

FOREWORD

In order to derive continuous improvement in the software engineering process, it is essential to measure and control the process. Good software estimation methodologies ensure process predictability and clarity on timelines. Accurate estimation benefits several stakeholders and results in

- Better profitability
- Better employee morale
- Higher customer satisfaction

In situations where the end customer is not very conversant with software engineering or the nuances of programming, estimation gives credibility to the software engineering process, and helps the service provider gain respect from the customer. Superior estimation methodologies lead to optimal utilization of inputs and improve the quality of the end product, both of which result in higher satisfaction levels. In essence, a process-driven objective estimation, which eliminates the person dependency, is a competitive advantage for the organization that implements it.

Despite considerable effort and costs having gone into research on improving the accuracy of software estimation, the results have been far from satisfactory. Estimation accuracy has varied from as low as 5% to as high as 350%! There are a number of reasons for such a high degree of variation in estimations, including inadequate scope capture, lack of appropriate technical skills, and poor project execution techniques.

Heads of large IT organizations continue to be tormented by one of the most difficult facets of managing IT business: controlling their budgets. Estimates that cover costs towards discretionary and non-discretionary

expenses, including operational and infrastructure costs, have always been a source of dispute and ambiguity. Unlike hard facts and figures available in manufacturing industry, there are many gray areas in the software industry that have yet to be ironed out.

This book attempts to address many of the gray areas in the software project execution process. M. A. Parthasarathy of Infosys has used his vast experience in project execution in writing this book. Starting from a very basic explanation of the ingredients of a typical estimation activity, he proceeds to remove some of the basic misconceptions about software estimation.

In a truly “flat world” scenario today, there is a compelling need for IT organizations to bring together an international global workforce where people from different countries and cultures come together to produce world-class services and products, resulting in many complexities in software project execution. In this context, it is very important to have process driven effort and cost estimation methodologies.

Software professionals and managers will find this book insightful and lucidly written, providing an analytical approach to estimation methodologies.

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