

Collaborative Innovation: A New Dimension To Innovation

* *Rupa Khanna Malhotra*

** *Uday Khanna*

INTRODUCTION

There is a business philosophy in Japan: *Be better than competitors & if you cannot be better, be different.*

In the competitive scenario where great ideas can sprout from any corner of the world and can easily be accessed and communicated through the development of I.T, it is not advisable for the companies to work in isolation where the companies are already working on wafer thin margins. The task of senior leadership in innovation has broadened and has become truly strategic. It is no longer just a matter of hiring the most talented and creative people or establishing the right internal environment for innovation.

Profitable innovations require re-segmenting your customers and creating new offerings that meet their new needs. The essence of this strategy is differentiation. The companies can reconfigure customer portfolio by deciding which segments to continue investing in, which to divest and more importantly, which emerging segments to target. Sustaining or growing bottom-line during current tightening conditions will translate into a price-to-earnings multiple that will outshine your competitors and consequently, into an increased share of market share as well as market capitalization. Companies should exploit an economic downturn by identifying and meeting emerging customer needs to guide the customers in the right direction.

“Innovation¹ is not always thinking outside the box. Often it is thinking of new ways to arrange things inside the box”.

Lemuel Lasher, director of CSC's Innovation Office quotes²: "Companies don't want innovation for itself-they want solutions to business problems so they can enhance their business performance."

Watts Humphrey quotes: “Innovation is the process of turning ideas into manufacturability and marketable form”.

ERGONOMICS OF INNOVATION

➤ Joseph Schumpeter³ defined economic innovation in *The Theory of Economic Development*, 1934, Harvard University Press, Boston.

➤ The introduction of a new good that is one with which consumers are not yet familiar or of a new quality of a good.

➤ The introduction of a new method of production, which by no means needs to be founded upon a scientifically new discovery, can also exist in a new way of handling a commodity commercially.

➤ The opening of a new market, which is a market into which a particular branch of manufacturing of the country in question has not entered previously, whether or not this market has existed before.

➤ The conquest of a new source of supply of raw materials or half-manufactured goods, again irrespective of whether this source already exists or whether it has to be created first.

➤ The carrying out of the new organization of any industry, like the creation of a monopoly position (for example through trustification) or the breaking up of a monopoly position.

MECHANISMS OF INNOVATION⁴

➤ Novelty in product or service (offering something no one else does).

➤ Novelty in process (offering it in a new way).

➤ Complexity (offer something which others find difficult to master).

➤ Timing (first mover advantage, fast follower).

➤ Add/extend competitive factors (e.g. From price to quality or choice).

➤ Robust design (contribute a platform on which other variations can build).

➤ Reconfiguring the parts (building more effective business networks).

DRIVERS FOR INNOVATION⁵

➤ Financial pressures to reduce costs, increase efficiency, do more with less, etc.

➤ Increased competition.

➤ Shorter product life cycles.

* Assistant Professor, Graphic Era University, Dehradun. E-mail : khanna_rupa@rediffmail.com

** Sr. Lecturer, Graphic Era University, Dehradun. E-mail : khannauday77@gmail.com

- Value migration.
- Stricter regulation.
- Industry and community needs for sustainable development.
- Increased demand for accountability.
- Demographic, social and market changes.
- Rising customer expectations regarding service and quality.
- Changing economy.
- Greater availability of potentially useful technologies coupled with a need to exceed the competition in these technologies.

CURRENTLY THERE ARE FOUR⁶ TYPES OF INNOVATION WHICH ARE STATED BELOW

Incremental improvements are new ways of doing what is in your core business. These improvements are the kind of innovation most people are familiar with. It's what most companies want from their service providers because it solves the most common business problems: how to lower costs and improve quality.

Adjacent innovation moves out of the existing core, and can be either incremental or discontinuous. This kind of innovation can represent a change in a service offering, or an application of a service offering into a new geography or market. To be adjacent, however, there needs to be, as a derivative of a core activity, a strategic change, not just a tactical adjustment.

Breakthrough innovation is a discontinuous change, either in the core business or in an adjacency. The key distinction is the dramatic nature of the change, in either category.

Radical innovations are completely new, both to the market and the company. Because they are new to the market and new to the company, they are not easily identified and there is a high risk in execution.

Collaborative innovation⁷ adds a new chapter to innovation which acts as a lubricant to give some mileage to the existing capabilities of the organization to prove their mettle in the highly competitive scenario.

