Determining the Impact of Computer-Mediated Communication: An Experimental Investigation into the Use of an Asynchronous Discussion System to Improve the Effectiveness of Virtual Teams

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Abstract. Information technology has had a significant influence on individual, group and organizational work patterns and promoted virtual work environments. However, the performance and satisfaction of Virtual Teams (VTs) is generally perceived to be lower than that of traditional Face-To-Face teams. In order to identify the underpinning issues impacting on the effectiveness of virtual teams caused by Computer-Mediated Communication (CMC), a comparative study was undertaken. A preliminary framework was built through an extensive literature review and then, a one-year experiment was conducted to collect data to validate the models for both face-to-face and virtual teams. The results of this longitudinal study revealed a number of factors impacting on performance and satisfaction. The study made three major contributions: (a) this study confirmed that FTF (Face-to-Face) groups perceived higher levels of performance than VTs but not of satisfaction; (b) the factors that affected the performance and satisfaction of FTF and VTs were identified along with their relationships and impacts on performance and satisfaction; (c) solutions to improve the effectiveness of VTs were proposed.

Keywords: Virtual teams, face-to-face teams, performance, SEM

References


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