Book Review: *How To Develop Winning New Product Ideas Systematically* by Roni Horowitz
## Reviewed by Larry Ball, and John Terninko.
Edited by Ellen Domb, editor@triz-journal.com

Details: 145 pages. Published in April, 2004, as an e-book in PDF format.   Download from www.start2innovate.com for US$57.

Editor's note: We invited two reviewers to write their impressions and opinions of Roni Horowitz's new book, ***How To Develop Winning New Product Ideas Systematically,*** this month, to give our readers a variety of opinions. Horowitz is the developer of ASIT (Advanced Systematic Inventive Thinking, a simplified derivative of TRIZ—see the August, September, and November 2001 issues of the TRIZ Journal for a tutorial.)   John Terninko and Larry Ball are authors of popular TRIZ books themselves, (***Systematic Innovation*** by John Terninko, Alla Zusman, and Boris Zlotin, and ***Breakthrough Thinking*** by Larry Ball) and John is also the author of the best-selling ***Step-by-Step QFD.*** We thought it would be useful to have the opinions of people who are not ASIT practioners, so that our readers could judge how they might be able to benefit from this new book. The merged opinion of our reviewers is

BUY	BORROW	PASS
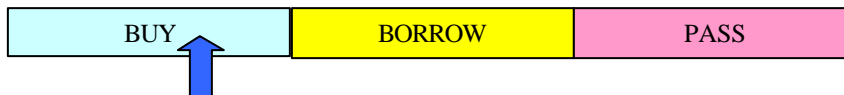
 Let us know if you like this approach!

A Hardcore TRIZ User's View of ASIT
By Larry Ball

        I have always been suspicious of what I considered to be simplified versions of TRIZ. As such, I have usually avoided ASIT articles or skimmed them. When I was asked to review Roni Horowitz's book, ***How to Develop Winning New Product Ideas Systematically***, I was reluctant, but agreed to download the book and have a look. Knowing my bias, I was determined to be as open-minded as possible because I wanted to do justice to the review. As I began reading I was surprised to find answers to questions that had been troubling me. I learned that I had completely missed the central point of ASIT. While I do not claim to be an expert on the subject, the potential of ASIT now intrigues me.

        As a prelude to reading this book, I had been reading Clayton Christensens's books on innovation. Clayton Christensen sensitizes us to that fact that in virtually every commercial situation, we become fixated on satisfying the needs of our most important customers. We come to see the world through their eyes. In fact, the whole process of innovation and resource allocation is held hostage to these customers. We become entrenched in their needs and problems. While it seems that this is wisdom, in fact it becomes a liability to growth by creating difficult business and technical paradigms.

Ultimately, every business reaches a time when it becomes important to grow into new markets. Clayton Christensen points out that it is difficult (for many reasons beyond the development of innovative ideas) to break from the death grip of these primary customers. It is especially problematic when marketing tries to identify new markets. Up to this point, marketing has been able to use standard marketing tools to study the existing markets. If we use these same tools to study new markets (as is commonly the case) the effects are disastrous and usually come at a high financial penalty because we are trying to anticipate the needs of a market that does not yet exist! At the same time, it is difficult to identify needs from any point of view other than our primary customers. In short, new product ideas continue to focus on the problems and needs of our most important customers. How can we systematically break this form of ingrained thinking? This is where ASIT comes in.

A high level view of ASIT is to create a "virtual product" under a highly constrained condition called the "closed world principle" and then conceive and develop a market that would find immediate benefit from this virtual product. Having discovered this market, the product is then developed and improved around the needs of this market. In effect, *ASIT is a market discovery tool that creates new products for this market in the same instance*. For those paying careful attention, ASIT fill a hole in the TRIZ methodology.

The closed world principal forces us to only consider "virtual products" which do not add anything to the environment (the "product world") of the baseline product. (While this thinking is not new to the TRIZ community, the emphasis of this thinking is a little different in ASIT). In effect, we are only allowed to manipulate the product and elements within the environment by eliminating, combining, multiplying, reorganizing, or changing parameters of existing objects.

While creating the virtual product, another unusual constraint is often imposed. Whatever we do, it is done to the more important elements or parts of the product. For example, if we are going to eliminate objects, we look for the most important ones to eliminate first! (This is very different from mainstream TRIZ). One of the first examples of this constraint is the development of a television without a screen. Possible markets are the blind or truck drivers. The author reminds us that this is not just a radio in disguise since normal radios do not pick up television frequencies. A new market is discovered with unfulfilled needs. The very weakness of this virtual product becomes a strength in this new market.

While the author does mention the use of ASIT to solve problems, there is no claim that it is a strong problem-solving tool. For instance, the book does not go into the subject of discovering cause and effect or the subject of resolving contradictions. (It does however create virtual products having contradictory properties with the "Breaking Symmetry" tool).

In summary I highly recommend this book. I found the book to be very thought provoking. The reading is easy. Each principle or tool is clearly taught and summarized. Ample examples are provided. The writing is somewhat playful. Whether you are a beginner or an advanced user of TRIZ, you will find application of ASIT to the discovery of needs and new markets.

Review of Roni Horowitz's book
How to Develop Winning New Product Ideas Systematically
by John Terninko

It is great when a title *How to Develop Winning New Product Ideas Systematically* delivers. Roni Horowitz the author even delivers on the subtitle of this fast read book (149 pages) *Learn to harness the power of ASIT to invent ideas for new products that will <u>WOW</u> the market and <u>AWE</u> the competition*.

The book presents six "tools" (templates) for transforming an existing product into a new product often useful to customers in new market segments. Each of the tools creates a constraint on the developer based upon "The Closed World Principle. Counter-intuitive research is presented that shatters our common belief that freedom and resources enhance creativity. Wrong! Concepts are more creative with fewer resources and less freedom.

The Sacrifice Tool asks you to identify the product's components. The old product becomes several different new products when one component is removed. Consider all the uses of each of these new products. If we remove the picture tube from a television we do not get a radio but a device that allows a car or truck driver to listen to their favorite TV program. A radio does not cover the frequency band of television broadcasts unless a television station chooses to also broadcast the sound track on a radio frequency.

Each tool has its own chapter that starts with several examples and personal experiences before a detailed example with clear directions is presented. The chapter finishes with variations on a theme for the tool covered.

There is a nice blend of a story format with many examples and detailed.

The other tools are:

Parasite Product - remove a main part from the product and carrying out its function in another product.

Unification – product takes upon itself the action of other products in its environment

Multiplication – select some part and add several more or slightly different parts to the product and discover new benefits.

Division – divide the product into two units in different ways and reorganizing the parts.

Breaking Symmetry – creating a new conditional responses of the characteristics of the product to application dimensions (space, time, user, environment and grouping)

For the diehard QFDite, this is a pleasant way to create products that will sell without talking to the customer. However, customer conversations and observations at the GEMBA (where the action is) will fine-tune the design of the product concept.

Individuals familiar with TRIZ will find these six tools interesting variations on the themes contained in TRIZ as well as a shift from finding solution concepts to inventive problems to finding new products for new environments.

After generation of many virtual products the author suggests not asking which are worthwhile but "What needs to be done to make it worthwhile."

There are just a few detractors that should not prevent you from getting this book. There are a few words or products I did not recognize and was surprised to find no glossary or index. Nowhere is the acronym ASIT defined. An index would be useful to find an interesting example remembered but location in the book forgotten.

Overall this book is a *** out of **** book.