

IndiaNow

June - July 2010 | Volume 01 | Issue 2

B U S I N E S S A N D E C O N O M Y

EMERGING ENTREPRENEURS

GREEN BUSINESSES ARE THE BUZZWORD

INDIA 21

A TINY INDIA-MADE ELECTRIC CAR IS PACKING QUITE A PUNCH

INNOVATION CORNER

SLEEK & SMART, A SNEAK PREVIEW OF AN E-READER



**THINK
BIG
THINK
SMART**

**INDIA'S NEW
MANUFACTURING MANTRA**

Winds of Change

A determined new breed of entrepreneurs leads the charge.

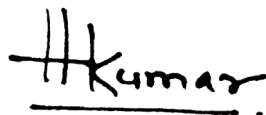
The manufacturing numbers of any economy are among the clearest indicators of its health. Manufacturing in India is showing the robustness it has so painstakingly built over the years.

From a little-known producer of semi-finished items many decades ago, India has emerged as a serious manufacturer of high quality and globally competitive products. Industrial heavyweights from all over the world are moving into India, setting up manufacturing hubs here to not only service the sizable domestic market, but also the entire world. Indian companies are aggressively modernising and advancing in research and development, bagging the prestigious Deming Awards, year after year.

Fifty years ago, India's burgeoning population was seen as its heaviest burden. Today, it has come to be understood as its greatest asset, whether as a high-power, youthful resource, or an ocean of a market for products and services. People make the difference – educated, inspired and enterprising. If the last decade has been one of prolific growth, then the next one promises to be even more rewarding.

More importantly, the growth is moving in step with prudent, sustainable eco-consciousness. Entrepreneurs are saying: each of us affects the environment a little; each of us, therefore, must help keep it clean. A young entrepreneur from Bangalore nurtured a dream and scaled mountains of struggle to give the world the all-green, world-renowned, commercially successful REVA. Rag pickers climb smoking hills of discarded plastic at Delhi's landfills, and out comes a brand new material for European fashion's high street. That's recycling at its sustainable best.

Admittedly, these are just local trickles, but not far from becoming a global stream – the clear, gurgling stream of collective consciousness – more powerful than the strongest wave ever recorded.



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VOICE OF A VISIONARY

Unique number will be the foundation through which a citizen can claim her rights



National ROUND-UP



A Smooth Takeoff.

Some of India's airports make a big mark in the global aviation map as the Airport Council International rates them.

DELHI'S INDIRA Gandhi International Airport has been adjudged the "best improved airport" in the Asia-Pacific region and has been rated the world's fourth best airport in the 2.5 crore passengers (approx) category.

Awards were announced recently by the Airport Council International, the apex body, which has 575 members operating over 1,633 airports in 179 countries. The Council rated airports on 36 parameters related to passenger amenities and infrastructure. The Indira Gandhi International Airport received the fourth-best airport award in the category of airports handling 2.5 crore passenger traffic per annum while

the Baltimore airport in the US topped the list. Hyderabad's Rajiv Gandhi International Airport (RGIA) has been rated the world's No 1 airport in the 1.5 crore passengers (approx) category. The Hyderabad airport has also been voted as the fifth-best airport worldwide. RGIA is the second public-private partnership venture among Indian airports, after the Cochin International Airport. With one of the country's longest runways (4,260 metres), the airport is designed to handle 1.2 crore passengers, more than 100,000 metric tonnes of cargo and 90,000 air traffic movements (ATM) per annum in the initial phase.

DATA BRIEFING

10%

GROWTH RATE PER ANNUM WILL BE SEEN IN THE INDIAN AVIATION INDUSTRY IN THE NEXT 20 YEARS.



More power, roads. The country expects to add 20,359MW of power generation capacity in this fiscal.

