

# Chapter X

## Leadership of Integrated Teams in Virtual Environments

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### ABSTRACT

*This chapter introduces a process reference model of leadership for integrated teams operating in virtual environments. Geographically dispersed integrated project teams collaborating in virtual environments face many challenges in successfully completing projects, particularly if the teams are non-homogenous. These challenges have driven the development of more powerful and efficient collaborative technologies, that enable participants to better communicate. The need to support and develop leadership in the online setting is one of these challenges, representing a socio-technical gap between how integrated virtual teams use leadership and how technology supports it. The leadership model proposed here will be useful both to individuals desiring to lead in such online settings and those wishing to develop online systems that support leadership.*

*Leadership is the art of getting someone else to do something you want done because he wants to do it.*

—Dwight D. Eisenhower (1988).

### INTRODUCTION

Of the hundreds of quotes about leadership from all walks of life, this well-known one from Eisenhower seems to exhibit best, though perhaps not explain, the enduring enigma that is leadership. A manager may use authority to achieve compliance, but a leader finds a way to make the person want to do it.

Leadership has been observed and studied for countless generations, yet interestingly little consensus exists as to what true leadership is. Intense and on-going controversy exists between psychologists, sociologists, historians, political scientists and management researchers on this point (Yukl, 1994). No universally accepted definition of leadership has yet been developed.

After thousands of empirical studies performed on leadership over the previous 75 years, no clear and unequivocal understanding has emerged as to how we can distinguish leaders from non-leaders (Bennis and Nanus, 1985).

Conventional wisdom maintains that leadership is an innate ability that natural leaders are born with, and which cannot be effectively learned. Another school of thought, typified by Peter Drucker (1996) and Warren G. Bennis (1994), maintains that leadership can indeed be learned; that in effect, leaders are made rather than born. This is an underlying assumption of this project,

Meanwhile, in the world of software development we have seen a growing commitment to defining the way to do the job as a process, as typified by Humphrey (2002). This systematization approach is reflected more broadly by W. Edwards Deming who is famously quoted as saying “If you can’t describe what you are doing as a process, you don’t know what you’re doing.” (2000). If we accept the basic proposition that leadership can be learned rather than only be received through inheritance, then it is logical to suggest that leadership can be described as a process, as suggested by Deming (2000).

## **Background**

The past 50 years have seen an ongoing proliferation of the global enterprise, organisations that transcend national borders and extend across the globe. This trend has led to the advent of distributed work environments and the formation of multi-disciplinary virtual teams (teams that operate across different time and physical space) to perform many projects across industries. And yet expertise in the coordination of virtual teams is emerging as a critical area of need for research.

The rise of the virtual project has driven the development of more powerful and efficient collaborative technologies that facilitate meetings. This technology includes information sharing, messaging and discussion forums, audio and video conferencing, as well as knowledge portals, business directories, webcams and other manifestations of groupware.

The efficiency of these collaborative technologies notwithstanding, the building of functional social networks in virtual environments can be challenging, particularly on an international scale.

In this context, the socio-technical gap can be described as being between the collaborative technologies and our ability to use them effectively.

One approach to the treatment of this socio-technical gap is to recognize that everything that occurs in a project is ultimately the responsibility of the project manager. Yet the term ‘management’ leaves out a vital ingredient; how to motivate diverse team members to want to perform to a high standard and achieve the project aims? It is leadership that is required. We therefore ask the question, what are the human factors involved with leading successful virtual teams? As technologists, we might have the technology that allows virtual teaming, but without a good understanding of the human factors involved with teamwork, and in particular the challenges of leading multi-disciplinary teams in a virtual environment, our efforts to operate globally will likely achieve only limited success.

The process reference model has a practical aim; to inform the practice of project managers of integrated teams in virtual environments to give them the means to achieve better project outcomes. It distinguishes leaders from managers in the sense that leaders know how to motivate people to perform, whereas managers direct people’s activities and resort to coercive force when necessary. Managers can learn leadership skills, and these can be used for the benefit of all concerned.

## **VIRTUAL TEAMS**

### **Distinguishing Virtual Teams from Conventional Teams**

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

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