



# DESIGNED FOR EXCELLENCE



The Tata Indicom Parsec and the SeaKey: innovative products where design has been the key

Indian design companies are starting to innovate and they are doing it with products, services and, critically, business models.  
**By Arun Katiyar.**

**A** recession, or an economic slowdown, is the ideal time to re-examine products and services, align them with emerging needs and demands, and ensure they are re-engineered to provide higher value. Or, create new products that clearly demonstrate innovation and economy in materials, overheads and consumables. Success awaits those who can do this, especially in challenging economic conditions. The Nano from Tata Motors is just one such example of an Indian product launched during difficult times – a product that breaks the boundaries between technological innovation, design and pricing.

Businesses are starting to wake up to the power of design and the sophistication of design in India. Design experts believe that an explosion in sensible, smart and local design will infuse manufacturing, such as cars, clothes and fast moving consumer goods (FMCG) products, as well as high-end outsourced tech design.

Darlie Koshy, former director of the National Institute of Design (NID), notes that design is as much about strategy as it is about styling. According to him, design thinking is going to be very important to India as the economy evolves. Further, innovation of services is critical as the sector dominates the Indian economy at present.

Often, innovative product design is not about the look and feel at all, but meeting consumer needs with insight. For example, when CavinKare, a Chennai-

## TAKING ON THE TECH CHALLENGE

ONE of the most challenging and interesting aspects for Indian design companies is in the area of technology. And amongst those who have been doing pioneering work is Bangalore-based Bang Design. Says Vinay Rao, who founded the firm in 2002: "The cultural and social background, ergonomics and business concerns combine to create experiences and these experiences create the brand."

Bang Design has been engaged by companies such as Microsoft, Dell, BPL and D-Link; one of its most interesting design projects has been for Catcher Holdings Inc, a US-based company that developed a portable, wireless, hand-held GPS-based command control device called the Catcher Defence Grizzly. The convergent unit is built to military standards and incorporates voice, video, data and biometric information with multiple wireless and wired communications capabilities.

"You can drive a sports utility vehicle (SUV) over the device and it will survive," says Rao. The brief from Catcher to Bang Design – make it look like a video game console that people will find easy to relate to and use. And that is exactly what Bang Design delivered.

Bang is unique in what it does. And it is not surprising that it has won three excellence awards instituted by Businessworld magazine and NID in the home, office and transportation accessories categories. The very first assignment Rao worked on, straight out of the Indian Institute of Technology (IIT), Delhi, was a two-seater sports car, San Storm, for a Mumbai-based maker of convertibles, San Motors, along with co-founder and classmate Prashant Subedar. Today, the company he helped co-found is promoting sustainable human consumption in its work.

Another interesting technology product that Bang has been involved with, in this case, redesigning, was the Simputer. According to Prof Swami Manohar, chief IPR and strategy officer, Geodesic Ltd (he was the co-founder and ceo of PicoPeta Simputers Pvt Ltd, the world's first truly cheap computer, which was acquired by Geodesic in 2005), the Bang Design team worked closely with Simputer's electronics engineers to create a compact design.

"Especially important from a tooling cost perspective was our need to have a single design to fit three different LCD displays with minor modifications in the tooling," recalls the co-inventor of the Simputer and recipient of the Dewang Mehta Award for Innovation in IT. "This was successfully accomplished. One can confidently say that given the specifications of the components and the functional constraint and requirements, it is unlikely that any other designer could have done any better. The aesthetics of the design were also very impressive."

Today, Bang Design has added another dimension to

its business strategy. "We have recently started working with small and medium enterprises (SMEs) through a new engagement method," says Rao. "SMEs are below the surface, but many are actually worth more than some of the better-known brands that have not delivered their promise and a lot can be done in this sector. The only issue is that few actually understand the power of design."

For SMEs, Bang reduces its standard fees, marks the reduction as an investment and seeks a return on investment (RoI) on that investment via royalties and equity. The specifics of each partnership are customised to incorporate a unique set of targets, goals and challenges for that engagement. This is the new course that design companies could begin to adopt.

Some products and jobs define a company. Bang Design has worked on numerous technological products that define it. Here are three of its more interesting products, which highlight its capability to innovate, create new businesses through design and solve problems.

**The Tata Indicom Parsec:** Tata Indicom's Access Business Unit wanted to create a multifunctional terminal, one that could go beyond functioning simply as a pay phone. Bang's research and design led to innovations in integrated user interfaces for messaging, phone calls, and payment and billing, as well as value-added functions such as railway ticket booking and a new mounting mechanism. The product won the Businessworld NID Design Excellence Award 2007.

