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Dear Innovators,

It is really exciting to live at these times: when creative innovation ceases to be a mystery and turns into a systematic and method-based activity. We also realize very well that innovation is not an exclusive luxury time spending any longer but is activity which must be continuous and sustainable.

Last dozens of years have been producing enormous impact on our lifestyle and our values. Everything gets more dynamic. Everything accelerates. It is great but such acceleration and dynamics tend to sharpen contradictions existing in our society and create new ones that can catalyze crises.

For instance, ability of communicating globally becomes available to virtually everyone. Every day we are diving in a huge ocean of data, knowledge and information and their amount becomes overwhelming. At least, to me. Many of us continuously stay online and now can not even imagine how it could be otherwise.

On one hand, we need to get full access to all knowledge which matters to us. On the other hand there is so much noise in this knowledge which can greatly slow down our productivity at work and at home. To solve this contradiction technology has to offer means to provide us with right information and knowledge at the right time. I am not talking about filters only but what about obtaining information that you would not ask for but which would be crucial for you?

Last month almost everyone I know was talking about IPO of Facebook, and specifically about how much Facebook was overvalued. I have a slightly different opinion. I think that Facebook is undervalued. Potentially. Why? Because Facebook is not just another application, it is a platform which integrates content and communication. Such platform can become a huge part of our supersystem and for many people it will have great meaning since it can (and will) change their lives.

Yes, perhaps if we look at the technological side as it is today, Facebook is probably overvalued. But the concept has a huge potential. If done right, we won't be saying "I saw that on the Internet" but "I saw that on Facebook". Perhaps it won't be Facebook but some other name from some different team that would realize this concept in full, but if the Facebook founders and developers do the right things, they have all the chances. But to reach success and become real game changers they need to follow Apple's strategy: complexity must be hidden by ease and fun of use.

I remember when back in 1993 I installed and tried the first version of a web browser and I said, "Wow, it's going to be a revolution!". Although at that time the web browser could only display some hypertext and pictures, and it's needless to mention that the Internet was available only to a very limited number of people and organizations. But look now. Did the web browser change the way a huge crowd of people live today on this planet? I tend to believe so.

Our supersystem has been experiencing radical changes. Do we expect to remain the same as we were, say, 20-30 years ago? It would be a mistake. If we want to adapt to our supersystem, we need to change, too.

Because still, the fact that all these technological wonders change the ways we access information and communicate does not mean we start thinking different. But we have to in order to stay at the cutting edge and in many cases make right decisions. And we have to keep in mind that compromises do not eliminate contradictions; in many cases only postpone a disaster and even increase it instead.

A particular issue which has been of outmost interest to me for many years is that we need to "update" the way we think creatively and innovatively, the ways we understand and solve problems, the ways we generate new and valuable ideas.

More than 50 years ago Genrich Altshuller uncovered fundamental principles of creative innovation in technology and engineering, and as we can see today many of these principles are being proven valid for other areas of our activities.

That is why all my efforts are focused on developing xTRIZ: a system which provides people with tools supporting systematic and creative thinking to create right ideas at the right time in technology, business, society.

I wish you best innovations,

Valeri Souchkov  
[valeri@xtriz.com](mailto:valeri@xtriz.com)

## NEWS FROM ICG T&C (xTRIZ)



### xTRIZ and P41



I am happy to announce our partnership with [P41](http://www.p41.be) (<http://www.p41.be>), a company in Antwerpen, Belgium founded by Ives de Saeger, a very talented thought leader. P41's team focuses on process innovation and offers an array of methods and tools to their customers to achieve "process jump". Certainly, during 'jumping' innovative problems can arise, and xTRIZ seems to be a right framework to attack these problems in order to find solutions required within fraction of time and with the highest level of ideality. I hope this partnership will be fruitful for both sides as well as for our customers and business partners.

### xTRIZ and Management



On March 26, 2012 I provided a talk at "Agilia 2012" conference in Brno, Czech Republic. The audience was quite different from what we usually expect to see during TRIZ presentations. This time there were mostly IT product development managers in the room who use Agile, SCRUM and related techniques in product development. This style of management requires right decisions to be made quick but very often it is not easy because of conflicts or lack of possible solutions. But we have very powerful and proven tools in the TRIZ version for Business and Management to deal with such situation. So to me it seems to be a perfect fit between TRIZ and agile management.

