

# The thin edge of technology

In the business of designing products for both the real and virtual worlds, Tata Elxsi is touching lives in a myriad ways

**B**ollywood buffs are aware that a smart-talking, wisecracking, animated mutt, known as the *Roadside Romeo*, hit movie screens in October 2008. What they and the public may not know is that both the dog and his wag have been created and animated at the studios of Tata Elxsi in Mumbai.

Tata Elxsi is a company that over the years has developed specialised expertise in design and engineering solutions. Apart from the computer animation created at the company's Visual Computing Lab (VCL) — a division that specialises in animation, computer graphics and visual effects for film and TV, other products from Tata Elxsi touch lives far more directly — the company has an industrial design cell (IDE or Innovation Design Engineering), a product design division (PDS or Product Design Services) and a system integration division (SI), that together use high-end technology to create and produce ergonomic designs that are customised to suit needs of the clients.

These are exciting times at Tata Elxsi and each branch and division of the company is showing the signs. The company is working on new display technologies for home or mobile viewing, which promise to completely redefine how video and TV will be viewed in the future. PDS, which contributes 80 per cent to the company's Rs400 crore turnover, has worked on developing its own IPR for mobile TV as an upcoming technology. The Industrial Design services division — the largest design

house in India — has worked on hugely successful product designs including the Pureit water filter and Pond's range of skin care products for Hindustan Unilever, Horlicks Junior and Women's Horlicks for GlaxoSmithKline and styling intent and Class A surface development for car makers such as Jaguar, Land Rover and Nissan.

The Systems Integration Services division has made a positive impact in the virtual reality solutions market. VCL, the animation arm of the company has completed work on *Roadside Romeo*, India's first full-length animation feature film, and a prestigious project for Tata Elxsi. An Indian producer who brought in Walt Disney as a partner originally commissioned the movie. "Disney views our work to be as good as any other international animation or production house" says managing director Madhukar Dev, with a touch of pride.

The company's balance sheet is healthy and indicative of the fact that the company's services are much in demand. "Despite the fact that we had a very difficult year in terms of fluctuations in exchange rates, we clocked a growth of 33 per cent year-on-year in revenues (Rs403.83 for 2007-08) and equalled the previous year's profits," says he.

On the fast track already, Mr Dev aims to steer the company through a strategic plan targeting exponential growth. "In five years time, we aim to be a billion dollar company. Our aspiration is to be known internationally as a leading-edge technology company. We want to reach a position where we are recognised worldwide for helping companies transform their product portfolio. Whenever and wherever there is a product idea, companies should come to Tata Elxsi with, 'Can you do it for me, and in what timeframe?'"

A tall order; but the company is taking it seriously and is on the lookout for opportunities to make a bigger impact. The ambition is to be an end-to-



The IDE facility in Bangalore. (Inset: Tata Elxsi designs for Horlicks)

end provider, to be proactive and make a pitch to the customer rather than have projects coming in. “We are trying to move up to a point where we are not just delivering designs but business consulting for that product category,” explains Mr Dev.



Special effects created by VCL for *Taare Zameen Par*

The company’s vision is well supported by its internal business excellence programme. The delivery and quality processes at Tata Elxsi are CMMI Level 5 and ISO 9001 certified; the information security systems are BS 7799 assessed. To keep up with changes in technology, Tata Elxsi actively participates in technical forums and standards bodies relevant to their primary market (multimedia, wireless communication and automotive electronics). “We get a preview of future products and what is to happen three to five years from now,” informs Mr Dev. Technical training of engineers in current and emerging technologies is an on going activity.

The concept of innovation is present in the company’s DNA and is exemplified in the way it recreated itself under adverse conditions (see box). It is also evident in the unique campus in Bangalore designed by Charles Correa, with courtyard style office buildings, beautifully sculpted gardens, green lawns and eye-soothing fountains.

The campus is a setting which allows ideas, the essential product of the company to flower. The company believes ideas can come from anywhere. So, designers and engineers meet often at the Innovation Lab, to exchange ideas and thoughts, and then get back to work. “We believe in lateral exploration for improving designs and processes, rather than working only on fine-tuning

## The rebirth

Tata Elxsi has an interesting history. The company was incorporated in 1989 as a hardware manufacturer of computer servers. It supported — through a fairly large pool of application specialists — California based Silicon Graphics Inc (SGI) in animation and special effects, industrial design and engineering visualisation. Over the years, the demand for SGI’s support waned and the company found itself looking for new markets and clients. The team of computer engineers formed the Product Design Services (PDS) division, the mainstay of the company today. And the other streams became separate business lines handling industrial design (IDE) and animation (VCL).

existing processes to achieve greater efficiency,” explains Mr Dev. This reflects in the we-can-do-anything attitude of employees who are never overwhelmed by a challenge.



High-end technology products enabled by PDS

Human capital is of utmost importance to deliver Tata Elxsi’s promise. But as with other knowledge-driven companies, manpower remains a huge challenge. Though every batch of fresh graduates is smarter than the previous batch, they are no quicker to get into a live project, largely because the curriculum that they follow is not enough to keep them in touch with design trends. “To overcome this we rolled out a prototype at two engineering colleges where we run a course, sort of a finishing school for relevant graduates. We intend rolling it out to about 50-75 colleges in about six months time as this prototype matures,” informs Mr Dev. He hopes that the foray into education will result in more productive recruiting and substantial savings on training.

The HR cloud has a silver lining. Though attrition remains an industry wide problem, it is less of an issue at Tata Elxsi owing to the technically stimulating environment the company provides and the name of Tata. “The Tata brand name has enormous value today for all, whether it is young engineering graduates or mid career professionals thinking of a long-term career,” says Mr Dev. Tata Elxsi loses about a tenth of its staff to captive units of multinational companies. Which according to the chief, is not a bad thing after all: “Some amount of attrition is good. It is sort of a validation of the fact that we are working in the right areas of technologies.”

The biggest challenge for the company is keeping track of the trends in technology. The next new direction seems to be energy efficient technologies, and as a design and engineering solutions provider, Tata Elxsi will need to use its skill sets and capabilities to come up with solutions that will keep clients and customers happy. The ball is forever rolling and Tata Elxsi has to keep an eye on it. ●

*Shubha Madhukar*