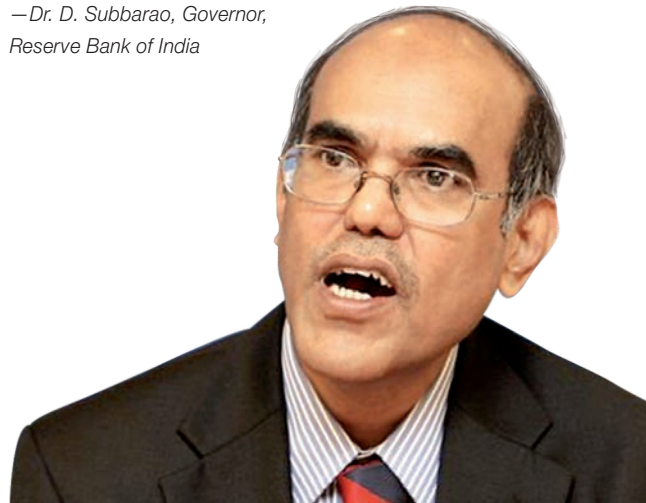
THE PLANNING Commission has set targets to boost the country's infrastructure in this financial year, including adding 20,359 megawatt (MW) of power generation capacity and 2,500km of highways, deputy chairman Montek Singh Ahluwalia was quoted as saying in the media. The Plan panel had set a 14,507MW target in 2009-10, while addition was 9,585MW. Similarly, the target for highways in the last fiscal was 3,165 km, while 2,008km was completed. India has an installed power capacity of about 160,000MW. The investment target for roads has been pegged at INR 35,680 crore (US\$ 7.6 billion) in 2010-11, higher than INR 29,934 crore (US\$ 6.4 billion) in the last fiscal, according to a report by the country's premier news agency Press Trust of India. The actual investment that came into the sector in the last fiscal was INR 11,608 crore (US\$ 2.5 billion). The country expects to increase its infrastructure spending in the next five-year plan (2012-17) to \$500 billion. By 2007, it is supposed to be doubled again, to \$1 trillion. India's economy is expected to grow 8.5 per cent in the fiscal year that began April 1, after expanding 7.2 per cent in 2009 (provisional figure) making it the world's second-fastest growing major economy, after China.

THEY SAID IT **DR. D. SUBBARAO**

The Reserve Bank of India (RBI) Governor, D. Subbarao, speaking at a recent conference held in Zurich, Switzerland, admitted that among components of capital flows, India preferred long-term flows, to short-term ones, and non-debt flows to debt flows.

“Our policy on equity flows has been quite liberal, and in sharp contrast to other EMEs (emerging market economies), which liberalised and then reversed the liberalisation when flows became volatile, our policy has been quite stable.”

—Dr. D. Subbarao, Governor, Reserve Bank of India



UPDATE ON RESEARCH



PHOTO: PHOTOS.COM

Greener Indian companies. India's Tata Consultancy Services, Bharti Airtel and Suzlon Energy are among the global firms with high sustainable development standards, a report by Swiss lender Bank Sarasin showed. The study, conducted among 360 emerging market companies, found that a third of these firms have a high rating in terms of sustainability.

PHOTO: PHOTOS.COM



IL&FS plans 'long' bonds. The instrument will be similar to the US' Treasury Bond.

INFRASTRUCTURE Leasing & Financial Services will launch "long bonds" with a maturity period of 25 years, a move that will set a new trend in the corporate bond market, said a report in the *Economic Times*.

The instrument will be similar to the US' Treasury Bonds or long bond with a maturity from 20-25 years and coupon payment every six months like short duration treasury bonds. The instrument, which will be rated by credit rating agencies, will work on the model of the erstwhile US-64 of the Unit Trust of India, said the report in the *Economic Times*.

The company is planning to

raise long-term fund through an instrument on the line of the US long bond for those projects which have residual concession period of 25 years, IL&FS chairman Ravi Parthasarthy was quoted as saying in the report.

Long-term securities, such as long bonds with 25-year maturi-

ties, are often tough to sell. Unlike the shorter-dated securities, a bond with maturity period of 25 years or more appeals to a much smaller group of buyers as it needs long-term investors' commitment, it said.

However, IL&FS is planning to appoint at least two or even three market makers for the instruments, who will pro-

vide enough liquidity and an exit route to the investors. These market makers will give two-ways quote for the instrument that will be listed on Indian bourses. IL&FS will also be one of the market makers.

Since there is no corporate bond market in the country, the company is looking at introducing such instruments under the prevailing guidelines, which will have enough liquidity so that investors even with short-term funds can participate, the chairman was quoted as saying. IL&FS will raise around INR 500 crores (US\$ 107 billion) through this route. The company has already started discussions with investment bankers, the report said. "The company will appoint four investment bankers including three foreign banks and one domestic for the proposed issue," another company official involved in the discussion was quoted as saying.

IL&FS will raise INR 5 crore through this route. It is in talks with investment bankers.

SOUND BITES



"Benchmarking on a global scale is the only way to compete internationally. And to achieve this, Indian companies must have an export orientation."

-N.R. Narayana Murthy, Chief Mentor, Infosys Technologies Limited



"We have to be prepared for a three-digit increase. Crude oil prices are well above the \$70-mark... the petrochemical industry will have to keep reinventing itself."