Video of my 40-minute presentation "TRIZ for New Product Development (and more!)" can be found at: <http://youtu.be/n2d3McRr28Y>

## xTRIZ LinkedIn Group



The LinkedIn xTRIZ group is available at:  
<http://www.linkedin.com/groups?gid=4485435>

To join, please request a membership.

## GB-TRIZ: Android App with Inventive Principles



Guided Brainstorming LLC ([www.gbtriz.com](http://www.gbtriz.com)), a company ICG T&C cooperates with, has announced its new release: GB-TRIZ 2.0 for Android. It is a simple app for Android devices which serves and Inventive Principles reminder and costs only EUR 2.34. It can be downloaded from Google Play:

<http://www.gbtriz.com/TRIZGB.htm>

Guided Brainstorming LLC also offers advanced version of their TRIZ-based software products.

## Next TRIZ Cafe



Our next informal "TRIZ Cafe" gathering is scheduled for June 27, 2012 in Eindhoven or the Netherlands.

More specific information will be available at <http://www.xtriz.com/trizcafe.htm>

## Global TRIZ R&D Database

Since the end of 2011 I have been also involved with Global TRIZ R&D Council where my task will be to set up the global database of TRIZ research. I strongly believe such database will be of help to the entire TRIZ community.

## PUBLIC TRIZ & SYSTEMATIC INNOVATION TRAINING FROM ICG T&C

In Summer-Fall 2012, ICG T&C organizes the following public courses (all courses are conducted in English, international audience is welcome):

### TRIZ IN TECHNOLOGY AND ENGINEERING:

#### **Two-Week "TRIZ Fundamentals" in Technology and Engineering** (for starters or familiar with TRIZ): Training and certification

This intensive two-week (80 hours) "full immersion" course is conducted in cooperation with the University of Twente in Enschede. The course explains fundamental principles and philosophy of TRIZ, various TRIZ tools and techniques and involves a lot of practice. The course helps with obtaining a deep understanding of TRIZ and learn how to use its tools in real life.

Although the course targets at M.Sc and B.Sc students, professional audience is also welcome and each year we have participants from different industries and different countries.

<http://www.xtriz.com/summercourse.htm>

**July 9-20, 2012**  
 Enschede, The Netherlands

**3-day TRIZ and Systematic Innovation for Business and Management** (for starters or familiar with the TRIZ basics): Training and certification

This course focuses on understanding how the basic principles of TRIZ and Systematic Innovation can be used in business and management, and explains techniques which can be put to everyday practice to generate new ideas for business products, services and resolve management conflicts.

<http://www.xtriz.com/Training/businessExtended.htm>

**September 5-7, 2012**  
Utrecht, The Netherlands

**One-Day Systematic Creative Imagination Development**

Our creative imagination is essential for generating new ideas. During this course a number of techniques and tools for systematic development of creative imagination are explained and practiced.

<http://www.xtriz.com/Training/cid.htm>

**September 25, 2012**  
Utrecht, The Netherlands

**3-day Basic TRIZ and Systematic Innovation in Technology and Engineering**

(for starters or familiar with TRIZ basics): Training and certification

This course provides understanding of how the basic principles of TRIZ and Systematic Innovation can be used in technology and engineering, and explains several basic TRIZ techniques which can be put to everyday practice to solve problems and generate new ideas.

<http://www.xtriz.com/Training/technology.htm>

**October 3-5, 2012**  
Utrecht, The Netherlands

**5-day Advanced TRIZ and Systematic Innovation in Technology and Engineering**

(for those who are familiar with TRIZ basics): Training and Certification

Intensive 5-day learning and practice with Trends of Technology Evolution, Function Analysis, 76 Inventive Standards, RCA+, ARIZ. If you do not familiar with TRIZ basics, we can help you to gain the needed knowledge before the course.

