Product Innovation: Strategic Imperatives for Indian Firms

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India today presents a vast opportunity for firms to either create differentiated products suited to the requirements of Indian customers, or to create good cost effective innovative products for mass consumption. The central problem for most Indian firms is that they lack the innovative capability to exploit these emerging opportunities by creating and marketing products and services that garner superior profits. In this paper we identify a variety of product innovation opportunities in India and elaborate on the strategic imperatives for Indian firms that attempt to exploit these emerging opportunities. Products innovations in India require tight control on the price-performance equation as Indian customers are price sensitive and demand good value. There is a higher chance for success in marketing adequate functionality or minimal feature products that communicate a clear benefit for users. We suggest that Indian firms can gainfully adopt a focus cost leadership strategy in niche markets where they can gain first mover advantages, as this provides the highest potential for Indian firms to exploit these emerging product innovation opportunities. We present a road map for Indian firms to identify product innovation opportunities and to develop their capabilities and implement processes to exploit them effectively.

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India today presents a vast opportunity for organizations to innovate new products and services to meet current and emerging customer needs. The customer base in India is growing rapidly both in depth and breadth and is looking for new and better products. Growing incomes have lead to customer expectations changing rapidly in India. The upper classes of customers have raised their expectations given their exposure to high-end imported products and foreign travel, while the larger population in India is also exposed to a wide range of imported goods that have created new demands. Across the population, there is greater awareness of cost and quality and customers have become more demanding of the products they use.

In this scenario, there is potential for Indian firms to either gain higher margins by creating differentiated products with more features that are desired by customers, or gain high volumes by creating good cost effective basic products suited for mass consumption in urban and rural markets. The central problem however, for most Indian firms, is that they lack the innovative capability to exploit these emerging opportunities by creating and marketing products and services that garner superior profits. The speed of changes in the market place has resulted in shorter time periods available for Indian firms to create new products or variants and reach the market. Easy imports of cheaper products from other Asian countries have frustrated many product development efforts by Indian firms. Therefore, Indian firms must increasingly consider product development and innovation as an ongoing activity to excel in, rather than as an occasional project activity as in the past.

In this paper we identify a variety of product innovation opportunities in India, identify the strategic imperatives for Indian firms attempting to exploit these emerging opportunities and suggest the strategic positions with the highest potential for Indian firms that seek to exploit these emerging product innovation opportunities. We present a road map for Indian firms to identify product innovation opportunities and to develop their capabilities and implement processes to exploit these opportunities effectively.

Product Innovation Opportunities in India

India is one of the worlds largest consumer markets and is growing in both size and purchasing power. However, there are still several large product categories where unbranded products survive - especially in rural and semi-urban markets. Such product categories in untapped markets provide a major opportunity for firms to create brands for unbranded products and stimulate the conversion of customers to prefer branded products. Several prominent examples exist of Indian firms that took such initiatives to create new and profitable businesses. Dhara edible oil when launched in branded tamper proof packaging at almost no price premium over loose oils had a major impact on converting loose oil buyers to branded oils. Many edible oil brands have subsequently exploited this conversion affected among buyers to sell packaged edible oils at higher price premiums over loose oil. Similarly when Tata Chemicals launched a branded packaged iodized salt, it started the process of converting loose non-iodized salt users to branded iodized salt, as well as helped in reducing iodine deficiency in the larger population. Many iodized salt brands have subsequently benefited from this conversion affected among buyers.

It is typically assumed that moving customers from unbranded to branded products requires large expenses in brand building. While some brand building expenses are inevitable, firms can move customers to branded products more easily and at lower brand building cost, by providing a valuable additional feature in the branded product that the unbranded product cannot provide. Dhara provided a tamper proof pack for edible oil, thus countering the problem of adulteration of edible oil sold loose or in tins. Tata provided packaged clean iodized salt that was finely ground making it easier to use than loose rock salt that was often adulterated with sand. A1 tea was launched at low prices in rural markets by Hindustan Lever to counter the use of loose tea. The product was a success primarily because it was marketed as a very strong tea attracting rural buyers who prefer strong tea and teashop owners who could make more cups of tea from it. Such products create a natural demand due to the additional benefit they provide.

