Effective Leadership of Virtual Teams

David Tuffley
Griffith University, Australia

INTRODUCTION

Geographically dispersed project teams collaborating in virtual environments face a range of challenges in the successful completion of IT development projects. This is particularly the case when the project teams are nonhomogenous, comprising multidisciplinary members with a range of skills, professional orientations and cultural backgrounds. Of interest to the global enterprise are those leadership mechanisms and attributes that may serve to optimize team functioning.

With an increasing portion of the estimated US$600,000,000,000 (Cusamano, 2004) global software industry being performed by virtual teams, and with the mechanics and dynamics of virtual team operations being a relatively new area of study, the significance of the problem can be firmly established.

Virtual teams, and the leadership thereof, is therefore a significant aspect of the global software development industry. Yet as Cusamano (2004) asserts, it is the *business* itself (and the processes therein), not the technology that determines the success or failure of the organizations that produce the software.

BACKGROUND

The past 50 years have seen a remarkable proliferation of what might be termed the *global enterprise*, organizations that transcend national borders and extend across the globe. Commercial organizations in industrialised economies have increasingly established international networks of subsidiaries and affiliates with which to pursue a global agenda, taking advantage of economies of scale and effort. This trend inevitably leads to the advent of distributed work environments and the consequent formation of multidisciplinary virtual teams (teams that operate across different time and physical space).

Collaborative technologies (messaging and discussion forums, audio and video conferencing, as well as knowledge portals, business directories, Web cams) are assumed to facilitate team functioning in virtual environments, yet it is nonetheless important that we examine the broad issue of team work processes and optimising. The building of functional social networks in virtual environments can be a difficult task, particularly on an international scale. The respective cultures of the team members are a significant factor. Other factors include physical environments, information technology support, communication policies and procedures, as well as leadership.

VIRTUAL TEAMS

Distinguishing Virtual Teams From Conventional Teams

Bell and Kozlowski (2002), quoting a widely cited earlier study by Townsend, DeMarie, and Hendrickson (1998) define virtual teams as:

Groups of geographically and/or organizationally dispersed co-workers that are assembled using a combination of telecommunications and information technologies to accomplish and organizational task.

Virtual teams can therefore be distinguished from conventional teams in two fundamental ways; their *spatial proximity* and the *communications technologies* employed.

When contrasting Townsend et al.'s (1998) definition of virtual teams with that of conventional teams (Humphrey, 2000), we see that the Humphrey definition offers a good general purpose view of what a team is:

A team consists of:

1. *At least two people, who*
2. *Are working toward a common goal/objective/mission, where*
3. *Each person has been assigned specific roles or functions to perform, and where*
4. *Completion of the mission requires some form of dependency among group members.*

Operational Definition of Virtual Team

It might be reasonable, therefore, to combine these definitions:

A virtual team consists of:

1. At least two mutually interdependent people, who
2. Are geographically dispersed, and who

3.   Are working toward a common goal/objective/mission, where
4.   Each person is assigned specific roles or functions to perform, and where
5.   Communication is facilitated by a combination of telecommunications and information technologies to work toward the completion of the project/mission.

Leadership

Until "kings were philosophers or philosophers were kings" there will be injustice in the world. (Plato)

The classical period of ancient Greece produced concepts and modalities that have become the foundation of western civilization. In relation to leadership studies the philosopher Plato (427-347 BC) in his renowned dialogue *The Republic* outlined certain enduring leadership principles that Western administrative thinking has based itself upon (Takala, 1998). Plato developed systematic administrative thinking for the efficient running of the city-sate (polis) which over time allowed the evolution of democracy. Plato described in detail the appropriate relationship between the state and individual citizens. This relationship was so close that it was not possible to think of a citizen living outside of his state (Takala, 1998). The purpose of this state is to educate people to become "good." The state is like the human body in which parts complement each other and act harmoniously. In terms of organizational theory, Plato would be regarded as a premodern functionalist.

