

## Chapter 5.14

# Trust in Virtual Enterprises

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### INTRODUCTION

For a virtual enterprise (VE) to be competitive and successful in a dynamic environment characterized by constantly changing customer demands and technological innovations, it must be capable of rapid adjustment in order to reduce the time and cost needed to deliver to the customer a quality product. The success in the agile competition naturally depends on the effective operation of the VE.

Trust has been recently regarded as the foundation of the digital economy (Keen, 2000; Stewart et al., 2002). The e-business environment is characterized by:

- a) the impersonal nature of the online environment;
- b) the extensive use of communication technology as opposed to face-to-face transactions;
- c) the implicit uncertainty of using an open technological infrastructure for transactions; and
- d) the newness of the transaction medium.

Given these attributes, trust development in VEs presents significant challenges because it is difficult to assess partners' trustworthiness without ever having met them (McDonough et al., 2001). Moreover, as the life of many virtual teams is relatively limited, trust must quickly develop (Jarvenpaa & Leidner, 1999). Yet, trust development is deemed crucial for the successful completion of virtual team projects (Sarker et al., 2001). The objective of this chapter is to identify the essential conditions for trust building in VE and to evaluate the likely impact of trust on the operations and management of VE. The study raises a number of issues to be explored by future research.

## **BACKGROUND**

Trust encompasses constructs as diverse as ethics, morals, emotions, values, and natural attitudes. Further, trust spans interdisciplinary fields, including philosophy, computer science, economics, and organizational behavior. Consequently, there is a myriad of definitions of trust. Since the dyadic view of familiarity-based trust does not readily correspond to the reality of the VE environment, which involves a large number of potential partners, the author proposes to define trust as the expectation by one member of ethical behavior on the part of the other member in a joint VE project. This definition emphasizes the importance of trust in organizational relationships and includes the idea of a joint undertaking, implying that there is a level of understanding of shared business goals and practices between the partners. Another factor that is implicit in the definition is the role of ethical behavior. Any change in ethics will cause a change in actions and thus influence trust. Finally, the definition implies that the VEs will undertake jointly to contribute to the final outcome.

According to traditional studies, trust builds incrementally and accumulates over time. VE business relationships, however, are characterized by project-oriented relationships that may entail no past history nor any plan for future association. In these temporary relationships, time is a vital but often elusive component in the trust building process. This does not mean, however, that trust cannot be apparent in temporary groups. On the contrary, McKnigh et al. (1998) have shown that trust in initial relationships can often be high. Further, Jarvenpaa & Leidner (1999) argue that trust is maximally important in new and temporary organizations, because it acts as a substitute for the traditional mechanisms of control and coordination.

Creating a VE takes more than just information technology. A study on issues of information technology and management concluded that there

is no evidence that IT provides options with long-term sustainable competitive advantage. The real benefits of IT derive from the constructive combination of IT with organization culture, supporting the trend towards new, more flexible forms of organization. Information technology's power is not in how it changes the organization, but the potential it provides for allowing people to change themselves. Creating these changes, however, presents a new set of human issues. Among the biggest of these challenges is the issue of trust between partner organizations in the VE (Wong & Lau, 2002). The following section identifies the essential conditions for trust development in a VE.

## **ESSENTIAL CONDITIONS FOR TRUST DEVELOPMENT**

From the literature, the essential conditions for trust development in VE may be summarized as follows:

### a) Common Business Understanding

Researchers such as Wigand et al. (1997) and Fuehrer & Ashkanasy (2001) note that an important element in any business cooperation is the establishment of common business understanding. An earlier work suggests that there are three specifications necessary for the establishment of a common business understanding in the virtual context. The first is a clear product specification: the design, quality, and functionality of the product or service. The second is a specification of the level of cooperation, which requires agreement about deadlines, liability, prices, profit allocation, and staff and resource input. The third is a formal specification of agreements between the virtual partners. In a virtual organization, these specifications need to be communicated clearly between the partners in order to achieve a common business understanding. There is always

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