Chapter XI

Recommendations for Conducting Software Reviews

Abstract

This chapter provides recommendations for conducting software reviews in software development environments. It is recommended that the software review process planning should consider three issues. These include: 1) decision on the selection of inputs, 2) a determination of the level of review meetings required, and 3) identifying the measurement metrics. For researchers, it is recommended that 1) future research should pay more attention to important relationships between software artefact characteristics and the use of supporting documents, 2) designing and conducting laboratory studies be done more realistically, 3) direct and indirect relationships between the use of inputs as predictors for software review performance, 4) the important relationships between the software artefact characteristics and meeting process factors, 5) meetings should be held when the artefact is complex, of large size and poor initial quality, 6) the use of previously reviewed software documents in relation to meeting process, 7) perceived contingency (motivation) is the most critical factor to meeting process, and 8) future studies should further concentrate on the use of previously reviewed software documents in combination with the implicit inputs, process, and performance.
Introduction

This chapter discusses the theoretical and methodological contributions of the book, the key findings and managerial implications of the studies, the limitations and directions for future research, and the final conclusion of this book.

Recommendations for Conducting Software Reviews

For Practitioners

With rapid changes occurring in business and information technology, practitioners often face pressure to produce high quality software in tight timeframes to satisfy stakeholders and/or users. The discussed benefits of software review to system development indicate that practitioners should pay more attention to achieving an effective review process. The book has developed guidelines to practitioners for organising and conducting their software reviews in an effective way.

Firstly, the use of inputs becomes more important to the organization of their software review process. Next, practitioners should be cautious in selecting the right people to perform software review tasks. Finally, according to the survey and in-depth interview findings, it is recommended that the review process planning should consider three concerns:

1. Decision on the selection of inputs.
2. A determination of the level of review meetings required.
3. Identifying the measurement metrics.

Use of Inputs

The first step is to identify the software artefact characteristics, as they determine the level of reviewer experience required and the types of supporting documents that should be used. Selection of reviewers should be based on the characteristics of the software artefact. When the artefact is more complex, larger, and of poor initial quality, more experienced reviewers are required, particularly those having role (review) experience. The research has not
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