<http://www.xtriz.com/Training/technologyAdvanced.htm>

**November 5-9, 2012**  
Utrecht, The Netherlands

More details about each course and registration can be found at <http://www.xtriz.com/Training/>. For further details, please contact us at [training@xtriz.com](mailto:training@xtriz.com)

## TRIZ-RELATED CONFERENCES IN SUMMER-FALL 2012



**The 3rd International Conference on Systematic Innovation (ICSI) and Global TRIZCON 2012 in Korea**

July 10-12, 2012  
At Yonsei University, Seoul, South Korea

Organized by Society of Systematic Innovation (SSI) and Korean Academic TRIZ Association (KATA).

General information: <http://www.systematic-innovation.org/icsi/icsi2012/>

**TRIZfest – 2012**

**TRIZFest 2012**

August 2-4, 2012  
At Lappeenranta University of Technology (LUT), Lappeenranta, Finland.

Organized by the International TRIZ Association (MATRIZ) and Lappeenranta University of Technology.

General information: <http://www.lut.fi/trizfest2012>



### The 8th TRIZ Symposium in Japan

September 6-8, 2012  
Tokyo, Japan.

Organized by Japan TRIZ Society.

General information:

<http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/eTRIZnews.htm>



### ETRIA Global Conference TRIZ Future 2012 in Portugal

October 24-26, 2012

At New University of Lisbon, Lisbon, Portugal.

Organized by the European TRIZ Association (ETRIA) and New University of Lisbon.

General information: <http://www.trizportugal.com/>



### TRIZ: Technology for Innovation.

Isak Bukhman

March 2012, 368 pages, ISBN: 9789868563520

This is a comprehensive TRIZ book suitable for use as a TRIZ textbook in high school, university or as a resource for anyone looking to be more innovative.

There are five parts of this full colour book:

- Part 1 explains the elements of TRIZ
- Part 2 describes methods of opening out thinking process
- Part 3: creative person development
- Part 4: TRIZ technology for innovation
- Part 5: Appendixes: How to study TRIZ; how to implement TRIZ in your company; how to development technology for innovation.

Available for purchase (USD 80) at:

<http://www.triz.com.tw/isak2/Publication.html>

## NEW BOOKS ON CREATIVITY AND INNOVATION



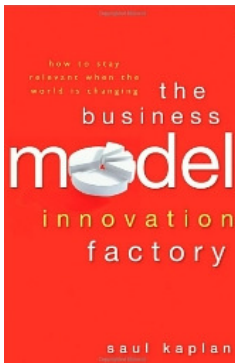
### Serial Innovators: How Individuals Create and Deliver Breakthrough Innovations in Mature Firms

Abbie Griffin, Raymond Price

May 2012, Stanford Business Books, 240 pages, ISBN: 9780804775977

In this study, authors Abbie Griffin, Raymond L. Price, and Bruce A. Vojak detail who these serial innovators are and how they develop novel products, ranging from salt-free seasonings to improved electronics in companies such as Alberto Culver, Hewlett-Packard, and Procter & Gamble. Based on interviews with over 50 serial innovators and an even larger pool of their co-workers, managers and human resources teams, the authors reveal key insights about how to better understand, emulate, enable, support, and manage these unique and important individuals for long-term corporate success.

<http://www.amazon.com/gp/product/0804775974>



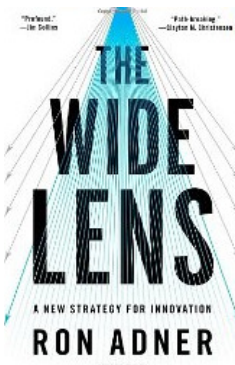
## The Business Model Innovation Factory: How to Stay Relevant When The World is Changing

Saul Kaplan

April 2012, Wiley, 212 pages, ISBN: 9781118149560

Business model innovation is the new strategic imperative for all leaders. Blockbuster's executives saw Netflix coming. Yet they stuck with their bricks and mortar business model, losing billions in shareholder value. Business models don't last as long as they used to. Historically CEO's have managed a single business model over their entire careers. Today, all organizations must be capable of designing, prototyping, and experimenting with new business models. The Business Model Innovation Factory provides leaders with the survival skills to create a pipeline of new business models in the face of disruptive markets and competition.

