



## **Chapter VII**

# **Trust and Technology in Virtual Teams**

Steven A. Morris  
Middle Tennessee State University, USA

Thomas E. Marshall  
Auburn University, USA

R. Kelly Rainer, Jr.  
Auburn University, USA

### **ABSTRACT**

*Pressured by the growing need for fast response times, mass customization and globalization, many organizations are turning to flexible organizational forms, such as virtual teams. Virtual teams consist of cooperative relationships supported by information technology to overcome limitations of time and/or location. Virtual teams require their members to rely heavily on the use of information technology and trust in coworkers.*

*This study investigates the impacts that the reliance on information technology (operationalized in our study via the user satisfaction construct) and trust have on the job satisfaction of virtual team members. The study findings*

*reveal that both user satisfaction and trust are positively related to job satisfaction in virtual teams, while system use was not found to play a significant role. These findings emphasize that organizations seeking the benefits of flexible, IT-enabled virtual teams must consider both the level of trust among colleagues, and the users' satisfaction with the information technology on which virtual teams rely.*

## INTRODUCTION

For many organizations, survival requires competing in a rapidly changing, hypercompetitive and global marketplace. In order to compete in this type of environment, organizational processes are becoming more complex, dynamic and global in nature, thereby prompting many organizations to transform their organizational structures from large, hierarchical structures to agile, flexible, new structures. Goldman, Nagel and Preiss (1995) stated that agile organizations are “how more and more businesses, of all sizes and across all industries, are being run today in order to stay in business” (p. xvii). Virtual organizations and virtual teams, examples of such new structures, support organizational agility and flexibility; encourage cooperative, intra- and interorganizational relationships; use information technology (IT) to support these relationships; and allow businesses to compete more effectively (Lucas & Baroudi, 1994; Goldman, et al., 1995; Bensaou, 1997). While no single definition of virtual organization has been commonly adopted, this study defines a virtual organization as an organization constructed of cooperative relationships supported by information technology to overcome restrictions of time and/or location to meet specific objectives (see Chiesa & Manzini, 1997; Mowshowitz, 1997; O’Leary, Kuokka & Plant, 1997). Virtual teams are the application of the virtual organization structure at the workgroup level to create temporary teams that may cross functional and organizational boundaries for the completion of a specific task (Lucas & Baroudi, 1994). Although virtual teams are gaining in popularity among organizations that are seeking more flexible structures, relatively little is known about the nature of these new teams (Bell & Kozlowski, 2002). Research indicates, however, that the effectiveness of these teams may outperform traditional face-to-face teams (Schmidt, Montoya-Weiss & Massey, 2001).

It is important to distinguish between virtual structures and the use of telecommuting/telework, another means of overcoming geographic boundaries within a traditional organization. While virtual structures, as discussed below, involve a breakdown of traditional supervisor/employee control structures and an

25 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/trust-technology-virtual-teams/4601](http://www.igi-global.com/chapter/trust-technology-virtual-teams/4601)

## Related Content

---

### Enterprise Architecture Management and its Role in IT Governance and IT Investment Planning

Klaus D. Niemann (2010). *Information Resources Management: Concepts, Methodologies, Tools and Applications* (pp. 996-1026).

[www.irma-international.org/chapter/enterprise-architecture-management-its-role/54529](http://www.irma-international.org/chapter/enterprise-architecture-management-its-role/54529)

### Privacy-Dangers and Protections

William H. Friedman (2005). *Encyclopedia of Information Science and Technology, First Edition* (pp. 2308-2313).

[www.irma-international.org/chapter/privacy-dangers-protections/14604](http://www.irma-international.org/chapter/privacy-dangers-protections/14604)

### Exploring an Agile Plus Approach for Project Scope, Time, and Cost Management

Ali Hassan, Soayba Younas and Amiya Bhaumik (2020). *International Journal of Information Technology Project Management* (pp. 72-89).

[www.irma-international.org/article/exploring-an-agile-plus-approach-for-project-scope-time-and-cost-management/255103](http://www.irma-international.org/article/exploring-an-agile-plus-approach-for-project-scope-time-and-cost-management/255103)

### Design Patterns from Theory to Practice

Jing Dong, Tu Peng, Yongtao Sun, Longji Tang and Yajing Zhao (2009). *Encyclopedia of Information Science and Technology, Second Edition* (pp. 1047-1052).

[www.irma-international.org/chapter/design-patterns-theory-practice/13704](http://www.irma-international.org/chapter/design-patterns-theory-practice/13704)

### Leveraging Objects for Privatizing Military Housing through Information Technology

Guisseppe A. Forgie (1999). *Success and Pitfalls of Information Technology Management* (pp. 87-96).

[www.irma-international.org/article/leveraging-objects-privatizing-military-housing/33482](http://www.irma-international.org/article/leveraging-objects-privatizing-military-housing/33482)