**Snagless Cable:** Taiwan-based global networking major D-Link had a problem: the tack of a bought-out ethernet connector crimped to its pre-cut cables would break at the time of installation, rendering the cable useless until a new connector was fitted, which involved time and labour. The solution was to integrate a protection profile into the cable itself, even though it involved new production processes and investment. Bang Design enabled D-Link to differentiate cable quality and price as well. The Taiwanese major was one of the first in the world to launch 'snagless' cables.

**SeaKey:** What started as an attempt at original equipment supplies to a large boat manufacturer, the SeaKey allowed MobiApps, a Bangalore-based provider of hybrid terrestrial and satellite technologies for commercial communications, to strengthen its own consumer and enterprise product line in the marine segment. Bang Design infused a strong 'marine' aesthetic into the design to make the device visually appealing to attract customers. The SeaKey is a rugged water-proof, high-end marine electronic device with a distinctly 'marine' and 'safety/security' aesthetic. The product is of value to boat-owners, more importantly even when the vessel is not in use, so that they can monitor theft or misuse at the dock.

# 'MY APPROACH TO DESIGN IS FUNCTIONAL, HOLISTIC'

An interview with **Vinay Rao**, founder, Bang Design:

## What made you set up Bang Design?

I wanted to impact people positively via design. I wanted to function as a futurist, to be optimistic about the possibilities of new technologies and materials in enabling richer human experiences. Lastly, I wanted to promote sustainable human consumption through my work.



Vinay Rao

Right now, I am assisting some committed individuals looking at improving energy, pollution and water problems in Bangalore, through design thinking. Physically, my approach to design can be described as functional and holistic, aiming for relatively simple, elegant shapes that will effectively meet the requirements of an object's purpose. Be it a kitchen appliance or even a high-technology defence product, the design need not be overdone.

Our 20-person studio takes a long-term, strategic approach to developing and enhancing brands through innovations, which are communicated through a product's experience. The team spreads its individual expertise over ethnographic research and contextual enquiry, product design and styling,

interaction design and mechanical engineering for production and, in many cases, evolving unique methods and processes to cater to client needs and suit the studio style. Our service is both necessarily broad and deep.

## Who are the major rivals to Indian design companies?

The really large companies can be divided into two types – those that sell to businesses and those that sell to 'users' and consumers. Those that sell to businesses have invested in brand building via design for a long time now and continue to do so. Design at this level is a much bigger ticket-spend than in most other fields of design.

Those that sell to users and consumers can be further divided into those that trade and those that make their own products. Those that trade either rely on China to supplement their home brands, or just simply retail the well-known brands in their stores. Those that develop their own products actually make the most margins, but many companies are relatively faint hearted when it comes to development and would rather trade.

A management consultant recently told me that in China, when someone sets up a manufacturing plant for consumer goods, he is thinking 200 countries as his market. Our biggest rival in that sense is China.

## What is the key challenge before a design company in India?

Globally, a key challenge for design is that the term is often misused and the real definition of design is not yet understood or appreciated by the public at large. As expected, the scale of this problem is less in industrialised societies or in cultures that have valued art and design (Japan), and much more in developing economies where the situation demands more problem-solving than design and circumstances have fostered a more 'inward-looking' approach rather than free expression.

based personal care and food products major addressed the rural Indian consumer, it identified the need for shampoos and other products keeping in mind small incomes and small cash flows. The firm designed small sachets at low prices for the huge rural market.

Britannia Industries did likewise with its Tiger brand of biscuits by reducing the unit size of the packaging and, thereby, becoming accessible to a vast rural

market. This is business design, a critical part of product design.

Says Madhukar Dev, managing director, Tata Elxsi, India's leading design firm: "With the impact of current economic developments across the world, design is a catalyst that can enable companies to sustain themselves, while continuing to offer their end-customer a superior product experience. We always strive to provide our customers that edge, by

constantly innovating our approach and services".

Tata Elxsi recently opened its Design Studio Europe (DSE) in the UK to provide a range of high-value services to customers in the continent. The first of a network of international design studios, DSE will connect into the company's industrial design division (IDE) in Bangalore. The new studio offers product design, packaging design, graphic design and



**A hardy device:** The Catcher Defence Grizzly

design-realisation services, customised to meet the demands of the market.

“Over the years IDE has built a reputation for great design by balancing creativity with practicality,” remarks Anil Sondur, general manager of the division. “We would now bring our international design expertise closer to our customers along with a deep understanding of the European/local sensibilities.”

IDE provides complete brand and product development services across sectors including FMCG, transportation, consumer electronics and appliances, digital user experience and medical devices. Sondur notes that about a decade ago, companies would spend around 5 to 6 per cent on their R&D budgets on product design and packaging. But the figure has now gone up to 15 to 20 per cent, indicating the growing awareness about the need for better designed products.

