

The ***Hands on Systematic Innovation*** books are available from our website:
<http://systematic-innovation.com/Products/products01.htm>

Book Review: “Hands-on Systematic Innovation”

By
Drs. Ellen Domb and Michael Slocum, Editors

Hands-on Systematic Innovation by Darrell Mann. 2002, CREAX Press, Ieper, Belgium.
<http://www.creax.com>. 464 pages, hardback. ISBN 90-77071-02-4.

Dr. Darrell Mann is a frequent author for the TRIZ Journal, and a co-author and friend of the editors, and CREAX is one of the TRIZ Journal’s sponsors. Does this mean we’re going to tell you that this is a terrific book? Yes, we’ll tell you it is a terrific book, on its own merits, not because of any of our relationships!

The ambitious goals addressed by ***Hands-on Systematic Innovation*** are to help those who have a problem to solve by tomorrow morning, to provide a “helicopter view” for those who are just exploring TRIZ, and to benefit those at the top of the learning curve and those who are just starting. Darrell Mann’s foreword says that he doesn’t claim that ***Hands-on Systematic Innovation*** does all those things equally well, but that readers will find their own way to use the book.

Another important note in the foreword—in the course of his consulting and training work with TRIZ, Darrell has recognized situations where TRIZ is not the best or most powerful way to solve certain problems. So, rather than offer a “pure” TRIZ book, he has included techniques from other systems where he has found them to be useful, in combination with TRIZ tools. These additions range from right-brain oriented systems, such as deBono’s six hats and Buzan’s mind-maps, to very structured systems such as the patent analysis system developed by Mann and his colleagues at Creax.

Readers of Darrell Mann’s articles in the TRIZ Journal will find much of the material familiar, and may ask themselves, “*Why buy the book if much of the material has already appeared as articles in the TRIZ Journal, and elsewhere?*” Because this book is much more than an anthology of the articles. Darrell Mann has done a very difficult thing for an author—he has taken a fresh look at each of his articles, and has brought them into a unified system, so that the reader can use all the concepts together for systematic innovation of services or systems or products.

A graphical guide appears on each page, telling the reader what the contents of that page are good for. It starts as follows:

Define	Select tool
Evaluate	Generate Solutions

Sections are then highlighted, or sub-sections (such as any of 4 methods for problem definition or any of 11 methods of generating solutions) so that the reader won’t get lost in the details.

The tools and techniques are illustrated with a wide range of examples over a wide range of technical complexity, from the influence of the evolution of the fork on the design of the knife, to flange design for gas turbines, to red-eye in photography, to retail strategies for department stores and stock brokers. Illustrations and photographs make most of the examples easy to understand, for people with some technical background—none of them requires specialist-level knowledge of mechanics or fluid dynamics or finance—but they all do require that the reader be willing to learn by analogy. Every point is illustrated through the use of examples, but there is no particular effort to use a variety of examples to explain each point.

Although one of the goals of the book is that readers can “dip” into it for occasional tips on tools or insights into specific methods, the lack of an index makes this quite difficult, and we hope that the publisher will correct this problem in future editions.

As editors we are frequently asked, “What’s the best book for beginners?” or, “If I can only buy one book on TRIZ, which should it be?” Usually, we avoid a single answer, and suggest that more than one book is necessary, since the reader needs to learn more than one thing. Absolute beginners might be best off starting with *Simplified TRIZ* (reviewed in June 2002, and co-authored by editor Ellen Domb and Kalevi Rantanen.) *Hands-on Systematic Innovation* is the book that can carry beginners to the next levels of TRIZ learning and practice, and can help TRIZ practitioners and teachers at all levels to get a sophisticated, integrated view of the use of TRIZ techniques and tools to achieve the benefits of bringing innovative services and products and systems to market.

The *Hands on Systematic Innovation* books are available from our website:
<http://systematic-innovation.com/Products/products01.htm>