<http://www.amazon.com/dp/1118149564/>



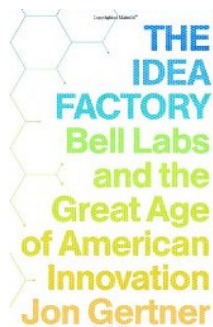
## The Wide Lens: A New Strategy for Innovation

Ron Adner

March 2012, 288 pages. ISBN: 9781591844600

A very interesting book which discusses influence of supersystem on development of innovations. "Greatness on your part is not enough. You are no longer an autonomous innovator. You are now an actor within a broader innovation ecosystem. Success in a connected world requires that you manage your dependence. But before you can manage your dependence, you need to see it and understand it. Even the greatest companies can be blindsided by this shift." (Ron Adner)

<http://www.amazon.com/gp/product/1591844606>



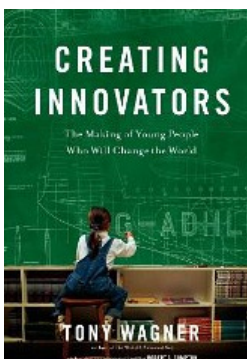
## The Idea Factory: Bell Labs and the Great Age of American Innovation

Jon Gertner

March 2012, Penguin Press, 432 pages ISBN: 9781594203282

This book is about history of innovation at AT&T Bell Labs. It tries to explore what causes innovations, success and failures of innovation.

<http://www.amazon.com/gp/product/1594203288>



## Creating Innovators: The Making of Young People Who Will Change the World

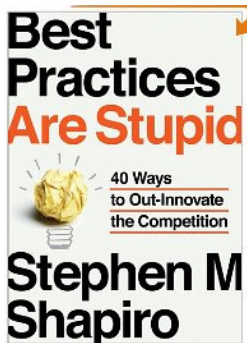
Tony Wagner

April 2012, Scribner, 288 pages ISBN: 9781451611496

Education expert Tony Wagner provides a powerful rationale for developing an innovation-driven economy. He explores what parents, teachers, and employers must do to develop the capacities of young people to become innovators. Wagner shows how we can apply this knowledge as educators and what parents can do to compensate for poor schooling. He takes readers into the most forward-thinking schools, colleges, and workplaces in the country, where teachers and employers are developing cultures of innovation based on collaboration, interdisciplinary problem-solving, and intrinsic motivation.

<http://www.amazon.com/gp/product/1451611496>





## Best Practices Are Stupid: 40 Ways to Out-Innovate the Competition

Stephen M. Shapiro  
September 2011, Portfolio Hardcover, 224 pages  
ISBN: 9781591843856

(This book is not about TRIZ 40 principles!)  
Obviously, proven practices are not dumb. But sometimes we lock ourselves into this cage of thinking, "This is the way it must be done." And that just kills innovation. Stephen Shapiro's *Best Practices Are Stupid: 40 Ways to Out-Innovate the Competition* takes a look at some of the best practices formed over many years. And discusses why they can kill innovation.

<http://www.amazon.com/gp/product/1591843855>

### MORE ON CREATIVITY AND INNOVATION



## TED: Rory Sutherland: Perspective is everything

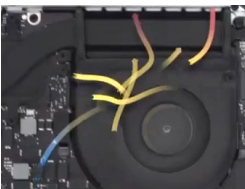
A very interesting talk from TED about a power of psychological solutions over mechanistic solutions. I remember a case when after 5 hours of flight a young kid who sat with his parents across an aisle did not want to leave a plane. He had not enough time to watch all the cartoons on a seat's TV monitor which were available.

[http://www.ted.com/talks/rory\\_sutherland\\_perspective\\_is\\_everything.html](http://www.ted.com/talks/rory_sutherland_perspective_is_everything.html)

Source: TED

### NEW INVENTIONS FOR INSPIRATION

The inventions presented below are not made with TRIZ (we just do not know if TRIZ was used to make them). But they can be used as nice illustrations of some TRIZ concepts and principles.



