Go frugal!

Future belongs to "good enough" products with attractive value proposition

By Rajnish Tiwari, Cornelius Herstatt and Stephan Buse

Succeeding in India and other emerging markets often requires developing market-specific products and services that enable an attractive value proposition without taking recourse to (excessive) over-engineering. Moreover, the innovations should be able to circumvent the given infrastructural restrictions ever so present in the rural and semi-urban areas. We see an increasing demand for "frugal" products also in the industrialized nations of the West.



Model Crop Tiger in India, developed by Claas. It was originally designed for the rice harvest. Thanks to further developments, it now has the ability to tackle grain as well.

Abdul Rahim Khan-i-Khana, one of the nine "jewels" in the court of India's great Moghul Emperor, Akbar, and an avid poet known for packing great and pointed insights in small

About the Authors

Dr. Rajnish Tiwari, Prof. Dr. Cornelius Herstatt and Dr. Stephan Buse are senior researchers based at the Institute for Technology and Innovation Management of Hamburg University of Technology (TUHH). Together they have founded a Center for Frugal Innovation in Hamburg. couplets, cautions in one of his dohas (verses) against relying excessively on the "big" solutions. "A task that can be achieved by a needle," reminds Rahim, "often cannot be performed by a sword", even though a needle is small and inexpensive and a sword big and much more expensive.

This metaphor, perhaps, can succinctly summarize the appeal of "frugal" solutions that are sought by the large and voluminous markets in India and other emerging economies. Most consumers here are wary of purchasing products that are beset with functionalities that are not required; costs of ownership that are too high; a build that is too fragile; and a price point which is not affordable. An average consumer in a market like India is basically carrying a paradox within. On the one hand, he (or she) aspires for consumption and yearns for a better standard of living; on the other he is often driven by nothing less than a "passionate rationality" about his purchasing decisions.

It is this challenge of simultaneously addressing these two paradoxical wants, which firms need to master for succeeding in such a market, and what we call is the "frugal challenge". A report in the German newspaper Die Welt a few months ago brought this challenge to the fore: German machines in the construction sector are "too good to succeed" in the emerging markets, it said. They win a lot of innovation prizes at industrial exhibitions, it said, but not the purchasing orders.

What is frugal?

In terms of dictionary meaning frugal refers to "economical in use or expenditure; prudently saving or sparing; not wasteful; entailing little expense; or requiring few resources". It therefore implies careful and saving use of resources, for example through prudent planning in the disposition of resources so as to avoid unnecessary waste or expense.

Not surprisingly, its antonyms are "wasteful; extravagant; luxurious; or lavish". Seen in conjunction with innovation, it can refer to products and services that seek to minimize the use of material and financial resources in the complete value chain with the objective of substantially reducing not just the price point but the complete cost of ownership/usage of a product while fulfilling or even exceeding pre-defined criteria of acceptable quality standards.

Our research shows that frugal innovations are characterized by affordability, robustness, user-friendliness, scalability, and finally by an attractive value proposition. A recent study showed that frugal innovations can lower the price point by 50 per cent to well above 90 per cent. Targeted at consumers who might hitherto have never had the occasion to use a similar product they should be able to cope with "unsophisticated" users, and withstand hazards like dust, heat or power failure. Such frugal products aimed at serving volume-driven markets with comparatively thin margins - can lead to success in price-sensitive markets.

What frugal is not!

There is a famous cartoon by the legendary R.K. Laxman, which shows a minister along with his secretary standing opposite a slum apparently discussing removal of the slum. The secretary is seen suggesting: "It will be a problem demolishing it, sir. Why not just put a board 'low cost housing complex' and leave it?" That sums up beautifully at least what frugal innovations are not. Frugal does not mean a poor-quality, off-the-mark, improvised solution; often sold as a "Jugaad" product.

Frugal innovations, very much to the contrary, enable an excellent value proposition, which prudently takes into account the specific needs of the customer and does not seek to compel him (or her) into purchasing more than what his perceived requirements are. In a sense, it is a "democratization" of innovation, because a customer can choose "add-on" features and upgrades depending on his taste, choice and financial resources within the parameters defined by regulatory quality standards.

At another level, frugal innovations also signify a transition from heavily technology and R&D driven "inventions" to more market-driven "innovations". Frugal innovations remind us that the primary purpose of a product development activity is to tap an unfulfilled demand, and enable consumption. Frugal innovations show that sophistication of a solution is not rooted in "the newest and most advanced technology" but in a "comfortable, robust, and affordable solution capable to uplift the standard of living to the next better level".

Drivers of frugal innovation

Opportunities for future growth now mainly lie in the unsaturated markets of the emerging economies. With a great reduction in the absolute number of people living below poverty line a new class of consumers has emerged in the developing world creating a large market ready for consumption. Since the purchasing power of the most of these consumers does not allow them, yet, to consume at the same level as the most of their counterparts in the industrialized West, they need products which can match their aspirations while catering to their specific environmental and cultural requirements. In the era of the Internet and television the traditional concepts building upon the international product life-cycle theory have been rendered redundant. It is no more feasible for companies to send their commoditized "outdated" products to the countries of the "Third World".

Second, the relative importance of developing nations is set to increase even further. They have not only become major recipients, but also major sources of foreign direct investment (FDI). Between 1992-2012, the stock of inward FDI in developing nations rose from 611 8,592 billion US-Dollar, demonstrating the growing economic activity there. Increased (outward) FDI by emerging market firms also means that they are bringing in their frugal products also to the Western markets. To pre-empt this threat many Western multinational (e.g. GE and Siemens) are also taking recourse to frugal products. This strategy has been called "reverse innovation".

Third, environmental concerns and resource constraints are driving up the price of commodities. UN Data shows that the price of commodities, like minerals, ores and metals, has increased 322 per cent between 2000 and 2012. With increased consumption it will not be possible to continue with the treaded path in the use of commodities. We need products that are more efficient and effective in the complete value chain, from development to disposal.

Frugal in Europe

Slowly, but surely, we also witness an increasing demand for affordable, functional, and resource-efficient products in the Western markets. Many consumers in the developed countries are turning apprehensive of over-engineered products and the planned obsolescence, which deliberately creates products that deteriorate almost as soon as the guarantee period is over, inducing the customer to make a new purchase. There are also economic factors associated. A recent study by the International Federation of Red Cross and Red Crescent Societies states that in Europe there are "43 million who do not get enough to eat each day".

Summarizing, it may be stated that the presence of a large and unsaturated young population, driven by aspirations, creates a unique opportunity for firms to create new and affordable solutions. The volumes can compensate thin margins. At the same time, India's innovation eco system allows significant technological capabilities so that products can be developed in open global innovation networks and therefore lower development costs and risks.

This is a win-win situation for all parties. Products that succeed in India have a large potential in other emerging economics with similar socio-economic conditions. But also in Europe and elsewhere there is an increasing demand for affordable, "good enough" solutions. A high focus on technology-driven "high tech, high price" innovations runs the risk of losing the sight of the changing consumer wants.

Therefore, it would be worthwhile to listen to Adam Smith, who wrote: "Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer." If this is made to be the guiding principle during product development for India – and indeed elsewhere – not much can go wrong.