Distinguishing Leaders and Managers

The terms leader and manager are sometimes used interchangeably, adding to the ambiguity surrounding the study of leadership. Yet studies of administrative science usually find the terms differentiated. How is this done?

According to Takala (1998) what they have in common is the ability to get things done. We then distinguish them by managers being a kind of instructor who puts pieces together and manages the "things." A manager is primarily concerned with making an organization function by evolving routines that serve the ongoing and sometimes changing purposes of the organization.

Leadership Qualities of Great Groups

Bennis and Beiderman (1997) discuss at length the leadership qualities required in Great Groups. They observe that group leaders can vary widely. There can be facilitators, doers, contrarians. Leaders are catalytic completers; taking on roles that nobody else plays and that are needed for the group to achieve its goal. They have an intuitive understanding of the "chemistry" of the group and the dynamics of the work process. Furthermore, they encourage dissent in the establishment and maintenance of a shared vision. They can distinguish between healthy, creative dissent and self-serving obstructionism.

Bennis and Beiderman (1997) identify four behavioral traits of effective group leaders:

1.   **Provide direction and meaning:** Group members are kept up-to-date on what is important and why their work makes a difference.
2.   **Generate and sustain trust:** The group has trust in itself and its leadership. This allows members to accept dissent and tolerate the turbulence of the group process.
3.   **Display a bias toward action, risk taking, and curiosity:** A sense of urgency and willingness to risk failure to achieve results.
4.   **Are purveyors of hope:**. Find tangible and symbolic ways to demonstrate that the group can overcome difficulties.

Personality Traits and Competencies of Effective Leaders

Bennis (1994) in a wide-ranging study determined that effective leaders display four distinct personality traits, and five specific competencies, the sum of which tends to manifest in strong and effective leadership. Personality traits include guiding vision, passion, integrity, and daring (Bennis, 1994). The competencies are technical competence, interpersonal skills, conceptual skills, judgment, and character (Bennis, 1999a). No pairing order is implied by this table, as it is a listing only.

Bennis (1999a) asserts that it is character that is the essential element determining a leader's effectiveness, saying "leaders rarely fail because of technical incompetence" but more so for lack of character. (Bennis, 1999b)

Table 1. Personality traits and competencies of effective leader (Bennis, 1994, 1999a)

Personality Traits	Competencies
Guiding vision	Technical competence
Passion	Interpersonal skills
Integrity	Conceptual skills
Daring	Judgment
	Character

Related Content

Enhanced Knowledge Warehouse

Krzysztof Wecel, Witold Abramowiczand Pawel Jan Kalczynski (2005). *Encyclopedia of Information Science and Technology, First Edition (pp. 1057-1062).*

www.irma-international.org/chapter/enhanced-knowledge-warehouse/14386

A Novel Intrusion Detection System for Internet of Things Network Security

Arun Kumar Bediyaand Rajendra Kumar (2021). *Journal of Information Technology Research (pp. 20-37).*

www.irma-international.org/article/a-novel-intrusion-detection-system-for-internet-of-things-network-security/279032

Factors to Consider When Designing Multimedia CBL Tools in Health Professional Programs

Colin D. Kingand Gregory MacKinnon (2020). *Journal of Cases on Information Technology (pp. 72-86).*

www.irma-international.org/article/factors-to-consider-when-designing-multimedia-cbl-tools-in-health-professional-programs/242982

Bibliomining for Library Decision-Making

Scott Nicholsonand Jeffrey Stanton (2005). *Encyclopedia of Information Science and Technology, First Edition (pp. 272-277).*

www.irma-international.org/chapter/bibliomining-library-decision-making/14249

Exploring the Business Case Development Process in Inter-Organizational Enterprise System Implementations

Silja Eckartz, Christiaan Katsmaand Maya Daneva (2012). *Information Resources Management Journal (pp. 85-102).*

www.irma-international.org/article/exploring-business-case-development-process/65105