



Process Innovation

Howard Smith

CTO CSC European Group
Corporate Office of Innovation
Computer Science Corporation

hsmith23@csc.com

books:

*Business Process Management:
The Third Wave* and

*IT Doesn't Matter:
Business Processes Do*

www.bpm3.com

Introducing P-TRIZ

Part 1 in a series on P-TRIZ

Here is a new idea that will be of use to anyone documenting, analyzing, or redesigning business processes.

Innovation is the process by which new commercial concepts – products, services, processes – are brought into being, in order to generate business. It requires uncontrollable creativity positioned side-by-side with disciplined business practice. Most companies find it tremendously difficult. Innovation, the goal of creating new top-line value, is the antithesis of unreliable, hit-and-miss, trial-and-error, psychological means of lateral thinking and brainstorming. Rather, to satisfy shareholders, innovation must be repeatable, procedural, and algorithmic. Making effective progress requires much more than inspiration.

Taking a creative or innovative idea and turning it into cash involves almost every part of a company. The new competitive battlefield is not the technology behind the engine or the air conditioner, but the design, the warranty, the service deal, the image, and the finance package. In this environment, typified by General Motor's advertising slogan "a car full of ideas," you can hardly separate the product from the service, and all services are driven by processes. The challenge in innovation today is thinking about and managing this extremely broad set of interrelated activities as a unified process. Those who model, re-design, and deploy significant new business processes in support of innovation also need a process. I call that process P-TRIZ.

Now, in addition to the plethora of existing management strategies for adaptation and survival, there is something that may be a way of thinking, a set of tools, a methodology, a process, a theory, or even, possibly, a deep science, but which may be gradually shaping up as "the next big thing." TRIZ, pronounced "trees," is an acronym for the Russian words that translate as "the theory of inventive problem solving."

From its roots in patent analysis in the 1950s, TRIZ has grown and is today an impressive and useful body of work that is being applied by leading organizations in North America, Europe, and Asia. Many household name Fortune 500 firms use TRIZ today, but the methodology is far from a household name. Some claim it will soon take its place alongside Six Sigma as the flip side to Quality. Where Six Sigma perfects the known, methods such as Design for Six Sigma, and TRIZ, create the new. And just as Six Sigma has evolved from its roots in product tolerance and quality control toward helping organizations meet business goals more reliably, so too TRIZ is evolving from its roots in engineering to solve a much wider array of business problems. One of those problems is process re-design.

The potential for a reliable and general-purpose innovation methodology that can be applied to processes has never been greater. In a 2003 *Communication on Innovation Policy*, Erkki Liikanen, EU Commissioner for enterprise and the information society, wrote: "Innovation is ... a

multi-dimensional concept, which goes beyond technological innovation to encompass ... new means of distribution, marketing or design. Innovation is thus not only limited to high tech sectors of the economy, but is rather an omnipresent driver for growth.” Companies that recognize this will not define innovation as owned by one part of the organization or applying only to those working in leading edge R&D. Rather, they will pursue innovation as a broad business-led approach furthering commercial goals. Every aspect of how an organization operates is subject to innovation – administrative innovations, marketing innovations, financial innovations, design innovations, manufacturing innovations, service concept innovations, and human resource management innovations. These process innovations are echoes of the reengineering mantra of the early 90s.

In the Third Wave of BPM¹, creative process design has been given a new path to execution in the form of business process management (BPM) systems. These are IT tools that bring work processes to life in the enterprise. Such tools have transformed our ability to visualize, develop, and deploy enterprise applications for much needed processes. BPM software provides many benefits to both process owners and to IT developers, and this is well documented in case studies.² One documented benefit is a reduced **process design to deployment time and resource cost**. Yet BPM tools are no panacea. A BPM system is no substitute for human creativity.

BPM deployment tools can only provide a fast track to results once the process has been re-designed. Re-designing any process beyond minor optimization is still very much a creative human act. “Real time” process dashboards may help companies understand current process performance, but identifying and exploring process re-design options to enhance performance is an art. Process simulation can be an aid to thinking, but before a new process can be simulated a new process design is needed. There is currently no way around it; BPM solutions do little to reduce the **process discovery to re-design thinking time and resource cost**. To help solve that problem, we must look towards innovation methods. P-TRIZ can help, and refers to a modern version of TRIZ adapted for process work and with the objective of process re-invention.

Next month Howard Smith will describe P-TRIZ in more detail and explore how innovation methods can be applied in process re-design projects.

Notes:

¹ Smith H., Finger P., *Business Process Management: The Third Wave*, 2003, MKPress

² Howard Smith, “From CIO to CPO via BPM,” Computer Sciences Corporation,
<http://www.csc.com/features/2005/38.shtml>