

Insourcing Innovation

How to transform business as usual into business as exceptional

The last one hundred years have produced an incredible amount of innovation. Today our society is moving even faster toward an age when the barrier between thought and action, strategy and execution, collapses into a seamless whole.

For companies to meet their insatiable consumer appetite for better, faster, cheaper, they must evolve. A huge part of this evolution is honing the skills for making and delivering new products and services almost immediately – not the typical five or 10 years after they first form in someone’s mind. It’s the collapse of time that a business seeks, the pushing of evolution as far and fast as it can go.

For all the CEO talk about innovation, and for the best their companies’ money can buy, there still isn’t much by way of training people to be innovative, or by way of methodologies to follow. Yet certain companies (Whirlpool, P&G, Boeing, Hewlett-Packard, Samsung and others) are leading the way in their adoption of TRIZ as an innovation standard.

How fast a business can move an idea from concept to commercialization determines who leads, who follows and who gets left behind.

The demand now is to innovate swiftly, often and on a wide organizational scale. Innovation is not limited to only products and services; companies are racing to innovate the way they research, develop, test, make, sell and deliver everything they do.

Innovation has resulted in:

- Lower prices for consumers
- More predictability for business
- A better baseline of life quality for all

While businesses that have embraced innovation are making great progress, the process of innovation is still too expensive, unpredictable and generally out of control. For all the predictability and systemization that technology has created, the process of innovation is still clunky, fraught with strife and ineffective.

Insourcing Innovation points out the three fundamental flaws with the way most companies go about innovation, and prescribes a methodology for overcoming these obstacles.

The three main challenges are:

1. Assuming people outside the company are smarter and more capable than people within.
2. Changing behaviors to innovate pervasively, not occasionally and sporadically.
3. Learning to view innovation as a value proposition that can be measured and controlled on a project-by-project basis, not as an aggregate mass of return on investment.

Executive summary continued

To address these challenges, *Insourcing Innovation* uses a structured formula called TRIZ – a Russian Acronym that, when translated, means the “theory of inventive problem solving.”

Using TRIZ, an organization can:

1. Grow innovative capability from within.
2. Innovate pervasively, not sporadically.
3. Drive innovation with measurable project ROI.

Grow innovation capability from within.

Many companies look outside for innovation assistance and either hire innovative talent or farm the job of innovation out to a firm. The natural tendency in either case is to reach outside the company’s bounds to find agents who can bring about fundamental change or reinvention.

On the strategic front, corporations sometimes bring in a new CEO from a different industry hoping that the new CEO will bring a new model that will drive strategic innovation. On the technical front, organizations hire in talented scientists and engineers to make breakthroughs at the product and service level. Purchasing talent from the outside is really a disguised form of outsourcing. While outsourcing is sometimes beneficial and preferred, it usually isn’t when it comes to core competencies.

***Insourcing Innovation* says that innovation is a core competency, and demonstrates why it’s generally best to grow innovative capability within, not bolt it on from the outside.** It also demonstrates that, when you do outsource R&D to a firm, its engineers and scientists may not be as capable as you think.

Innovate pervasively, not sporadically.

Organizations tend to think about innovation in terms of periodic product and service breakthroughs, and this is reflected by their practices. Many companies have no structured system within which everyone can innovate in all parts of the organization.

While all CEOs recognize the importance of innovation, the reality is that many don’t have a structured system for making it happen as frequently and widely as they could. Having a technology roadmap and a new product development plan is helpful, but how do you perpetually innovate all your processes and functions?

***Insourcing Innovation* provides the methodology and roadmap needed for creating a base of internal innovation capability, which can expand organically and cost-effectively.** As the structured innovation methodology takes hold, more people in more functions become innovation-capable, thereby reducing the cost of innovating.

Drive innovation with measurable project ROI.

Most good organizations track the benefits versus costs of R&D – at least on some level to some degree. Typically, tracking categories revolves around the accounting system, which doesn’t afford any project-by-project innovation control.

Former GE CEO Jack Welch once said that the hardest thing to do is to get at the control function of a corporation. He cited Six Sigma as a great tool for doing that, especially when it came to control over operational processes. But as organizations stare down the innovation pipeline, what do they see? Where is the visibility and control?

***Insourcing Innovation* shows how organizations can define, scope, track and toll-gate individual innovation projects, much the same way they use the Six Sigma roadmap (DMAIC) to manage the ROI of improvement projects.** With project-level ROI visibility and control, any organization can find its way to pervasive innovation without losing money.

Executive summary continued

All salt-worthy executives know that the name of the game is reinvention, and those who play best win. What many don't realize is that they can play the game a lot better, and improve their company's performance by growing a culture of innovators from within, not by continuing to acquire innovation resources from without. If pervasive innovation is what you want, there's only one way to get it: insource it, and make it part of everyone's job.

***Insourcing Innovation* provides a straightforward depiction of why leading organizations are making innovation more systematic and structured.** The book also presents detailed case study material that illustrates the application and value of TRIZ, in industries from healthcare to space exploration. Here is a part-by-part breakdown:

- **Part One** provides a simple framework for thinking about business excellence, a rationale for implementing structured innovation, a historical context for understanding management methods and a viewpoint of TRIZ as a world-class method for achieving perpetual innovation with existing resources.
- **Part Two** covers the tactical aspects of TRIZ, with a central focus on the TRIZ methodology (DMASI) and its primary constructs, techniques and components. Part two also provides several implementation case examples, including an in-depth breakdown of how TRIZ was used to create an innovative self-heating beverage container.
- **Part Three** transitions from the tactical to the strategic aspects of structured innovation (TRIZ), which teach us that no single innovation can stand alone. All tap into one or more of eight evolutionary forces to become what they are. Part three describes these forces along with current anecdotes and examples.
- **Part Four** discusses how structured innovation is part of the larger system of business excellence. It shows how other key aspects of business excellence enable structured innovation, and at the same time are enabled by structured innovation. Part four looks at these aspects and shows how they're related.