Book Review: *INsourcing Innovation* by David Silverstein, Neil DeCarlo, and Michael Slocum.   Reviewed by Ruth and Jim McMunigal, Gaetano Cascini, and Ralph Czerepinski.

*Editor's note: Since Michael Slocum is co-editor of the TRIZ Journal and David Silverstein is president of BMG, one of the TRIZ Journal sponsors, we invited a team of TRIZ users who are TRIZ Journal readers, but not part of our staff, to do this review. We are glad to find that they recommend **INsourcing Innovation**, and found it useful for both management and technical readers.*

Full Title: *Insourcing Innovation: How to Transform Business as Usual into Business as Exceptional.* Forward by Mikel Harry. $24.95. Paperback. Available from Amazon and other booksellers. Publisher: Breakthrough Performance Press, Longmont, CO USA IBN 0-9769010-0-5

From Jim and Ruth McMunigal, jim.mcmunigal@gmail.com:
We have come to a point in the western world treatment of TRIZ, the Russian innovative process, that there are a quite a number of text choices to make. To date the materials have been theoretical, instructional, and technical. Management has not had a strong place to go to support its decision making regarding TRIZ. That hole in the literature has been filled with Michael Slocum's *INsourcing Innovation*. Slocum was the thought leader for a number of firms for TRIZ, the latest being BMG. David Silverstein had the vision to partner with Michael and to add the Six Sigma orientation, and the 3rd leg of the team, DeCarlo, added his writing ability, which has been demonstrated in many other Six Sigma books.

Outsourcing within the US has been between large metroplex organizations moving work to small places and the all too familiar out of country variety. Here is a cry that there is an alternative. Dr. Mikel Harry sees a parallel with Six Sigma in its earlier stages and the coming of age of TRIZ. We are reminded of Einstein's rejoinder that a system cannot be improved with the level of thinking which created it. TRIZ is clearly at a higher level of thinking than the outsourcing organizations are using.

The book puts the perspective of what can be a droning-on list of initiatives, too often ill-conceived and delivered, and with dubious results. Slocum brings organizational sensitivites with clear roles for the organization within a defined technical system. There are direct parallels to the 800 pound guerrilla six sigma throughout.

The technical material is clearly organized and is available to the novice and experienced practitioner as well. We add some new players to the list. This book is a must read for decision makers in business, those who would influence them, novices, and practicioners, as well. A clear World Class winner. There are a lot of good books in the field. This book stands out and will be recognized as a hallmark in the development of innovation and creativity as the next phase of strategies for firms to claim insourcing as a strategic imperative.

From Gaetano Cascini Dept. of Mechanics and Ind. Technologies, University of Florence (Italy), gaetano.cascini@unifi.it

Foreword:
A couple of months ago I received an e-mail by Michael Slocum announcing the issue of his new book and (I must be honest) my immediate thought was "do we need another book about TRIZ?!?"
I was even more surprised few days after when I received a box with a rather tiny book, with an essential cover and not more than 150 pages. Nevertheless, I had always appreciated Michael's speeches about the integration of TRIZ into a "Total Performance Excellence" framework in several meetings and conferences we attended together; therefore, I still was very curious about reading the book.

Facts:
First, **INsourcing Innovation** is a pleasantly readable book both for people not aware about TRIZ and those who are familiar with TRIZ. The most valuable contribution is the essential approach, just like the cover, that will attract technicians, managers, generally interested people. In facts, the book presents TRIZ as a brick of a structured system for empowering the innovation capabilities of a company. Compared with other publications, it highlights the benefits of TRIZ both at an operational and at a strategic level, enriched by examples and case studies from the relevant consulting experience of the authors.

The book is organized in four sections: the first two lead the reader from the "whys" of structured innovation to the operational fundamentals of the theory; then the authors provide a wider vision of TRIZ as a means for driving strategic decisions; finally, the role of TRIZ into an integrated environment pointing at "total performance excellence" is presented. The book is enriched by practical appendices with traditional TRIZ tools: Standard Solutions, Inventive Principles, Problem Parameters and Contradiction Matrix.

