Chapter 7

Knowledge Transfer and Knowledge Creation in Virtual Teams

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ABSTRACT

Tacit knowledge transfer and knowledge creation represents perhaps the best means of sustainable competitive advantage through continual innovation. As organizations become more distributed in their different offices, virtual teams become more common and valuable. The question of how these virtual teams can effectively transfer tacit knowledge and create new knowledge thus becomes of importance to organizations. This chapter focuses on this issue and presents supporting evidence related to tacit knowledge transfer and creation, virtual teams, and how businesses can effectively harness capacity of virtual teams to transfer valuable tacit knowledge and create new knowledge.

I. INTRODUCTION

Teams are used in virtually every organization to improve productivity, responsiveness and effectiveness because of the synergies of bringing different expertise, talent and perspectives together. Virtual teams represent a growing part of the business environment given the globalization of business. They are normally defined as “groups of geographically and/or organizationally dispersed coworkers that are assembled using a combination of telecommunications and information technologies to accomplish an organizational task” (Berry, 2011, Page 187). A recent survey of businesses by the Society for Human Resource Management (SHRM) (Minton-Eversole, 2012) demonstrated the pervasiveness of virtual teams in the workplace. In this study, they surveyed “379 randomly selected HR professionals from SHRM’s membership” and showed that almost half (46%) of the organizations surveyed used virtual teams. It was not surprising that their findings also showed multinational organizations were “more than twice as likely (66%) to use virtual teams compared with those with U.S.-based operations (28 percent).”

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Some other interesting results from this study included: • Why they used virtual teams: 53%- “the need to include talent in different locations because their work is taking on a more global focus.” 59%- to increase collaboration throughout the organization, 39%- to improve productivity, 39%- to reduce travel time and costs. • Of the respondents, 50% of the public for-profit companies were likely to use virtual teams as well as 49% of private for-profit companies. Only 9% of government agencies were likely to use virtual teams. If we assume that this survey is representative of most businesses, we can infer that virtual teams are very important to businesses and probably increasing in use and importance as business continues to extend its reach in terms of customers, suppliers, and collaborative activities with other businesses. This form of virtual collaboration provides an organization with competitive advantage by combining the best core competencies of expertise across an organization (Romero et al., 2011). They further provide organizations with the ability to adapt quickly to changing environmental and competitive conditions by assembling virtual teams with specific expertise to respond rapidly to these dynamic markets (Klotz-Young, 2012). However, it is not enough to create virtual teams and assume that team members will effectively communicate, collaborate, share knowledge, innovate and achieve goals. Rather, there are many challenges associated with virtual teams. This chapter explores tacit knowledge transfer in virtual teams including the impact of culture and leadership, and concludes with some lessons learned from the literature on how to effectively manage virtual teams for effective tacit knowledge transfer. Why is this important? With business operating on a global scale, expertise and talent is usually not local. Therefore, businesses should learn how to leverage the knowledge and expertise of people anywhere any time for sustainable competitive advantage and continual improvement and innovation. One way to do this is to learn to harness the power of virtual teams in an effective way. This chapter attempts to share knowledge on this topic by searching the literature and presenting research on the topic in a reasonably comprehensive manner. The chapter concludes with an analysis of trends from this literature review.

II. VIRTUAL TEAMS

According to Montoya et al (2011), a virtual team can be thought of as “a group of geographically dispersed people who interact through interdependent tasks guided by a common purpose with the support of communication technology” (Page 451). In their research, they suggest that several major factors can impact effective or ineffective virtual team communication and collaboration including trust, team composition, and cultural differences. However, they also recognize that since people on virtual teams must interface with technologies to communicate and collaborate, these technologies can also play a pivotal role in the success or failure of the team initiative. They suggest that the current technologies that are widely used can be improved upon with new, emerging technologies to enhance collaboration and communication. Specifically, they suggest that 3-dimensional (3D) technologies can provide a much richer environment than the commonly used technologies such as web sites, email, document repositories, wikis, and blogs. We infer that commonly used video and audio web-based technologies such as Google Hangout (free) and the similar technologies are included in the category of current 2-dimensional technologies. An example they provide of an emerging 3D environment is “Lenovo operates a 3D virtual showroom using the web. Alive platform where prospective customers can interact with products and salespeople” (Page 452). These 3D technologies use simulations to provide more of a real world experience to the users. Some of these environments use “avatars” such as the Second Life program where users create