ABSTRACT

The development of information systems is a difficult process that often ends in failing to meet the project's initial goals. Typical outcomes for information systems development projects include delivering promised products & services on time and within budget. These pressures are now compounded by the use of virtual teams that present a new set of challenges related to the cohesion, organization, and functioning of the team process. Specifically, virtual teams must contend with problems in team formation, the organizational environment in which the team operates, and the technology used for collaboration and communication. As more organizations use virtual teams, these problems present real and pressing obstacles to the successful completion of database systems development. The goal of the study was to determine whether leadership type, transformational, transactional, or management-by-exception was significantly related to leadership effectiveness in a virtual team tasked with developing a database management system. This study targeted millennial students at the Maine Business School who were assigned to virtual teams tasked with developing a database management system. Specifically, this study sought to answer three hypotheses: 1) what is the effect of leadership type, as self-reported through the Multifactor Leadership Questionnaire, on the quality of completed team projects? 2) What is the impact of type of leadership on virtual team effectiveness as measured by the Virtual Teams Survey?; and, 3) Are there interactions between leadership style and virtual team effectiveness on the quality and uniqueness of the completed team project? Findings suggest leadership style and virtual team effectiveness did predict project quality. Transformational and Management-by-exception leadership styles had a negative relationship with virtual team effectiveness. Findings further suggest that Transactional leadership style influenced project quality directly, while transformational and management-by-exception styles influenced project quality indirectly through their direct influence on virtual team effectiveness. These findings suggest that traditionally effective leadership types do not work well for Millennial Generation teams in virtual environments.

Keywords: Database Development, Generation Y, Leadership Types, Millennials, Systems Development, Virtual Team Effectiveness, Virtual Teams, Warp-PLS

DOI: 10.4018/ijec.2015070103
INTRODUCTION

According to Kock (2008) virtual worlds / virtual environments create a unique space that allows for interactions between individuals who are physically separated by geographic locations. Kock continued by stating that these virtual worlds also offer a “real-time” environment for business to occur between individuals and groups physically separated by time and space. This study sought to increase our understanding of virtual environments by examining leadership type and its impact on both virtual team effectiveness and the quality of completed team projects among millennial business students at the University of Maine. Many factors such as leadership types, personal communication style, and personality types influence the success or failure of team projects. An ever increasing trend in systems development according to Mihhailova, Oun, and Turk (2009), are to have many teams communicate virtually, through the use of Internet communication technologies, what many researchers labeled virtual teams. These virtual teams add yet another challenge to completing team projects because of the loss of face-to-face communication between the leader and subordinates, and between subordinates.

THE MILLENNIAL

Millenial’s have been defined by Williams and Chinn (2009) as the “net Generation.” The net Generation includes those individuals who grew up immersed in technology. According to Bracy, Bevill, and Roach (2010), Millenial’s, also often referred to as Generation Y, include people who were born between 1977 and 2003. Bracy et al. stated that there are many characteristics about the millennial population that distinguish them from other generations. For example, Millenial’s have a tendency to be very “tech savvy” and are visual learners. According to Zapalska and Brozik (2007), visual learners are those students preferring to receive information in the form of graphs, charts, flow diagrams, etc. Zapalska and Brozik stated that visual learners have a preference for “picturing information” and often will enhance visual information by adding colors and layout designs to information. Bracy et al. also stated that Millennial’s have been discovered to be much more accepting of diversity and they are more global-centric. Millennial’s have been shown in the literature as being different from previous generations, such as Generation X and the Baby Boomers (individuals born between 1946 and 1964). To illustrate this point, Billington and Billington stated that while Boomers sought freedom to do their work and recognition for work completed, Generation Y employees sought 1) mentors, 2) a balance between work and life, and 3) the opportunity to explore. Billington and Billington also found a difference in how Boomers and Generation Y employees sought to complete their tasks. Boomers used experience and perspective, while Generation Y employees were more technically inclined and used technology more often to complete tasks.

LITERATURE REVIEW

According to Dalcher and Drevin (2003), the greater part of database systems development projects end in failure. Warkentin, Moore, Bekker, and Johnston (2009) stated that up to 80% of all systems development projects failed for a variety of different reasons. These include: the system was not developed on time, system development went over budget, and the system developed did not meet the planned project’s criteria. These failures are further compounded by the use of virtual teams to complete projects. Hannola and Ovaska (2011) stated that information systems development in general is labored with obstacles hindering successful completion. Hannola and Ovaska stated that the objective of an information systems development project is to “develop and modify systems that satisfy customers’ and end users’ needs on schedule and within budget.” (p. 66). Hannola and Ovaska continued by stating that “the early activities involved in information systems development are recognized by the industry as
Critical Success Factors in the Development of Folksonomy-Based Knowledge Management Tools
www.igi-global.com/chapter/critical-success-factors-development-folksonomy/36057?camid=4v1a