



TRANSTECH^{USA}

Briefing Paper

Industry led Innovation *Reshaping Traditional approaches to Innovation and national competitiveness*

By Peter J Bryant
President and Founder
TransTech USA LLC

November 10th 2006



Overview

This brief provides insight into an emerging approach to solving immediate business problems that require a step change solution, industry led innovation. If this moves beyond the early adopters, it has the potential to fundamentally and radically reshape how organizations approach innovation, R&D and national competitiveness. It will also dramatically challenge universities, national labs, government etc to re think traditional approaches if they are to maintain their competitive advantage.

This represents a summary of a deeper pool of knowledge and experiences gained from working in the epicenter of this trend.

Drivers

Firstly it is important to understand the forces of change, macro and micro, that is driving the shift towards industry led innovation; some of these are:

- Companies are striving to achieve innovation excellence along with operational excellence to create more value and increase competitive advantage
- Globalization and the associated increase in business velocity and uncertainty
- Increased competitive threats – traditional and non traditional
- Realization that being innovative is not easy and goes beyond technology and products, into business models, marketing. Of course technology in many cases is the key enabler and can enable new business models
- Rapid commoditization of technology resulting in companies belief they are unable to secure competitive advantage from off the shelf solutions from major vendors
- Rapid consolidation in the technology industry around several mega companies, combined with a much more conservative set of buyers (i.e. do not buy from start ups), is stifling innovation
- Technology being developed via the traditional 'push model' not aligned to industry's pressing problems
- Re emergence of companies developing custom solutions – this is being driven by availability of cheaper off shore development and more modular and more easily maintainable technology

What is Industry led Innovation (ILI)?

Given these forces, organizations are beginning to realize that to gain sustainable competitive advantage from technology they need to create more of a 'pull' model. This is where they shape the creation of solutions, in many cases via ecosystems, which provides a more timely and focused approach – this is the developing notion of Industry led Innovation (ILI). Simple you may ask – not so.

ILI has certain characteristics that are not easy to attain, some of which are:

- Sustainable – it is focused on solving real world problems that require innovative solutions that are not available from one organization's capabilities
- Sophisticated collaboration across organizations and national boundaries
- Provides opportunity to capture value earlier in the R&D lifecycle
- Pull model vs. the current predominant push model
- Industry more directly shaping the innovation agenda
- Provides a more effective filtering mechanism
- Potential increase in effectiveness of each dollar invested in R&D

Let me illustrate with a real world example:

A global Fortune 500 company recognizes that its industry's existing production methods (platform), largely unchanged in 30 years, can no longer sustain the company's growth ambitions and is not practicable for many new developments. It is now seeking a 'step change' platform that will deliver production, economical and environment benefits.

Further there was a recognition that the ecosystem that's serves its industry, if left to its own devices, does not have the development of such a platform as a priority or even the vision.

An innovative approach was needed – hence the embrace of industry led innovation. The company began to form an ecosystem of manufacturers, universities, research labs, technology companies and leading thinkers to participate in an initial concept design process. The company defined the vision, timeframe and primary characteristics of the platform. The step change platform is a complex set of interacting capabilities – mechanical, digital, logistical and human elements. No single organization in the ecosystem can develop this platform – the company takes the lead and co-opts the ecosystem to collectively solve the problem.

The next phase is to spin off small consortiums to develop prototypes for the new platform.

This approach challenges each organization to push the boundaries of risk sharing; collaboration; IP ownership, transparency and directed R&D.

The bottom line – this industry led approach will accelerate the development of a new platform, and if successful, will deliver many benefits including major advances in energy efficiency and safety.

The challenges and opportunity

This approach presents many challenges and raises issues around the traditional approaches to innovation and cross border collaboration. If not understood and prepared for, then it could undermine a country's national competitiveness and lead to more waste. Some of these are:

- IP ownership- a move towards a more relaxed regime
- Increased transparency into public and private R&D efforts
- Speed – matching efforts to business velocity
- Matching capital and effort to real business needs vs. perceived commercial opportunity or noble cause
- Need to reconcile and balance conflicting agendas of industry, universities and national labs
- New collaboration paradigm – more open across both organizational and national boundaries
- New ways for companies and universities to interact and engage (Push vs. pull models)
- How can governments facilitate and lay some of the groundwork

The opportunity is immense – if these challenges can be met then the potential exists to unleash a wave of innovation that will deliver real world solutions to immediate and pressing problems. It will also enhance cross national collaboration and further globalization – either embrace this trend or protect the status quo?

About TransTech USA

TransTech USA, based in Denver Colorado, is an international corporate advisory firm that advises global companies on business and innovation strategy and product commercialization, with the goal to increase a company's stakeholder value and competitive advantage. For more information, please visit the company's Web site at www.transtechusa.com.