Chapter IX

A Revised EIIO Model and a Simple Software Review Guide

Abstract

This chapter presents the revised EIIO model from the industry survey results. This includes analyzing the structure paths and validation of the final EIIO model. Use of inputs, meeting process, and review performance describes in the final section of the chapter. The chapter also proposes a simple guide for conducting software reviews, which includes: 1) identifying the characteristics of the software artefact, 2) decision of which supporting documents (reports and previously reviewed software documents) to use and reviewers’ experience required which are determined by software artefact characteristics, 3) selection of reviewers should be based on their role (review) experience and working experience in the software industry, and how they perceive company support and encouragement, and their acceptance levels of the company that is organising and conducting the software review; and 4) In the review meeting process, the most critical factor is teamwork which can be affected by the characteristics of the software artefact, use of previously reviewed software documents and reports, and perceived contingency (motivation).
A Revised EIIO Model

Further to the hypotheses test using PLS, this chapter aims to discuss the revised EIIO model and the key inputs and process factors that affect software review performance. A set of statistic tests have been conducted to validate the final EIIO model. Discussions of the model also describes is chapter. A software review guide has been proposed for conducting a success software review.

Redundancy Analysis

After eliminating insignificant paths and constructs, the remaining seven constructs with 20 indicators of the final EIIO model was revised and reproduced using PLS. Figure 1 provides the results of the redundancy analysis. All structural paths of the revised model were found to be significant.

Figure 1. Redundancy analysis of the EIIO model
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