India has high socio-economic heterogeneity – in essence there exists buyers at every price point from the lowest price unbranded product to the higher priced premium product. This provides opportunities for firms to create and market a wide range of products as well as move customers from discounted products to popular brands to premium brands over time. As buyers become more affluent, they are willing to trade their low end products for more premium products. Thus, a well-structured product exchange program can stimulate new demand across the product range as demonstrated by the consumer electronics firms that started this practice.

Maruti has arguably revolutionized the second hand car business in India by providing loyalty discounts for existing Maruti car owners to move from their lower end models to their higher end models in an exchange offer. This has stimulated demand for their higher end models as well as provided them a steady supply of second hand cars in relatively good condition. These cars are then refurbished and sold to second hand car buyers at reasonable prices with good margins as they come with a Maruti certified warranty. Unlike in developed countries where the market for second-hand goods is limited, India's socio-economic heterogeneity also provides opportunities for refurbishing and resale of such second hand goods to price sensitive customers who are willing to pay good prices for second hand products in good condition. Big Apple, a company in Bangalore has made a viable business of purchasing used computer monitors in bulk at very low prices from the USA (where companies typically replace their monitors every three years along with their computer), and selling the good quality monitors second hand at a good margin in Bangalore where they can be used in homes for another six years.

A large proportion of Indians customers are very price sensitive, as many multinationals marketing their brands successfully worldwide have discovered to their loss. Even the upper class customers can be price sensitive in India and cannot be taken for granted. Marketers therefore need to understand why price-sensitivity exists among customers in their product category and find new ways to counter it. A small company that introduced the Chik brand shampoo for the first time in a low price single use sachet revolutionized the shampoo market in India. While this packaging innovation increased primary demand for shampoo due to its low unit price, it also created a benefit for users as it enabled them to try out a shampoo once to examine its suitability for their hair before deciding to buy a large pack size. De-risking the use of the product by providing small pack sizes at low cost, enabled more customers to try the product and adopt it – thus further stimulating primary demand. Similarly, Indian firms can create new businesses or stimulate growth in existing products simply by reducing the cost of product trial by customers or by reducing their purchase risk. For example, a firm may be able to stimulate primary demand by offering high unit price products on a buy-back lease rental rather than on outright purchase – giving the customer the option to give up the product at any time. This additional benefit may allow the firm to even get a higher price for the product than in outright sale as lease rentals rise over time.

India now provides a demography related opportunity that is not available in most developed nations. The large and rapidly growing younger population of the country provides opportunities for creating products and services that are targeted at the youth. Many Indian firms have launched products such as credit cards that are targeted primarily at the affluent youth. However the real opportunity is in creating low cost products that are useful and affordable by the larger youth population – such as career guidance centers, coaching centers and internet browsing centers. These facilities can generate high revenues at low margins due to the large volumes of youth users that they attract.

The under-developed rural distribution channels in India provide new opportunities for firms to create distribution channels and use them to market a wider range of products that are considered unmarketable in rural areas. Most companies assume that creating a rural distribution channel is uneconomical for their products – given high transportation costs and low volume of sales in each rural location. This neglect is exploited by rural traders who collect orders for a wide range of products from rural areas and transport them from cities for door-to-door supply in rural areas at relatively high premiums. Some firms have created new demand for their products by adopting innovative distribution channels for reaching rural markets such as using the village postman, the intercity bus driver or the milk collection vehicle driver as their transporter as well as salesperson. There is considerable scope to improve rural distribution and stimulate primary demand. Firms that make related products can jointly create economically viable rural distribution channels that can then be used to introduce new types of products in rural areas. For example, ITC's e-chaupal internet facility in villages is now an effective medium for educating potential customers and for introducing new products and services in the rural areas. Seeing the potential of this medium of reaching the rural populace, other Indian firms are now providing villages with similar facilities.

The relatively poor electric power supply in India, is often a major concern for firms as it adds a major cost element to their products since battery backup systems, generators and alternative power systems are required and widely used. On the other hand, this provides opportunities for firms to develop products that are competitively superior in countering these power supply problems. Given the high cost of power, products that consume less power or save power have a market even at relatively high prices – for example the higher priced long life low wattage light bulbs is slowly capturing market share from the conventional light bulb and tube light market. Solar water heaters have had wide adoption in India and other solar powered devices are also in increasing demand. Products that can withstand higher power fluctuations and products that function effectively with intermittent power supply are attractive options for users – for example a refrigerator or a commercial freezer that that can withstand power fluctuations and function effectively with intermittent power supply has good potential market.