The new leaders in innovations will be those who can understand how to design collaborations networks and how to tap their potentials. This strategic thinking gives rise to a new buzzword called collaborative innovation where you can develop and nurture collaborative relationship with the carefully selected partners to come up with new technologies, concepts, designs, products and services. Different modes of collaboration involves different strategic trade offs. Companies can use a combination of collaboration modes simultaneously to support their strategies.

The open model of collaboration called crowd sourcing is open to everyone who wants to join. In this model, the company makes a problem public and then seeks support from an unlimited number of potential problem solvers who have the capabilities and assets to offer. They can be suppliers, customers, designers, research institutions, inventors, competitors and et al. Open source softwares such as Linux, Apache & Mozilla are examples of these types of network.

The closed model for collaboration calls for some carefully selected and potential partners who the company thinks has the capability and approach for the upcoming innovation.

In the closed mode, the company can identify the knowledge domain from which the best solution can creep in and the right collaborators in this field i.e. to receive a few good ideas from a handful of contributions. The development of radically new product concepts or product architectures is an integral task that has to be embraced in its entirety. For example, IBM invited a handful of selected partners (Samsung, Siemens, Free scale, ST Microelectronics) to join its Microelectronics Joint Development Alliance consortia for developing semiconductor technologies such as memory, silicon on insulator components & chip manufacturing processes.

Open model of collaboration is just like throwing up an open house party providing the right kind of inducements and expecting the right people to join the gang. Interesting innovative solutions can come from people or organizations you might never have imagined had something to contribute. This strategy works best when the company can afford to miss out on much better solutions from an elite player who can be lost in the stream of ideas and suggestions from the community.

A hierarchical or flat form of governance helps in identifying the type of decision which the company wants and its role in the collaborative innovation process. In the hierarchical form, an organization has an edge to control the directions of the innovative efforts and capture more of the innovations value. It is desirable when the company has the capabilities and knowledge needed to define the problems and evaluate the proposed solutions. These kingpins have a clear understanding of the relevant technologies and markets (user needs and functional requirements) and can define the system configuration and co- ordinate the work of various collaborators.

In the flat form, the decisions are either decentralized or made jointly by some or all collaborators and they all can share the costs, risks and technical challenges of innovation process. It works well when no single organization has the necessary breadth of perspective or capabilities to work in isolation.

There are four basic forms of collaboration:

- 1) A closed and hierarchical network (an elite circle).
- 2) An open and hierarchical network (an innovation mall).
- 3) An open and flat network (an innovation community).
- 4) A closed and flat network (a consortium).

Elite circle A selected group of participants chosen by a company that also defines the problem & picks up the solutions.	Consortium A network where anybody can propose problems, offer solutions & decide which solutions to use.
Innovation mall A place where a company can post a problem, anyone can propose solutions & the company chooses the solutions it likes best.	Innovation community A network where anybody can propose problems, offer solutions & decide which solutions to use.

Hierarchical

(Governance)

Flat

Source: HBR, Dec 2008

IBM's successful use of both an innovation community and consortia to support the strategy of its server and mainframe computer businesses is an excellent real example. IBM's strategy is to compete on the basis of hardware differentiation and service. Towards that end, the company has striven to commoditize operating systems by embracing Linux and participating actively in the open source community.-one of the first major computers makers to do so. But in quest for differentiation in its hardware, IBM needs to be on the leading edge of the micro processor technology. In order to stand tough in front of big daddies with the likes of Intel, IBM turns to its consortia of semi- conductor companies which have shared development costs. This combination of innovation has allowed IBM to gain market share in an intensely competitive and dynamic market.

Marketers always have the perception that the best sources of new product ideas are customers, both current and potential. Increasingly, though, we're seeing that customers lack the imagination to envision innovative products that address their emerging, or even existing needs or desires. For example, participants in focus groups typically opt for product innovations that feature only minor changes from the current version. When these products hit the market, they often fizzle because small improvements aren't enough to alter customers' entrenched buying habits.

Innovation myopia states that innovation is at the heart of what it takes a corporation to create and sustain leadership. It has far more to do with continually challenging the status- quo and pushing for corporate self renewal that it has to do with creativity and ingenuity per se. Innovation incorporates new insights about the consumer, new technologies that reinforces the producer's competitive capability and new business processes to improve that ability of the corporation in delivering value.

As per the chairman of Sony, Akio Morita-“the innovation process does not begin by bubbling up from the R&D laboratory. It begins with a mandate which must be set at the highest level of the corporation.”

Innovation requires that companies consciously create conditions where strategic and organizational issues are creatively resolved through the involvement of people.-J.J Irani (M.D., Tata steels).

