Impact of Individual and Task-related Characteristics on Perceived Team Effectiveness of Software Development Teams

Udayangi Perera
A.T. Fonseka

Abstract

This study investigated the reasons for the ineffective performance of software development teams in Sri Lankan organizations. It proposes a research model to examine team performance from an individual and task-related perspective. Data for the study was collected through the aid of a questionnaire based survey consisting of 177 participants in 9 Sri Lankan companies serving the Asia/Pacific and international market. The data was supplemented by 8 in-depth interviews. Analysis of the data was conducted using SPSS. The technique used was to first test correlations between each of the independent variables identified in the study with the dependent variable, perceived team effectiveness. Subsequently, a step-wise multiple regression analysis was used to test the impact that each category of variables has on perceived team effectiveness. Then a principal component analysis was conducted for the most significant predictors of perceived team effectiveness as revealed in the regression analysis. Findings from the analysis showed that nearly all the factors studied as positively affecting perceived team effectiveness, were indeed significantly correlated with team effectiveness. The findings of the factor analysis showed that the model tested by the researcher by grouping categories of variables together held true. It was also seen that of the two categories studied the task-related characteristics emerged to be the most significant determinants of perceived team effectiveness.

Key Words : Software Development Teams, Team Effectiveness, Person-Task Fit

Udayangi Perera, *is a lecturer at the Informatics Institute of Technology (Pvt.) Ltd., Colombo. She possesses an MBA from PIM.*

Prof. A. T. Fonseka, *is a senior faculty member at the Postgraduate Institute of Management (PIM), Colombo, Sri Lanka.*