The inadequate roads and high transportation costs in India is another area of concern for firms as it adds a major cost element to their products. On the other hand, the same inadequate roads and high transportation costs is also a concern for buyers who have to reach retail outlets for purchasing goods. This creates new opportunities for Indian firms to exploit the direct to home delivery channel as an additional means of marketing their products. Home delivery can reduce costs and time spent for the buyer and can enable users to test the product before acceptance. Internet based home delivery businesses have had mixed success in India and may have greater potential in niche product markets where a countrywide distribution network is not available. However, television and telephone based home delivery businesses have had better success. The first Indian internet based grocery business introduced by Fabmall in Bangalore had limited success till they also started taking telephone orders. Apparently, users that were averse to transacting on the internet were more willing to browse for products on the website and place their order on the phone for home delivery.

The heat, dust and humidity in India also pose challenges for Indian firms. Robust packaging of products to withstand heat, transport, dust and potential tampering is critical as many products are stocked and in poor conditions. This is an area for firms to provide better value to potential customers by assuring robust packaging. Since products are also made to work in poor conditions, those products that are shown to be robust enough to withstand wear and tear and potential misuse tend to enjoy greater success in India than seemingly delicate products that are rich on features but are perceived as likely to fail. Even products that are actually robust but look delicate may be rejected. For example, the Sumeet mixer-grinder's large base design is seen as a sign of its robustness and most other manufacturers of the product have duplicated that design even though it has no functional utility. On the other hand the superior quality and more robust Braun mixer-grinder was rejected in the Indian market, probably because of its small base vertical design and its more delicate looks.

In summary, products innovations in India require tight control on the price-performance equation as customers are price sensitive and demand good value. There is a higher chance for success in marketing adequate functionality or minimal feature products that communicate a clear benefit for users. Products that can be tried at low risk such as single serve packaging, and products whose robustness and utility can be demonstrated easily, have a greater potential to succeed in the Indian market. Robust packaging of products to withstand heat, transport, dust and potential tampering is critical, and so are products with low risk of malfunction during use. Customers often seek products that can be repaired easily at local levels in India. Innovative financing and trade-in exchange offers can stimulate primary demand as well as create new business opportunities. There are opportunities in converting unbranded products to branded products, and in positioning products at a wide range of price points, given the high socio-economic heterogeneity in India. Opportunities exist in marketing second-hand products, in targeting the growing youth segment, in countering the under-developed rural distribution system and countering the problems of poor infrastructure such as poor transportation facilities, inadequate roads and inconsistent electric supply.

Strategic Imperatives for Indian Firms

How should Indian firms gear themselves to continually exploit these emerging market opportunities? The strategic imperative for Indian firms is to develop an organization that learns to continually scan the business environment to identify and select new product opportunities, and then transforms them into new and profitable businesses over time. This requires three critical elements – a strong leadership that defines and communicates a unifying vision for the organization together with a strategy to achieve it, an organizational culture that encourages and supports initiative and innovative behavior among organizational members, and skills and management practices that are required for managing both individual ventures and the organization's overall venturing activity.

New product venturing is an activity that is initiated or conducted internally by the firm with high downside risk (losses) and high uncertainty that needs to be managed effectively. A venture is more than just the product - it's a new business and a profit center. The new venture process can and must be managed effectively and an appropriate corporate culture is critical to venture success. Venture managers must be seen internally as risk managers rather than as gamblers. Learning is critical to structuring and running the new businesses even in the face of initial failures. Effective practices to manage steady state businesses such as structured training, personnel policies and multi-layer management structures can sometimes block new ventures. Unlike steady state operations, optimizing on resources may sometimes discourage the pursuit of new and promising opportunities.