Tata Elxsi’s IDE also helps organisations optimise their product development by integrating the essential aspects of business, human and technical factors into design.

But in what can be described as ‘forward integration’, IDE has now started offering branding consultancy services

Over the years, IDE has built a reputation for great design by balancing creativity with practicality.

**Anil Sondur,**  
general manager, Tata Elxsi

as well. The division, which has clients ranging from Ford Motor Company and Nissan Motors to Intel, Unilever, P&G, ITC, Godrej and the UB Group, will go beyond R&D and industrial designing to improving its marketability and brand-building.

“Earlier, we designed goods according to the client’s brief, while the branding was done by the client’s marketing teams,” points out Rahul Sachdev, associate manager, marketing, Tata Elxsi. “Now we want to get involved in creating a brand first and then structuring the product around its DNA.”

The main drivers fuelling the growth of the Indian design market include demanding customer preference, the growing need for customised products, reduced product lifecycles resulting in the development of new products with faster time-to-market and the need to beat the ‘innovation vacuum’.

For instance, Innovative Design Engineering Animation (IDEA), an Ahmedabad-based provider of industrial design services (which has been catering to clients in America from its San Francisco office since 2006) is now expanding its India operations.

“Our gamut of services will enable companies to develop end-to-end innovative and manufacturable products,” says Deval Shah, director, IDEA. “Customers will be able to leverage a creative and strategic team of designers and engineers possessing strong domain knowledge and a well-defined project management process.”

IDEA has developed over 250 products across various verticals for its international customers. According to Shah, it has enabled its clients to quickly and cost-efficiently turn ideas into actual products by offering fully-integrated and high-quality design, engineering and animation

The India Design Council will bring people from different industries and sectors on the same platform.

**Pradyumana Vyas,**  
director, NID

## INDIAN BY DESIGN

Some of the leading Indian design firms are:

**Tata Elxsi, Bangalore:** The largest design company in India, which works on the software services model and designs much of the structural packaging (bottles, etc.) for major FMCG companies in India. Its clients include Intel, Kenstar, UB Group and CavinKare.

**Idiom, Bangalore:** India's largest retail design company in which Kishore Biyani, founder and ceo, Future Group (one of the country's largest retailer), has a personal stake. Its clients include the Manipal Group, Orchid Hotels, Hometown and the Delhi 2010 Commonwealth Games.

**Elephant, Pune:** Does both product design and branding (the latter much more than the former). It has clients that include Bajaj Auto, Lipton, Tech Mahindra and Thermax.

**Icarus, Bangalore:** Similar to Elephant, but is much smaller. Its clients include Kama Sutra, Tata Tea, Opto Circuits India and Hewlett Packard.

**Desmania, Delhi:** Structural packaging, product design for consumer durables, and branding. Its clients include LG, Dabur, P&G and Cadbury.

services. Its clients include GE Healthcare, Pacific Medical, GlaxoSmithKline and Shell.

Design is indeed playing a major role across different sectors in India. With the government's New Design Policy (NDP) in place, its importance will only increase.

The NDP has resulted in the setting up of the India Design Council (IDC), which will promote R&D, spread design awareness, develop strategies for design and impact studies, accredit design institutions and develop standardised syllabi for them. It will also conduct programmes and develop intellectual property in the area of design.

"Design has always been a key element of the overall production process, irrespective of industry or sector and the IDC can provide a suitable platform for Indian design to enhance its competitiveness on the global stage," remarks leading industrialist Anand Mahindra, who was recently appointed by the government as the president of the IDC. "I am sure the council will also play an important role in fostering closer ties between industry

and academia, and showcasing India's rich design heritage, which is most apparent in our monuments and traditional textiles."

Other members of the council include Pradyumana Vyas, the director of NID, Ahmedabad; Ritu Kumar, a leading fashion designer; Naushad Forbes, a technology design specialist; Ganesh Prabhu, a design consultant; and Rouble Nagi, an artist and mural designer.

Says Vyas: "The IDC will bring people from different industries and sectors on the same platform. It will bring together various design institutes and design departments of institutes and help create a situation of synergy amongst them all, which will help develop better curriculum and design educators."

One of India's eminently exportable non-objects is its culture. Intense Indian colours, vibrancy and spirituality, with a clear bias for being 'natural', is easily understood and assimilated by the world. Indian designers are infusing their work with the local flavour.

Expect the most attractive and innovative products to come out of India, reflecting an earthy sensibility over the next few years, driven by the new NDP that hopes to make 'Designed in India' a by-word for quality and utility in conjunction with 'Made in India' and 'Served from India'. 



Impressive design aesthetics: The Simputer Amida