



## **Chapter XII**

# **Factors Contributing to Knowledge Sharing and Communication in a Large Virtual Work Group\***

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## **Abstract**

*In this chapter, we discuss an eight-factor process model of large virtual groups. A team has been defined as a small group of people that work very closely on a project or process. We define a large work group as a larger group of people who are more loosely connected to one another than a team by a shared work process, project, or strategic goal. The eight factors are organizational support and purpose; egalitarian structure; team culture, trust, collaboration, and relationships; people—skills, expertise, and capabilities; motivation and rewards; communication processes; communication tools; and knowledge sharing. These factors to a greater or lesser degree have been shown to contribute to the effectiveness of*

*communication in a large virtual work group during a two-phase study at Nortel Networks. Qualitative and quantitative results of this study are presented in the chapter. We discuss issues related to communication and knowledge sharing in the chapter as well as recommendations for successful organization and communication in large work groups.*

## **Introduction**

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Firms have been using virtual-team-based structures to reduce costs as well as to share knowledge globally and to unleash innovation and creativity. Much research has been accomplished studying virtual teams. However, a hybrid organizational form exists in many organizations, where individuals or pairs of individuals do not actually work on a smaller team but are assigned to a large virtual work group. These groups do not appear to function in quite the same way as smaller teams function. While the literature on virtual teams has proliferated, there is little research on these larger hybrid organization types that are termed teams by management but actually function as large work groups. In this type of organizational form, team members (actually work group members) may work on their own or in pairs in remote offices. Members of virtual work groups may have little or sporadic contact with other members of the group. There is a gap in the research, where this type of relationship exists. The goal of this research was to provide a pilot study for research in this field. The concern here is for the firm to achieve the goals of knowledge sharing while retaining effectiveness in the completion of task objectives when groups are larger than those of normal team size. Further, it is the goal of this chapter to discuss the role-based performance self-efficacy of members of virtual group members during the completion of their work duties in relationship to a number of factors that exist within the firm. This chapter reviews the literature related to virtual teams, knowledge sharing, communication, and collaborative technologies from the fields of information sciences, technology and innovation, organizational behavior, organizational theory, and strategic management. It then reviews the findings of a two-phase case study of one large group of workers at Nortel Networks. Nortel Networks, headquartered in Brampton, Ontario, Canada, has participated in major developments in the evolution of communications networks technology worldwide in more than 150 countries. A century ago, they began as a telephone manufacturer, supplying primarily the Canadian market. With revenues of \$10.56 billion, they have become a leading mover in the next generation of communication technologies in four core businesses:

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