Studies show that the venturing performance of many large companies with large resources at hand is just slightly better than that of the venture capital industry, which typically funds small new ventures. Many companies that had set up separate venturing divisions to spearhead their venturing efforts have had little success. Evidently, the best reasons for corporate venturing are either strategic necessity or maturity of existing businesses while the worst reasons are either to develop managers or to provide them new challenges. A venturesome climate cannot be created in a firm merely by announcing it, or by creating a separate venture department for developing new businesses, or by bringing in consultants and experts to motivate management and employees at all levels to pursue new business ideas. A venturesome climate is more likely to be created by insisting that every business group pursue good and viable new ideas that fit the strategy of the firm. There need not be specific rewards for product innovation activities- however, the practice of assigning good people to the new business and demonstrating significant and visible personal commitment that is sustained over time has a positive effect. The firm must assign all the necessary resources to the new business – especially shared resources – and empower the creators of the new business. In the long run, it must develop an in-depth knowledge of all relevant customers and markets, build organizational confidence and build internal momentum for the business. To enable effective venture generation and selection within the firm, it is important to clearly communicate the business strategy within the organization so that all new initiatives are aligned to the strategy. There must be a limited number of key criteria on which potential ventures are selected, and these must be disseminated widely so that it enables self-selection and facilitates transparency and fairness in the selection process. It also helps to explain rejections in person so that the actual reasons for rejection are known and false assumptions are not made that can block emergence of new initiatives in the future.

At the firm level, there are essentially two major product innovation activities that need to be effectively managed. The first is the critical assessment and management of the firm's entire product portfolio. This is best done by examining the firm's current products in the market, its new product initiatives under way, proposed new product projects and potential new product opportunities on a commonly used product portfolio matrix as shown in **(Figure One)**. This matrix can give a snapshot of the firm's current position and indicates its competitive strength and vulnerabilities. New product proposals can be mapped on this matrix and examined in relation to the existing portfolio of products. The firm can then seek to balance its product portfolio as well as its product development efforts by having a variety of projects that adequately span the matrix and create defendable competitive positions.

The second major product innovation activity is the management of the entire new product development process in a fair and effective manner by the adoption of the commonly used stage-gate approach as shown in **(Figures two and three)**. All new product projects are examined by top management at predefined milestones from initiation to launch using predefined criteria so that timely assessments of project progress and assessments of changed market realities can guide further investments in the project. This enables firms to utilize its resources more effectively and deploy additional resources in higher priority projects. Firms can implement their new ventures in one of the following three ways depending on the level of interdependence the new business has with the existing businesses - they can create ventures internally as stand alone new businesses, or they can invest in creating spin-offs where the firm is an investor in the new business but not a host, or they can provide venture capital with equity stake to potential entrepreneurs from within the firm who create the new business.

High Potential Strategic Positions for Indian Firms

What types of product innovation should Indian firms focus on and what generic business level strategy should they adopt to exploit their product innovations? Among the four generic business level strategies identified by Porter, it is the focus cost leadership strategy that holds the highest potential for a majority of Indian firms. While a few large Indian firms like Reliance have successfully achieved a broad cost leadership position over time, a broad differentiation position has been elusive for most Indian firms. Indian companies like the Taj hotels, Titan watches and Jet Airways that have attempted to achieve a broad differentiation strategy have had mixed results in the larger market segments, even though they have been able to preserve their differentiation position in their premium segments. Attempts by some Indian firms like Sonodyne audio to achieve a focus differentiation position have had greater success, though price premiums have been difficult to sustain in a competitive and price sensitive market. It is therefore the focus cost leadership position that seems to have the largest potential for success in India, as evidenced by a large number of Indian firms that have achieved this position. There are numerous product niches in the Indian market that can be exploited effectively through a focus cost leadership strategy. This requires firms to think innovatively and develop products or services that exploit these niches as shown by the firms in some the examples quoted earlier in this paper - Dhara oil, Tata salt, A1 tea and Maruti.

Focus cost leadership does not mean creating and marketing the cheapest product in the market. Successful focus cost leaders create appropriate quality products with adequate features and utility from their focal users perspective and market them at prices on par with or below the average price point in the market. This is possible as these firms continually develop and implement innovative methods and organizational processes to keep their costs low while providing greater value to their customers. This stimulates primary demand in the focal user group and creates a viable business for the firm. Well known examples of Indian organizations that have created viable businesses with this approach are Air Deccan, the low cost limited service commercial airline and Mumbai Dabbawalas, the low cost meal carrier service organization. Many Indian hospitals are now part of a medical tourism process in which they provide high quality low cost surgeries to patients from affluent countries that have overloaded hospitals with long waiting times for specialized surgeries. Opportunities to create such niche products and services are constantly emerging in India and first movers firms that enter and occupy these niches can gain significant advantage over subsequent entrants. For example, the recently launched CARE Channel is the first Indian TV channel dedicated to providing authentic health related programs to an increasingly health conscious public. It has created a unique niche, as some well known doctors in all the major cities appear in it and many doctors advice their patients to view it – especially those patients who are undergoing long term recuperative treatments.

