



Highly Valuable Book on Neglected SPI Subject, March 30, 2004

Reviewer: David LaJuett from Rockville, Maryland USA

ROI of Software Process Improvement is a useful, thoughtful, and in-depth review of a neglected SPI area—How to estimate the costs and benefits of major SPI methods such as CMMI[®], SW-CMM[®], ISO 9001, Inspections, PSPsm, and TSPsm.

It is practical, complete, and is a good guide for anyone who wants to rapidly master and apply professional return on investment techniques.

The author does provide ample and valuable personal data, examples, and case studies, which are derived from his own varied experiences with implementing SPI methods in the Far East, Europe, U.S., and for organizations such as NASA, Fujitsu, U.S. Navy, and many more.

While the book does expect readers to input their own personal data, it provides simple, but powerful formulas for costs, benefits, net present value, benefit/cost ratio, return on investment, and breakeven point. In addition, the author also expects individuals, projects, firms, and organizations to use their own data to design their own business cases.

In any event, the author provides so many formulas, data points, and examples, that he practically gives away the answer for free.

There are free spreadsheets for estimating the costs and benefits of software process improvement available at the publisher's website, which are worth thousands in consulting fees. This book is pretty much like having a \$250 an hour consultant in a box for 50 bucks. Who could argue with that?

There have only been a few major in-depth studies, which have attempted to identify, analyze, and compare the costs and benefits of major SPI methods such as CMMI[®], SW-CMM[®], ISO 9001, Inspections, PSPsm, and TSPsm (one of which was popularized by the same author).

These studies were unique, controversial, and yet sorely needed. They were controversial because they challenge the myth of one best SPI method, they shatter the illusion that SPI is cheap and easy, and yet they teach people how to identify, quantify, and express the elusive benefits of SPI. Very few people can convincingly and authoritatively tap into the secret benefits of software process improvement.

ROI of Software Process Improvement is no exception. It is one of a kind, it will surely push you to the edge of your comfort zone, it will cause you to reconsider the ROI approaches, and it will teach you all you need to know about the ROI of SPI.

Software process improvement is a highly competitive field and this book will certainly challenge your current paradigms and cause a lot of people to think very hard. However, make no mistake about it, this book is highly educational, it is a perfect example of just in time training and information, and, for the open minded reader, it is a notable tool for taking individuals and organizations to the next level of performance.

Finally, the author's web site is worth a visit for additional articles and links that relate to what's in the book. In short, the book is a highly useful, portable tutorial on an area of software process improvement that seems to have been neglected by most others authors in the field, and yet it's an area that many organizations place a strong focus on.



Provides Tools/Techniques to Assess SPI Value, March 26, 2004

Reviewer: Mike Tarrani from Deltona, FL USA

It's a safe bet that most readers who are interested in determining the return on investment of a software process improvement initiative have stumbled upon the author's web site at one point. The material that comprises this excellent book is a distillation of Mr. Rico's extensive work in this area, and is one of the most useful and complete books on the subject.

He begins by providing a context for both software process improvement and its associated ROI. The introduction answers the who, what, how, and why of ROI of software process improvement (SPI), and the methods, principles, and pitfalls of measuring it. The next chapter drills down into SPI itself in which he answers the who, what, why, and how questions. This segues into a chapter that surveys the major SPI approaches (Software Inspection Process, Personal Software Processsm, Team Software Processsm, SW-CMM[®], CMMI[®], and ISO 9001). These establish the foundation for the heart of the book—Three chapters, each dealing with a specific method (ROI analysis, benefit analysis, and cost analysis).

After thoroughly covering each analysis method the subsequent chapters focus on how they are applied to the SPI models. Here he uses a set format that addresses the following methods:

- Cost Methodology
- Benefit Methodology
- B/CR Methodology
- ROI% Methodology
- NPV Methodology
- Breakeven Point Methodology

Next are chapters that cross-reference the above by individually discussing in separate chapters costs, benefits, cost/benefit ratios, ROI, NPV and breakeven analysis. Here the format for each of these chapters is:

- Software Inspection Process
- Personal Software Processsm
- Team Software Processsm
- Software Capability Maturity Model[®]
- ISO 9001
- Capability Maturity Model Integration[®]

Finally, the book provides yet another view by addressing analysis of return on investment, optimizing return on investment, and future of software process improvement, rounding out the dimensions.

This book is more about how to examine the return on investment of SPI, using proven tools and techniques, and drawing your own conclusions that reflect your organization, constraints, and opportunities. In addition to the exhaustive examination of all facets of SPI ROI, you can also download invaluable tools and artifacts from the publisher's web site, including: ROI high-level and detailed models, and ISO 9001 and SW-CMM cost model (all in Microsoft Excel format). You can also download an additional ROI article in MS Word format that augments this book. This book, plus the value-added artifacts, is invaluable to any practitioner who is examining the true benefits of SPI.