

ABSTRACT

In previous studies, virtual team structures and how they benefit an organization through the software project development process leading to project development success has been addressed widely. However, the level of customer participation driving the virtual team design and development process and the influence of decision quality and speed during the design and development process results in virtual team development success is yet to be explored. In line with this, the purpose of this study is to explore the factors affecting the virtual team project development success and how these factors are directly influencing the virtual team project development success. The paper uses multiple case study strategies under the qualitative approach. The sample includes twenty individuals from virtual teams and six focus groups consisting of 3-4 team members from three different global software development companies. Data was collected using a semi-structured questionnaire in the context of face-to-face and virtual means. Then the data was analyzed, and multivocal arguments by building themes resulting in a thematic analysis. The study revealed that the software projects were not completed successfully even after adopting virtual team structures in global software development companies. It has shown that the level of customer participation in the design and development process is low when conducting the project development virtually unless they are dependent on the project scale or budget. Due to that, the design and development process determined by the interconnectedness of the virtual team member activities, virtual team member interactions, and virtual team member sentiments fails to achieve project development success in a virtual context. Furthermore, it was identified that the decision quality and speed during the design and development process influences the virtual team development success. The study contributes to the limited existing literature on the virtual team development success in product-oriented software organizations and extends Homan's Interactions Theory in group formation. The managers and the organizations will receive a clear picture of the importance of customer participation and the rest of the key elements to be present in a virtual team to make the project development successful. This will drastically reduce rework, over-work, rejections, and everything.

Keywords – Virtual teams, Virtual team project development success, level of customer participation, Design and development process, Decision quality, and speed