# Foreword

This book makes an important and timely contribution. Agile methods are gaining more and more interest both in industry and research. Many industries transform their way of working from traditional waterfall projects with long duration to more incremental, iterative and agile practices. Furthermore, the need to evaluate and to obtain evidence for different processes, methods and tools has been emphasized in research in particular over the last decade. The main contribution comes primarily from combining agile methods (or more precisely XP and test-first programming) with empirical evaluation.

The book's contribution is important since it evaluates empirically a way of working which is more and more embraced by companies developing software or software-intensive systems. Thus, it evaluates new ways of working which is a challenge given the pace in which new technologies evolve, and in particular it provides evidence in relation to test-first programming or test-driven development. However, this is not the sole contribution. The book presents three experiments in much more depth than normally is possible in a research article. This means that it provides readers with in-depth insights into experimental methods in the context of agile development. This includes presentation of statistical methods, having concrete example of how to conduct the statistical analysis with SPSS and a thorough discussion about the different validity threats in empirical studies. Furthermore, the book presents how meta-analysis can be conducted when having several separate experiments.

In summary the book provides many valuable insights both to practitioners in terms of the evidence for test-first programming and to researchers in terms of clear illustrations of how new processes, methods and tools can be evaluated using experimentation in software engineering. It is pleasure to recommend this book to practitioners and researchers being interested in agile methods or empirical evaluation or both of them.


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