Critical Factors for the Relationship Quality of IT-related Project Virtual Teams – Roles of Mutual Trust and Knowledge Sharing

Pei-Hsuan Hsieh  
National Cheng Kung University, Tainan, Taiwan  
peihsuan@mail.ncku.edu.tw

Vy Kiet Chung  
National Cheng Kung University, Tainan, Taiwan  
kvjhong@gmail.com

Abstract

With the quick development of information technology, enterprise digitalization has become more and more popular. Through the use of IT communication tools, face-to-face traditional project teams transform into virtual teams and they are able to enter a virtual space to continue discussion and interaction. A virtual project team operated with cross function, organization, culture or cross country characteristics consists of team members who establish and execute the project to meet the destination goal by working in a virtual environment with IT support. However, the relationship quality of these virtual teams, especially that occurring in cross function or cross culture IT-related project teams remains questionable. How relationship quality changes during project completion is also worth exploration.

A project-based organization involves the creation of temporary actions necessary to accomplish project tasks in which knowledge is created. IT platforms play a role in helping project team members communicate their knowledge with others rather than storing it, which further causes the organization to concentrate on the information exchange between members. Mutual trust developed among team members is also regarded as a key driver to strengthen project performance. Virtual team managers need to manage conflicts, such as those resulting from functional diversities and misdoubt among team members. However, the increasing expansion of project information capacity makes it more difficult to explore, embody, approach and conserve the knowledge requested by project users. Moreover, there is little research examining how mutual trust and knowledge sharing impact members' relationship quality.

Thus, this study is aimed at identifying the critical factors that influence the relationship quality among IT-related virtual project team members. The changes in the relationship quality among project members during the completion of projects are also explored. This study also separately explore the roles of mutual trust and knowledge sharing for the purpose of further determining their various moderating and mediating effects on the relationship quality of project teams. To identify the factors impacts the virtual team member relationship, semi-structured interviews were conducted with 11 participants who are now working with or who have worked with virtual project team members. All the interviews were audio-recorded to create a verbatim transcript which could be analyzed later. The preliminary results indicated that while communication technology is critical during the project process, shared goals and mutual trust are considered to be the most critical factors influencing relationship quality and project performance. Only after establishing mutual trust are project team members willing to share knowledge.

Keywords: relationship quality, virtual project team, knowledge sharing, mutual trust