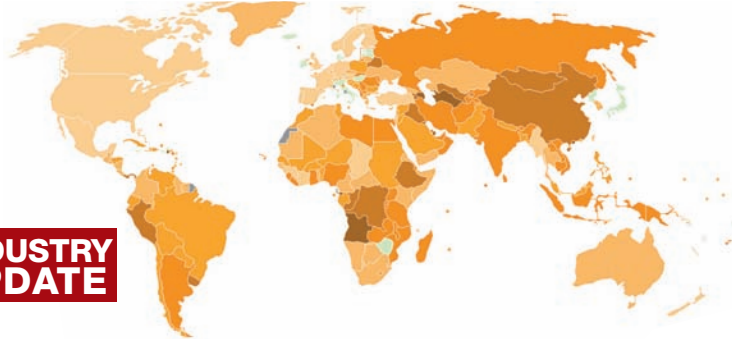
-Mukesh Ambani, Chairman, Reliance Industries Limited



"Talent acquisition, transformation and management are critical anchors for the growth of an industry."

-Nandan Nilekani, Chairman, UIDAI

INDUSTRY UPDATE



India, US reach agreement. New Delhi can tax 17.5 per cent of the profits earned by Indian units of the US companies in 2004-05.

INDIA has settled a disagreement over taxing profits of captive Information Technology services units and research arms of US firms, bolstering New Delhi's position as a preferred destination of such investments, said a report in the *Economic Times*.

According to the report, the negotiated settlement between the tax authorities of the two countries allows India to tax 17.5 per cent of the profits earned by Indian subsidiaries of the US companies in 2004-05. India had sought to tax 25 to 30 per cent of the profits. "This is a significant development," the daily quoted an official with the income-tax department as saying. The government could gain about INR 400-500 crore (US\$ 107 million) in revenues, the report said. Though the transfer pricing (TP) settlement is binding only for transactions in 2004-05, this would serve as a reference point in future disputes, it added. TP refers to the valuation of contributions by way of assets, services, and funds changing hands within an

organisation. TP rules check an MNC from shifting profits out of India. The report added that Article 27 of the tax treaty between India and the US provides that a firm, which has suffered from a potential double taxation, can seek relief through the competent authority under the mutual agreement procedure (MAP).

30%
OF PROFITS FROM
CAPTIVE IT SERVICE
UNITS WOULD
BE CUT FROM US
SUBSIDIARIES

"Most multinationals view transfer pricing as a tug of war between tax authorities and a MAP resolution ensures that the taxpayer does not suffer economic double taxation," Vijay Iyer, partner at consulting firm Ernst & Young, was quoted as saying by the newspaper.

Several multinational companies have set up their IT and research facilities in the country thanks to the availability of high-quality technical manpower and low labour costs. American companies such as GE, IBM, Dell, Accenture, JP Morgan and American Express have large establishments in India, said the report.

UPDATES IT SERVICES

Paris-based IT services and consulting firm Capgemini plans to hire more than 4,000 people for its India operations in this quarter. Its India headcount stood at 23,353 at the end of March, making India one of its largest centres; its India headcount grew by over 5 per cent in January-March.

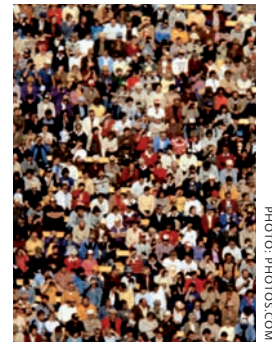


PHOTO: PHOTOS.COM

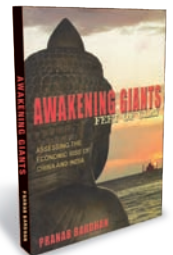
Its Raining Jobs: French firm Capgemini will be on the lookout for 4000 new faces for its India operations.

The finance ministry plans to form a core group of tax officials for rolling out GST by April next year.

BOOK PREVIEW

AWAKENING GIANTS: FEET OF CLAY

Pranab Bardhan's book focuses on the economic development of India and China in the past quarter century. It investigates the two countries' economic reforms and composition of growth. It also puts the spotlight on long-



term institutional and political-economic issues in these fast-growing economies. India release not announced.

PRINCETON UNIVERSITY PRESS

SHARE TRACKER

Road regulator expects to be debt-free. The authority plans to mobilise INR 40 billion in the current fiscal.

THE NATIONAL Highways Authority of India is planning to use multiple instruments to raise funds. Plans include capital gains tax exemption bonds, external commercial borrowings,

infrastructure bonds, term loans, and loans from multilateral agencies, banks and financial institutions, said a report. The planned construction of another 37,000km of roads over the next four

years entails a total investment of INR 8 lakh crore (US\$174 billion), of which market borrowings will be INR 1.2 lakh crore (US\$25 billion), the Business Standard reported. NHAI chairman Brijeshwar Singh said the estimated size of borrowing would be INR 100-200 billion annually for the next 15 years. Nihar Ranjan Dash, chief general manager, was quoted by the daily as say-



ing: "The government has already given in-principle clearance to the investment plan. However, NHAI will have to seek its approval on a case to case basis. Besides, the BK Chaturvedi Committee, whose recommenda-

tions have been accepted by the Centre, has also given its nod to NHAI's plan to award projects of 37,000 km. The plans will be executed in five-six years."