Mr. Rishiksha T. Krishnan⁸, Professor of Corporate Strategy, Indian Institute of Management Bangalore, states: "We do not lack innovative abilities. But the ability to harness this innovative capacity and convert it into globally competitive enterprises in a sustained and systematic way currently eludes us”.

The New Millennium Indian Technology Leadership Initiative (NMITLI) ⁹ launched by CSIR has brought together academia, research institutions and corporations to work together in areas where India can potentially achieve technology leadership. CSIR provides low-interest funding to facilitate this joint working and also bears a part of the risk. A product suite for bioinformatics, BioSuite, is an important outcome of this recent initiative.

The Indica and the Ace from Tata Motors, the Pulsar from Bajaj, the global delivery model conceptualized by our leading software companies and the lifetime prepaid card for mobile services are all excellent innovations from our top companies. A recent report by Booz Allen Hamilton rightly points out that the innovative output of a company depends not so much on the amount it spends, but more on the company's capabilities in ideation, project selection, development and commercialization. Many of our leading companies demonstrate these capabilities in an increasing magnitude.

Many companies are focused on the product or service they're already developing, or on the one the competition is offering, rather than on the help they must give the customer to execute the steps in a job. When the job is the focal point of value creation, companies not only can improve their existing offerings but also can target new, or "blue ocean," market space. While other MP3 manufacturers were concentrating on helping customers listen to music, for example, Apple reconsidered the entire job of music management, enabling customers to acquire, organize, listen to, and share music.

So how can product developers hit the innovation sweet spot-far enough from existing products to attract real interest, but close enough to fall within a company's existing positioning and capabilities? We've seen many companies achieve impressive results using a method we call systematic inventive thinking. It represents a complete overhaul of traditional brainstorming, replacing the creative free-for-all with a highly disciplined "inside the box" approach to idea generation. And, unlike most new product development methods, it starts with an existing product and its characteristics rather than with customers and their unmet needs. The method's main thrust: Don't just listen to the voice of your customers; listen to the voice of your product.

This process, by drawing new product ideas out of current products and tapping existing skills and technologies reduces the chance that you will come up with ideas that are impractical to produce or market. And using systematic patterns, rather than the preconceptions of customers or marketers, to generate ideas liberates your thought processes from the straitjacket of existing concepts and assumptions.

For generations, Procter & Gamble generated most of its phenomenal growth by innovating from within--building global research facilities and hiring the best talent in the world. Back when companies were smaller and the world was less competitive, that model worked just fine. But in 2000, newly appointed CEO, A.G. Lafley saw that P&G couldn't meet its growth objectives by spending greater and greater amounts on R&D for smaller and smaller payoffs. So he dispensed with the company's age-old "invent it ourselves" approach to innovation and instead embraced a "connect and develop" model.

Procter & Gamble¹⁰, US, has entered into a tie-up with the Council for Scientific and Industrial Research (CSIR), to support acceleration of its 'Connect and Develop' (C+D) strategy launched in India in September 2003. The \$50-billion company- P&G believes that India's intellectual capital, technical and scientific expertise, and its world-class centers of excellence will create a unique opportunity to accelerate P&G's innovation capability. Dr Mitra said, "We are confident that our partnership with CSIR and the combination of our institution's knowledge resource will help us create breakthrough innovations. CSIR's strengths and experience will expand our ability to tap into new, breakthrough technologies and product opportunities that better serve the needs of our global consumers. The company is establishing a C+D hub in Bangalore, headed by Dr. Arun Viswanath, Associate Director, and Corporate R&D, to help develop collaborative partnerships with various Indian organizations including research laboratories, academic institutions and companies.

Dr. Viswanath said, "P&G's tie-up with CSIR will benefit our respective organizations to leverage each other's technology strengths. India's intellectual capital in science and technology has a lot to offer and we are very positive about our productive collaboration, as we establish our Connect & Develop Hub in Bangalore."

By identifying promising ideas throughout the world and applying its own capabilities to them, P&G realized it could create better and cheaper products, faster. Now, the company collaborates with suppliers, competitors, scientists, entrepreneurs, and others (that's the connect part), systematically scouring the world for proven technologies, packages, and products that P&G can improve, scale up, and market (in other words, develop), either on its own or in partnership with other companies. Thanks partly to this connect-and-develop approach; R&D productivity at Procter & Gamble has increased by nearly 60%. In the past two years, P&G launched more than 100 new products for which some aspect of development came from outside the company. Among P&G's most successful connect-and-develop products to hit the market are Olay Regenerist, Swiffer Dusters, the Crest SpinBrush, and the Mr. Clean Magic Eraser. Most companies are still clinging to a bricks-and-mortar R&D infrastructure and to the idea that their innovation must principally reside within their own four walls. Until they realize that the innovation landscape has changed and acknowledge that their current model is unsustainable, top-line growth will elude them.