## Asymmetric Cooling Fan in MacBook Pro

In my training workshops on systematic innovation for engineering I often use exercise with a cooling fan in a powerful notebook: the fan must be powerful but it must be noiseless. A recent innovation in a newly announced MacBook Pro nicely complies with a TRIZ **Principle of Asymmetry**: blades of its cooling fans are located asymmetrically. Such solution creates different frequencies of turbulent air flows and the entire system produces less noise. In addition, the cooling fans act as resource to create a beam which increases the computer rigidity.

Watch video: (starts from 3:13): <http://youtu.be/wbRBJCfa2EM?t=3m11s>

Source: Apple



## Street lamp is powered by both wind and sun

It was long ago stated by Genrich Altshuller that best inventions are based on smart **use of resources**. This innovation combines two resources: sun and wind.

<http://www.gizmag.com/holonc-streetlamp-solar-wind-power/22922/>

Source: OTRI



## Automated bed makes itself

Another innovation which complies with a TRIZ principle of **Self-Control**. Spanish furniture maker OHEA says its new bed can make itself in just 50 seconds. The duvet is attached at the base of the bed, allowing robot arms to grab either side and straighten it out. Meanwhile, the pillows are stretched by internal cords and then lifted over the top of the duvet.

<http://www.newscientist.com/blogs/onepercent/2012/06/automated-bed-can-make-itself.html?DCMP=OTC-rss&nsref=online-news>

Source: New Scientist

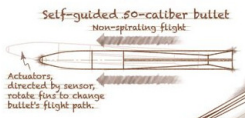


## Self-stirring pot

One more invention which **uses resources** and **eliminates presence of a person**: this time for cooking. The Kuru-Kuru Nabe (aka the 'Pot Round and Round') was invented by Hideki Watanabe, who came up with the design after experimenting with dental plaster at his practice. The pot relies on thermodynamics to create a whirlpool motion as liquids heat up. It not only saves you from having to stir, but it allows for a more efficient and even heating process, and has the added benefit of compacting foam so the pot is less likely to boil over.

<http://gizmodo.com/5913529/specially-sculpted-pot-creates-a-whirlpool-when-cooking-so-you-never-have-to-stir>

Source: Gizmodo



## Self-Guided Bullet

If beds can control themselves why not bullets? A new invention from patents a self-guided bullet that can improve shooting accuracy by 90%.

<http://www.popsci.com/technology/article/2012-05/rough-sketch-self-guided-bullet>

Source: Popular Science

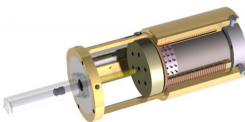


## The Arkiv Field Pack

There is a good example of **Segmentation Principle**. Field Packs allow for the secure and simple attachment of weatherproof accessories to the exterior of the bag. The pack can be used in either "roll-top" mode, or in a traditional "flap-down" configuration. This modular system allows the pack to be arranged to meet your specific needs and gives the pack freedom to evolve and adapt as needed.

<http://missionworkshop.com/products/arkiv-system-bags/field-pack-overview.php>

Source: Mission Workshop



## Needle-Free Drug Delivery

Those who know TRIZ know that according to the **TRIZ Trend of Transition to Microlevel** in many cases functions delivered by solid objects sooner or later become delivered by liquids, gas, plasma or or a filed. In addition, we would like to make things universal. MIT researchers have engineered a device that delivers a tiny, high-pressure jet of medicine through the skin without the use of a hypodermic needle. The device can be programmed to deliver a range of doses to various depths — an improvement over similar jet-injection systems that are now commercially available.

<http://web.mit.edu/newsoffice/2012/needleless-injections-0524.html>

Source: MIT





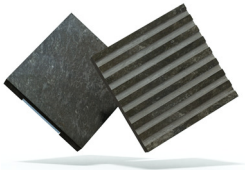
## Fashionable Malaria Prevention

Another good example of improved **use of resources**. Created by a Gambian designer and a Cornell University scientist from Kenya, the structure of the fabric's molecules allows the repellent to bind directly to the fibers, which means it can carry up to three times more insecticide than conventional fabrics.

The team plans to next develop a fabric that reacts to changes in temperature and light, providing increased protection during active mosquito times.