Short personal comments:
If you want to suggest a book to a top manager in order to convince him about the advantages of structuring innovation with TRIZ, this is the right one: short, clear, pleasant, with practical references. Nevertheless, just a long list of positive comments wouldn't be credible, so let's look at the limits of **INsourcing Innovation**.

The authors have a relevant consultancy experience with big companies and the book reflects this experience. I am concerned that people in small and medium enterprises could react negatively from this point of view, with the classical assumption "it's not for us!"…Another aspect worth mentioning is that people who already use TRIZ as a problem solving toolkit will appreciate the practical appendices at the end of the book; on another side, this is not the book to learn how to use those tools, since practical obstacles have been omitted.

A finale note: this is the time to accredit TRIZ to a wider audience not limited to inventors and people aiming at inventing. **INsourcing Innovation** goes in this direction.

From Ralph Czerepinski, PhD, Cz innovation

This book fills two very real needs in North American TRIZ. First, it is written for managers, not for the technical crowd. Second, it could be used as an easily read backbone for a basic course in TRIZ. I truly wish I had this in my hands six years ago, as I was getting into TRIZ, and trying to convince my managers it was the way to go.

It's just about as difficult to learn TRIZ by reading a book, as it is to learn swimming the same way. They are both learned by doing and by practicing. Nonetheless, it is still valuable to have an easy-to-understand introduction to TRIZ, a workable starting point, and a quick lookup book. This work covers all these readily.

A charming feature of *INsourcing Innovation* is that after the authors offer a summary comparison for each section of the book, such as those on pages 19, 58, 80 and 100, they include a very nice list of suggestions labeled, 'Practical Advice'. One or two of these might well have been expanded into short sections as well. For example, on page 59, they advise,

- "Don't solve primary problems only to be defeated by secondary problems (win the battle but lose the war)."

This is very good advice, but this feature of TRIZ is extremely important, and worth more than one sentence in an advice column. Almost any primary solution will bring with it some unintended consequences, and even beginning TRIZ users should be taught to take this new problem back through TRIZ for a non-compromise solution. This point should also be made clear in advance to non-technical problem owners.

There are a couple of weaknesses which I found, trying to read it as if I were a non-technical manager. First, too many of the examples are a technical, and not enough of them are business-like in character. Second, the somewhat philosophical sections 5-11 seem to be kind of plodding – I kept hoping they'd get to the point.

Another source of difficulty might lie in the implication that the application of TRIZ is easy, and doesn't require a lot of time and effort. This could be misleading if a manager gets the idea and expects his people to deliver quickly. The full application of technical evolution to discern the characteristics of the next breakthrough in a modern technology could require extensive work on the part of quite a few people, for example. And even a very good idea still takes a long time to reduce to practice, test market, and refine.

This book includes a few of the minor first edition glitches, both typos and technical issues, but these don't really impair readability, nor the introduction of TRIZ.

Overall, *INsourcing Innovation* does not include enough spelled-out how-to's or examples to serve as a solid reference book, either as a technical TRIZ text or as a solid business text. It does, however, include the classic summary of the 76 Standard Solutions, and the 40 Principles with the Contradiction Matix.

For more how-to's and more worked-out examples on, I'd still turn to *Simplified TRIZ* by Rantanen and Domb, or one of Darryl Mann's *Hands-On Systematic Innovation* texts.

INsourcing Innovation is a wonderful introduction to TRIZ for managers and board members. It includes a great invitation for them to integrate TRIZ into wider range

breakthrough thinking and longer term strategic planning. Parts Three and Four are especially valuable introductions to the applicability of TRIZ from this perspective. This text would also serve as a nice companion text for an introduction to TRIZ class.