The Impact of Trust on Virtual Team Effectiveness

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ABSTRACT

Given the important role of information technology, virtuality has become crucial issue in contemporary organizations. Virtual teams are comprised of members who are located in more than one physical location. They need to be effectively collaborating to harness their full performance capabilities in order to compete in the highly competitive environments. However, virtual team effectiveness is affected by determinants of trust which include three types; personality, cognitive and institutional-based trust. Therefore, this paper examines the impact of trust determinants on virtual team effectiveness represented in virtual team satisfaction and performance. Through a survey of 125 virtual team members who had experienced at least two years in this field, the results indicated that determinants of trust positively influence virtual team satisfaction and virtual team performance. The authors’ structural equations modeling findings also support our hypothetical predictions that personality- based trust, cognitive- based trust and institutional- based trust have a dramatic impact on both of virtual team satisfaction and virtual team performance. Moreover, institutional- based trust is the uppermost driver of virtual team effectiveness. This study provides novel insights into virtual team behaviours, managerial and research implications for effective virtual team.

Keywords: Cognitive-Based Trust, Institutional-Based Trust, Personality-Based Trust, Virtual Team, Virtual Team Satisfaction

1. INTRODUCTION

In the context of globalization of the economy and the availability of advanced information technology, organizations are finding that working remotely with virtual teams (VTs) at many locations could be seen as a viable way to run their business (Brahm & Kunze, 2012; Pinjani & Palvia, 2013). VTs have changed the corporate landscape of the twenty-first century, replacing traditional teams—face-to-face—and enabling organizations to become involved in more global, complex and dynamic projects (Townsend et al., 1998). They have become increasingly more commonplace and prevalent in organizations as they ensure the agility and speed required for business practices in the context of extensive competition (Olson & Olson, 2012).

VTs can be defined as “two or more persons who work together on a mutual goal or work assignment, interact from different locations, and therefore communicate and cooperate by means of information and communication technology” (Geister et al., 2006, pp. 459-460). Martin et al (2004, p. 808) further define VTs

DOI: 10.4018/ijom.2014010102
as “teams whose members use technology to varying degrees in working across locational, temporal, and relational boundaries to accomplish an interdependent task”. The idea of virtual teaming has been applied in organisational settings to solve many problems, assure particular quality, develop products, share information, and provide other team-oriented activities in a very similar manner as physical teams would. Therefore, it has been suggested that promoting the virtual teaming environment can produce more innovations and gain more benefits than their more traditional face-to-face counterparts (Bock, 2003).

Technology has become a critical for VTs in carrying their basic team functions such as: communication, decisions making, learning, collaborating, and managing knowledge (Pinjani & Palvia, 2013). As communication technology has improved and collaborative software has been developed, VTs would be able to largely transcend time and space, connecting people across functions, geographies, and organizations. Supported by ever advancing communication technologies, VTs will be able to combine their individual skills in order to work together and to achieve a project or organization goal (Peters & Manz, 2007).

In that sense and for the purpose of promoting the context of VTs, the concept of trust has become an important issue. Members of VTs are geographically dispersed and as a result are lacking a shared social context and face-to-face encounter. Therefore building trust among VT members becomes a crucial factor for its effective operations. In that sense, O’Hara-Devereaux and Johansen (1994) view trust as glue that helps in creating virtual team relationships and is required for virtual teams’ effectiveness. Moreover, trust could be seen as central to members of VTs who work virtually especially those who participate in cross-functional project. In cross-functional projects people would find some difficulties to share information, to observe others’ work, and to develop rapport (Zolin et al., 2004; Jarvenpaa et al., 1998; Henttonen & Blomqvist, 2005). In this context the issue of ‘trust’ has become a key successful factor that would help to overcome these difficulties and hence help promote the effectiveness of virtual team in organisations (e.g. Jarvenpaa et al., 1998; Henttonen & Blomqvist, 2005; Holton, 2001; DeRosa et al., 2004; Sarker et al., 2003; Brahm & Kunze, 2012).

Accordingly, the objective of this research is to highlight the impact of trust on virtual teams’ effectiveness. To achieve this objective, this research is structured as follows. Having had the introductory section, the second section entails the purpose and significance of the study. Section three comes to review some of literature concerning the concept of trust and its types and effectiveness of virtual operation in teams work. Research hypotheses and methodology are included in section four and five respectively. Drawing upon the previous sections, section six presents some conclusions and implications for practitioners. The study ends with section seven that illuminates its limitations and further suggestions for forthcoming research.

2. PURPOSES AND SIGNIFICANT OF THE STUDY

The research attempts to introduce the concept of trust as a crucial explanatory factor for the achievement of high level of effectiveness in VTs. In order to do this the researcher pursues the following objectives:

1. To explore the relationship between types of trust and the virtual team effectiveness (PVTE);
2. To develop a theoretical framework model explaining this relationship;
3. To test hypothesized relationships derived from this theoretical framework; and
4. To draw some implications concerning the effective management of VTE.

Therefore, the study try to illustrate the contextual role of trust and attempt to theoretically derive and empirically test a model considering types of trust as input factors associated with VTs effectiveness.
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