<http://inhabitat.com/anti-malaria-bodysuit-to-repel-mosquitos-created-by-african-scientist-designer/>

Source: Inhabitat



## iCloud Pavement

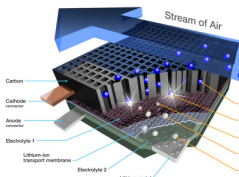
Why not **using resources** again? Turn standard pavement to iCloud Pavement!

The iPavement takes technology to the streets, with imbedded WiFi hotspots, Bluetooth connectivity, and even apps.

Developed by a Spanish tech company, and already being installed in the sidewalks of Spain, each iPavement tile is about 15 inches square, with an imbedded 5 GB microprocessor able to communicate with mobile devices through WiFi and Bluetooth. Along with providing internet access, the pavement includes a variety of cloud-based apps.

[http://www.ipavement.com/en/index\\_eng.html](http://www.ipavement.com/en/index_eng.html)

Source: iPavement



## "Air-breathing" battery

And again about the **use of resources** - why not to get electricity right from the air? Under the aegis of its Battery 500 project — an effort to build a battery capable of powering a car for 500 miles — Big Blue has designed a battery that produces power by taking in oxygen and then recharges by expelling oxygen. Because it's driven by the outside air, such a battery can be significantly smaller and lighter than traditional lithium ion batteries, providing a much longer life per square inch.

Researchers have long explored this sort of "lithium-air" battery, but IBM's demonstration shows it can actually be built.

<http://www.wired.com/wiredenterprise/2012/04/ibm-supercomputers-battery/>

Source: Wired



## Boiling water from inside.

Inventions often use the principle of "**The Other Way Round**". During camping we often need fire to boil water for coffee, tea, or cooking. The Heatstick from Danish company Heatgear attempts to give backpackers and military personnel a better alternative to the camping stove. If you don't have a pot or cooking vessel that you can apply directly to flame, you can boil water by heating up a rock, placing it inside the container you have and letting it heat the water inside out.

<http://heatgear.dk/company/our-technology/>

Source: Heatgear



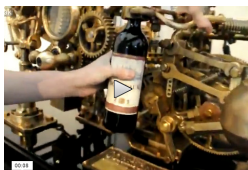
## Loop Shower

This innovation complies with **Principle of Spheroidality**.

The "Loop" from Italian furniture and fixture makers Idiha looks like an oversized Dyson Air Multiplier. It's darn good looking, with pretty colors and sleek swooshes that make up the circle you stand in to take your shower. It can be used indoors and outdoors.

<http://dvice.com/archives/2012/05/luxury-loop-spr.php>

Source: Dvice (SyFy)

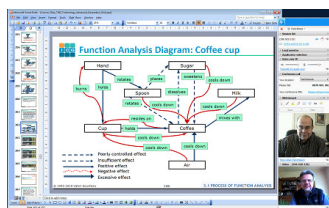


### Crazy complicated de-corking machine

Well, in TRIZ we know about ideality. But what about **anti-ideality**? It is not a concept from TRIZ... But still, impressive and fun! By the way, the concept of "anti-ideality" is not that bad: in certain application niches, for instance, in arts it can provide good results.

Watch video: [http://www.liveleak.com/view?i=2d1\\_1331231643](http://www.liveleak.com/view?i=2d1_1331231643)

## ONLINE TRIZ AND SYSTEMATIC INNOVATION TRAINING



Since 2010, we have been successfully running online training. This training involves both pre-recorded video lectures and follow-up online face-to-face communication to answer questions, have discussions and evaluate assignments. During online training the participants can work on their own problems and challenges.

Upon completing the online training successfully, the participants are awarded with ICG T&C training certificates.

We offer both "packaged" courses as well as courses on specific TRIZ and xTRIZ tools. Also, custom-tailored courses are possible. More information and the list of courses are available at [http://www.xtriz.com/Training/online\\_training.htm](http://www.xtriz.com/Training/online_training.htm)

- [Newsletter Archive](#)
- [4.5 Hour Video Introduction to TRIZ](#)
- [Top 12 TRIZ Questions for beginners: Part 1](#)
- [Top 12 TRIZ Questions for beginners: Part 2](#)
- Other publications from ICG T&C: <http://www.xtriz.com/publications.htm>

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