Some interesting examples of focus cost leaders from the not for profit sector include the Jaipur Foot, the world's lowest cost fully functional artificial limb, the Aravind Eye Hospital, the world's largest eye hospital providing the world's lowest cost cataract surgery, Navjyothi, a police organization providing a low cost drug abuse de-addiction program through group therapy rather than medication and Sulabh International, the developer of a self sustaining low cost toilet solution that also enables human waste to be used as an energy source. With minor initial investments, each one of these organizations have used an innovative approach to provide a valuable and socially desirable product or service at an affordable cost. These organizations have not only created viable and self-sustaining businesses, they have also created a wider network of links with governmental and non-governmental organizations to propagate the wider use of their innovative solutions. Like these organizations have shown, other Indian organizations also have the potential to take world leadership positions by focusing on some developing country problems that do not attract the attention of developed countries. Products related to diseases prevalent in developing countries, rural communications, health infrastructure, mass education and insurance are all areas of promise and challenge for Indian firms.

Identifying and occupying a high potential niche with a new product or service is in itself not sufficient to reap superior returns. Firms must undertake a number of support activities to ensure that they capture the maximum value from their market entry, while covering the risk of potential product liabilities. These activities include product ratification by external agencies to establish quality and safety standards and legal ratification to establish non infringement of patents, brand names, packaging look, trademarks and licenses. Firms need to examine the tax implications of their products or services and their concurrence with product safety norms, environmental safety norms, and product recycling norms. They need to develop appropriate instruction manuals for users and training manuals for service staff and sales staff. They need to test the product for robustness under normal use and misuse and document all product versions and variations. Due diligence in all these activities during the product development process, can ensure that the product is ready for launch in time to meet market demand and initial problems, if any, are rapidly corrected, to ensure a long life cycle for the product.

Conclusion

India presents a variety of emerging opportunities for organizations to innovate new products and services to meet current and emerging customer needs. In this paper we identify some of these innovation opportunities and indicate the strategic imperatives for Indian firms attempting to exploit them. We suggest that the strategy of focus cost leadership has the highest potential for most Indian firms to exploit emerging product innovation opportunities. We present a road map for Indian firms to develop their capabilities and implement processes to exploit such opportunities effectively and efficiently. We emphasize that Indian firms must increasingly consider product development as an activity to excel in, rather than as a peripheral and occasional activity as in the past. The long-term gains in competitive advantage for Indian firms that do so are likely to be substantial and sustainable.

References

- Udai Pareek and V. Sis
- Melissa A. Schilling and Charles W.L. Hill (1998) "Managing the New Product Development Process: Strategic Imperatives" Academy of Management Executive Vol.12, No. 3, pp. 67-81.
- K.T. Ulrich and S.D. Eppinger (1995) Product Design and Development New York: McGraw Hill, 1995.
- S.C. Wheelwright and K. Clark (1992) "Creating Project Plans to Focus Product Development" Harvard Business Review March-April, pp. 70-82
- K. Clark and T. Fujimoto (1990) "The Power of Product Integrity" Harvard Business Review November-December, pp. 107-118.
- A. Griffin and J.R. Hauser (1993) "The Voice of the Customer" Marketing Science Vol. 12, No. 1, Winter.
- Krishnan, R. T. and G. N. Prabhu (2003) "Software Product Development in India: Lessons from Six Cases" in Anthony P. D'Costa, E. Sridharan (eds) India in the Global Software Industry: Innovation, Firm Strategies and Development, Palgrave Macmillan, December.p.139-163.
- Krishnan, R. T. and G. N. Prabhu (1999) "Creating Successful New Products: Challenges for Indian Industry" Economic and Political Weekly, Vol.34, No.31, p. M114-M120.

