Requirements Engineering Practice to Improve Project Performance and Competitive Advantage

Li-Ren Yang
Department of Business Administration
Tamkang University
New Taipei City, Taiwan
iry@mail.tku.edu.tw

***Abstract*—Poor project requirements engineering (RE) practice is one of the major causes of project failure. However, many organizations do not adequately manage a project's requirements leading to a poor design basis. The primary purpose of this research was to investigate the associations among RE practice, project performance, and competitive advantage. The second objective was to evaluate the mediating effect of project performance on the relationship between RE practice and competitive advantage. The third objective was to determine whether the impact of RE practice on project performance was moderated by project type. The results suggest that RE training & improvement may contribute to project performance. In addition, project performance has a significant effect on competitive advantage. The testing also supports a role for project performance as a partial mediator in the relationship between RE practice and competitive advantage. The findings also indicate that project duration has a moderating effect on the relationship between RE practice and project performance. The research results offer guides to software development process. Findings from this study are helpful to project managers and project planners in deciding whether to adopt RE practice in software development process. Project planners can use the research results to modify their current process.**

***Index Terms*—Requirements engineering, project performance, competitive advantage, project type.**

IJSMS

This is an open access article under the CC BY-SA 4.0 license (https://creativecommons.org/licenses/by-sa/4.0/)