### Chapter 4.23

# Temporary Virtual Teams: An Empirical Examination of Team Development

**Stacey L. Connaughton** *Purdue University, USA* 

Elizabeth A. Williams Purdue University, USA

**Jennifer S. Linvill** *Purdue University, USA* 

Elizabeth J. O'Connor Purdue University, USA

**Troy Hayes** *Ingersoll-Rand plc., USA* 

#### **ABSTRACT**

Temporary virtual teams are common organizing forms across industries and sectors, and their members often span national, functional, and other boundaries. Many times temporary virtual team members have no prior experience working with one another, may seldom if ever meet face-to-face, and may never work together again, thus team development may occur differently than it does in long-term or in tact teams. Yet little is known about the development of temporary virtual teams and

DOI: 10.4018/978-1-61520-979-8.ch007

the process challenges therein. The purpose of this chapter is to contribute to this body of research by revealing how individuals who are members of a temporary virtual team experience team development. Specifically, this chapter (a) reviews two often-cited models of team development and discusses the limited body of research on virtual team development; (b) presents findings from a study of one organization's business intelligence teams that were temporary, virtual, and global in nature; and (c) advances a research agenda for scholars in this area and recommendations to practitioners who are working in these contexts.

#### INTRODUCTION

Virtual teams are organizing forms characterized by geographic and/or temporal distribution in which members' interactions are often mediated through communication technologies (Zaccaro, Ardison, & Orvis, 2004). Although nearly all teams operate virtually to some extent (e.g., through the use of e-mail, document sharing web sites, or other resources), those labeled virtual teams conduct the majority, or even all, of their work through these channels. Organizations utilize virtual teams comprised of locally and/or globally distributed team members to attend to customer problems, develop and market products, deliver services, and address business challenges (Duarte & Snyder, 2006).

Although virtual teams can be permanent, they are often temporary in nature. Ad hoc project teams, for example, are assembled to complete a specific project and then dissolve once the task is accomplished. In this respect, temporary virtual teams are advantageous and serve important functions. However, many times temporary virtual team members have no prior experience working with one another, may seldom if ever meet face-to-face, and may never work together again. These factors may hinder team development. Further issues such as low commitment, role ambiguity, social loafing, and role overload – issues which have been shown to exist in virtual teams (O'Hara-Devereaux & Johansen, 1994) – may further adversely influence team development. Moreover, teams that primarily use computermediated communication have been found to be more task-oriented and to exchange less socialemotional information, which can slow the development of relationships among team members (Bordia, 1997; Chidambaram, 1996). Thus, given their prevalence across multiple industries and sectors as well as the potential process challenges this organizing form raises, temporary virtual teams constitute a topic worthy of researchers' and practitioners' attention (Chudoba, Wynn, Lu, & Watson-Manheim, 2005; Jarvenpaa, Knoll, & Leidner, 1998; Kennedy, Loughry, Klammer, & Beyerlein, 2009).

The purpose of this chapter is to understand how team members themselves experience temporary virtual team development. Of particular interest is how the global, virtual, and temporary aspects of these teams are perceived to relate to team processes. This chapter also seeks to advance a research agenda that encourages further exploration of these intersections as well as extend recommendations to practitioners who engage in this kind of organizing form. To meet these objectives, this chapter (a) reviews two often-cited models of team development and discusses the limited body of research on virtual team development; (b) presents findings from a study of one organization's business intelligence teams that were temporary, virtual, and global in nature; and (c) advances a research agenda for scholars and recommendations for practitioners who are working in these contexts.

#### **BACKGROUND**

## Global, Virtual, and Temporary Teams

Although temporary virtual teams are created to capitalize on knowledge and expertise that is geographically distributed (locally and/or globally) and to address a time-sensitive need, the nature of this organizing form may present challenges to team processes. Trust, for instance, constitutes one team process variable that has been found to be fleeting in virtual teams (Jarvenpaa & Leidner, 1999; Jarvenpaa, et al., 1998). In temporary teams, researchers have argued that trust must be developed swiftly or it does not develop at all (Jarvenpaa & Leidner, 1999; Krebs, Hobman, & Bordia, 2006; Meyerson, Weick, & Kramer). Moreover, like virtual teams in general (see Picherit-Duthler, Long, & Kohut, 2004), members of temporary

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/temporary-virtual-teams/48749

#### **Related Content**

#### Bunker-Room Mnemonics for Second-Language Vocabulary Recall

Alexia Larchen Costuchen, Larkin Cunninghamand Juan Carlos Tordera Yllescas (2022). *International Journal of Virtual and Augmented Reality (pp. 1-13).* 

www.irma-international.org/article/bunker-room-mnemonics-for-second-language-vocabulary-recall/304899

## Using a Design Science Research Approach in Human-Computer Interaction (HCI) Project: Experiences, Lessons and Future Directions

Muhammad Nazrul Islam (2017). *International Journal of Virtual and Augmented Reality (pp. 42-59).* www.irma-international.org/article/using-a-design-science-research-approach-in-human-computer-interaction-hci-project/188480

#### Data Privacy in the Metaverse Ecosystem

Sibanjan Debeeprasad Das, Pradip Kumar Balaand Rajat Kumar Behera (2023). *Handbook of Research on Al-Based Technologies and Applications in the Era of the Metaverse (pp. 381-394).*www.irma-international.org/chapter/data-privacy-in-the-metaverse-ecosystem/326041

#### Virtual Communities and Social Capital Theory

Catherine M. Ridings (2006). *Encyclopedia of Virtual Communities and Technologies (pp. 493-496).* www.irma-international.org/chapter/virtual-communities-social-capital-theory/18130

## Thinking in Virtual Spaces: Impacts of Virtual Reality on the Undergraduate Interior Design Process

Elizabeth Poberand Matt Cook (2019). *International Journal of Virtual and Augmented Reality (pp. 23-40).* www.irma-international.org/article/thinking-in-virtual-spaces/239896