen changes to the ways in which team work occurs, and the virtual world of work has emerged as a complex environment where success is dependent on a shared culture that facilitates knowledge creation and the best contributions of all its members (Starke-Meyerring & Andrews, 2006).

Modern workplace is inherently ambiguous, uncertain and full of change. It puts exacting
demands on the team to be effective in terms of communication processes and trust, and presents an increasing environmental complexity which is further exacerbated by the transfer of previously familiar concepts such as “team work” to a virtual, online world. Gone are the geographic borders and face-to-face interactions that previously embodied teaming; instead team members are faced with a trail of communications held on a server and transmitted via the Internet. The irony is that teleworkers are now working over greater distances and those who have not been in itinerant occupations have suddenly found themselves, similar to the nomads, working across vast distances (Sofo, 2000). New communication and social interaction technologies have made it possible for teams to function in a virtual reality. Such change to the workplace status quo requires a new appreciation of the ways in which team members can create, maintain, transmit and influence their competitiveness and effectiveness. This emerging shift in workplace culture defines the identity and uniqueness of an organization and thus gives purpose to its activities, responsibilities and behavior of its members (Lundberg, 1988).

This chapter reviews the concepts of virtual teams and online culture that promote critical thinking, including the transferability of key skills to the working of virtual teams. By commencing with an exploration of the concepts of virtual teams and online culture, and outlining their connection and links to the current research, this chapter analyses the key requirements for the successful functioning of a virtual team, including building trust, and consolidating authentic communication flows. Some practice guidelines for developing online learning cultures for virtual teams, as well as recommendations for enhancing the ability of virtual team members to think critically, are provided.

**BACKGROUND**

Traditionally, a team is viewed as a group of people who bring balanced competencies and accountability to shared purposes, approaches and performance targets. Members of a team have a unified commitment and think of themselves as a whole or as being “more than individuals.” There is usually synergy which means that when the individual efforts and actions are harmonized, something different and unique is created that could not be produced by any single individual of the team. There are six vital elements that comprise the concept of a team: the first element is size which is linked to the scope of the task as well as the other elements of the team; the second element is the fact that members’ skills are balanced which is a strong basis for interdependence; the third element is mutual accountability where members essentially consider themselves as synergistic and trust each other. The fourth, fifth and sixth elements relate to the synergies of purpose, approach and performance targets (Dani, Burns, Backhouse, & Kochhar, 2006). These six elements of a team are all present in a virtual team where commitment, communication and trust are still vitally important to success. A traditional team is usually co-located whereas a virtual team is not, thus, distance is viewed as the seventh element of a virtual team.

*Virtual teams* are teams whose members are geographically distributed, requiring them to work together through electronic means with minimal face-to-face interaction (Malhotra, Majchrzak, & Rosen, 2007); they are also a group of people who work interdependently with a shared purpose across space, time, and organization boundaries using technology (Lipnack & Stamps, 2000). Virtual teams can vary in size, competencies, duration and focus. Many have a proven capacity to create dialogue amongst diverse individuals and groups in order to develop a mutually supportive, collaborative network of people sharing meanings and achieving common objectives. Virtual teams