Chapter 6
Challenge and Complexity of Virtual Team Management

Edward T. Chen
University of Massachusetts – Lowell, USA

ABSTRACT
To thrive in our global economy, businesses must continually seek ways to maintain a competitive advantage by supplying the market with innovative and effective products and services. To do this, barriers of space and time must be overcome, conventional business processes must be enhanced, and customer demand must be promptly answered by high-quality, low-cost, or value-based products and services. One way for companies to meet these fast-paced market demands is by utilizing virtual teams. With virtual teams, companies can expand their talent pool beyond geographical barriers. Furthermore, they can incorporate a follow-the-sun process in their business strategy. Combined, this leveraged approach can better position companies to meet market demands in a more timely and cost-effective manner. However, to achieve this competitive advantage, business leaders must thoroughly understand the challenges associated with developing and managing virtual teams. This research chapter examines the reasons for utilizing virtual teams, challenges that stem from diversity, structural and behavioral characteristics, and managerial considerations for effective leadership, supporting technologies, best practices, and future implications.
INTRODUCTION

Information systems and the growth of high speed Internet across the globe have enabled companies to implement a global virtual team structure (Piccoli, Powell, & Ives, 2004). Companies implementing virtual teams have seen a reduction in costs, greater utilization, increased access to new markets, and a larger pool of resources with a greater variation in skill sets. However, working virtually does come with challenges. Virtual teams need to navigate communication difficulties, the effects of culturally diverse membership, and the technical difficulties involved in linking regions across large distances (Grosse, 2002; Jarvenpaa & Leidner, 1999; Jones, 2009). In order to maximize the benefits and minimize the weaknesses from virtual teams, managers need to be more involved than they are with local teams. Virtual teams require the manager to establish and closely monitor organizational design within the team, with an eye toward encouraging an environment of trust and open, effective communication (Henderson & Lee, 1992; Gaan, 2012; Krebs, Hobman, & Bordia, 2006; Zolin & Hinds, 2004). A manager must also mitigate conflict that arises. He or she must function in multiple roles, including administrator, coach, and advisor, throughout the lifespan of the team. The objective of this chapter is to explore the challenges of virtual teams and identify how to manage them in order to maximize performance (Brunelle, 2012).

Research for this chapter is comprised of several journal articles, corporate white papers, and trade magazines that revealed overlapping coverage of reasons to build virtual teams, limitations, challenges that team members encounter, managerial tactics, and the future outlook for virtual teams in a variety of settings. These articles contained empirical evidence of claims; however, to date it appears more research is needed to support virtual team best practices. Thus, this chapter is written for both IS researchers and IT practitioners.

VIRTUAL TEAMS

A singular, unifying definition of virtual teams is difficult to find. This is largely due to the fact virtual teams vary in many ways (Curseu, Schalk, & Wessel, 2008). Some definitions differentiate global virtual teams from local virtual teams. A local virtual team refers to a team of people that are located in a common geographic area and share the same culture. A local virtual team can also include personnel that work out of home or remote offices. On the other hand, global virtual team members are separated by larger distances and differ in cultural backgrounds between members. The other area in which there is some debate is on the longevity of the team. In other words, some definitions classify a virtual team with an expectation that the team has a specific end date. Lastly, there is a difference in how these team members interact with one another. Some definitions indicate that virtual teams have no face-to-face interaction, whereas other definitions state that the face-to-face interaction time is limited. Despite these differences, there are some common aspects of virtual teams in which there seems to be some consensus. These common aspects include that: (1) virtual teams work remotely, (2) there are multiple members on the team, (3) the members work together on a common project or focused goal, and (4) the communication among team members is through electronic means (Curseu, Schalk, & Wessel, 2008).

In recent years, there have been unprecedented technological advancements, which have made virtual teams more viable than ever before. Businesses sometimes prefer virtual teams for numerous organizational advantages, as they look to expand beyond their traditional boundaries. This expansion can allow companies to access a vast pool of previously unattainable resources (Eissa, Fox, Webster, & Kim, 2012). In addition to the enhanced skills of these personnel, many companies find benefits in reduced cost and