At the end, in the highly competitive scenario, the only thing which counts is the healthy balance sheets and trust of the customer which can really deliver the right kind of the product and the process through collaborative innovations.

(Cont. on page 39)

translates into establishing rapport with clients and providing great customer service. This perhaps is the reason why many women tend to launch businesses that are client based or service-oriented. Globally, women are enhancing, directing, and changing the face of how business is done today. Ultimately, female business owners must be recognized for who they are, what they do and how significantly they impact the world's global economy.

BIBLIOGRAPHY

- Association of Women in International Trade (WIIT). (1998). Second annual survey of public opinion on international trade. Washington, DC: Author.
- Babaeva L. & Chirikova, A. (1997). Women in business. Russian social science review, 38(3), 81-91.
- Bales, K. (1999). Disposable people. Berkeley: University of California Press.
- Bennis, W. & Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper & Row.
- Ducheneaut, B. (1997). Women entrepreneurs in SMEs. Report prepared for the OECD Conference on "Women entrepreneurs in small and medium enterprises: A major force for innovation and job creation".
- Henderson, H. (1996). Building a win-win world: life beyond global economic warfare, San Francisco: Berrett-Koehler.
- Organization for Economic Co-Operation and Development (OECD). (1998a). Fostering entrepreneurship, pp. 28-30. Paris: OECD
- Research Dimension, Inc. (1999). Women's enterprise development conference: Tbilisi, Zugdidi & Kataisi, Georgia - October-December, 1997, Counterpart International. Washington, DC: Author.
- Siegel, B. (1990). Business creation and local economic development: Why entrepreneurship should be encouraged. In Organization for Economic Cooperation and Development (Ed.), Enterprising women (pp. 11-20). Paris: Organization for Economic Co-operation and Development.
- Webster, R., Gray, T. & Johnson, R. (1999) Partnerships for sustainable enterprise growth. Washington, DC: USAID.

(Cont. from page 15)

BIBLIOGRAPHY

1. Beverly Behan, Governance Lessons from India's Satyam, BusinessWeek, January 16, 2009
2. Mahanta Vinod, Satyam Saga: What about India Inc's corporate governance?, Economic Times, January 23, 2009
3. Mayer Colin, Chinks in corporate governance, The Mint, January 29, 2009
4. _____, "Inside Ramalinga Raju's Mind, Money Today, February 5, 2009

(Cont. from page 18)

thoughtful and diligent leap is crucial to sustain a brand non-stop for the long term. At the implementation stage, the creative execution must be provoking and reflect the values associated with the brand. A brand is a brand as long as it connects with the consumer, remains relevant & excites her, it doesn't matter whether it's Indian or not.

BIBLIOGRAPHY

- Nirma goes global, Business India, December 16, 2007.
- The Nirma Story, Marketing Mastermind, December 2001.
- Pretorius M. and Millard M.S., Creativity, innovation and implementation: Management experience, venture size, life cycle stage, race and gender as moderators.
- Butler Charlotte, Hindustan Lever Limited: Levers for change.
- Thompson A. Arthur, Stickland III J.A., Strategic Management: concepts and cases, Mc Graw Hill, 12th edition.
- www.Nirma.co.in
- www.Wikipedia.org
- www.scribd.com/doc/2165083/rural Nirma

(Cont. from page 22)

BIBLIOGRAPHY

- 1) <http://marylandmedia.com>
- 2) www.csc.com
- 3) www.hup.harvard.edu/catalog/
- 4) www.uio.no/studier/emner/matnat/sfe
- 5) www.uio.no/studier/emner/matnat/sfe
- 6) <http://innovateonpurpose.blogspot.com> by Jeffrey Phillips, Raleigh, North Carolina, United States
- 7) Harvard Business Review, December 2008
- 8) "Innovation is strongly linked to strategy and competitiveness", Friday, Apr 13, 2007, Business line
- 9) "Innovation is strongly linked to strategy and competitiveness", Friday, Apr 13, 2007, Business line
- 10) P&G, CSIR tie up to create breakthrough innovations, business line, Wednesday, Aug 04, 2004