FIGURE 1 : PRODUCT PORTFOLIO MATRIX

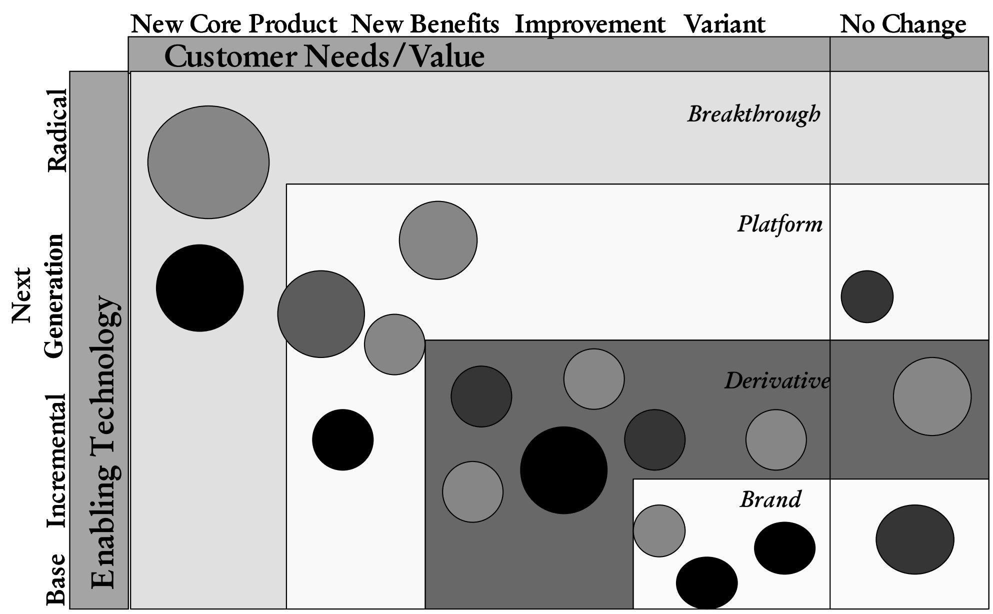

FIGURE 2 : THE PRODUCT DEVELOPMENT FUNNEL

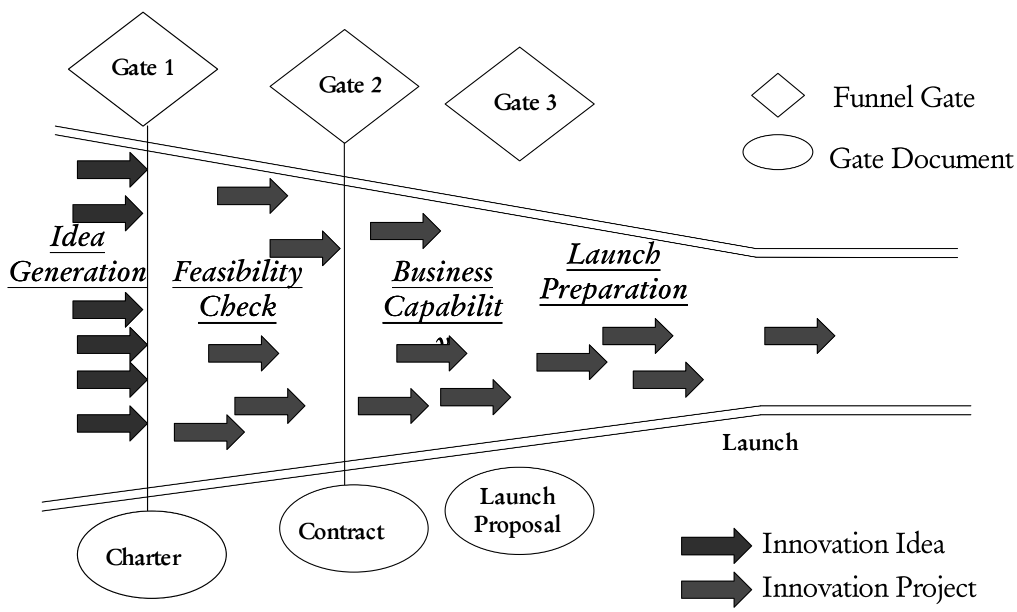

Figure 3: Product Development Activity