It quoted Dash as saying that NHAI expected to be debt-free by 2030-31 and added the authority, raised about INR 14 billion (US\$ 300 million) in 2009-10 through capital gains tax exemption bonds.

INDIA WATCH

\$14.2
billion
revenues
from India's
3G auction

Area	Population	Male	Female	Population Density	Urban Population
3,287,590 sq km	1.133 bn	600884425	523601762	359.14	340 million

Key performance indicators of the Indian economy, with patterns, trends and forecasts

ECONOMIC PROSPECTS FOR 2010

India's Economic Outlook Projection

Fiscal Year	2007	2008	2009	2010
GDP Growth	9.40%	7.30%	5.40%	7.20%
CPI	6.40%	9.30%	5.50%	4.90%

Source: Data taken on 7th May, 2010 from RBI website

Mean Probability Pattern of Real GDP Growth Forecasts

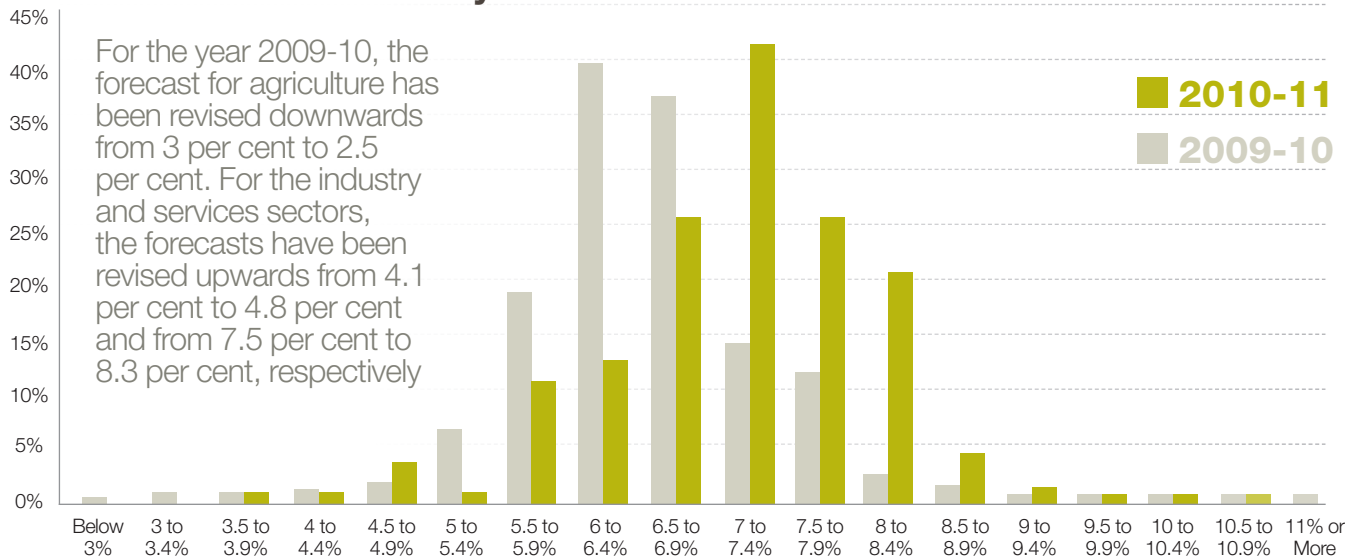


Chart 1: Year-on-Year Growth IIP

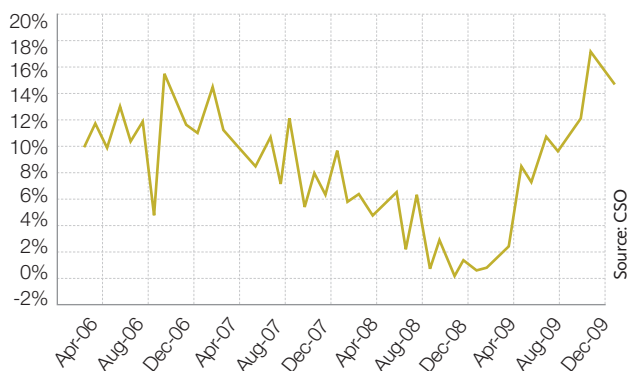


Chart 2: Year-on-Year Growth in Sectoral Indices

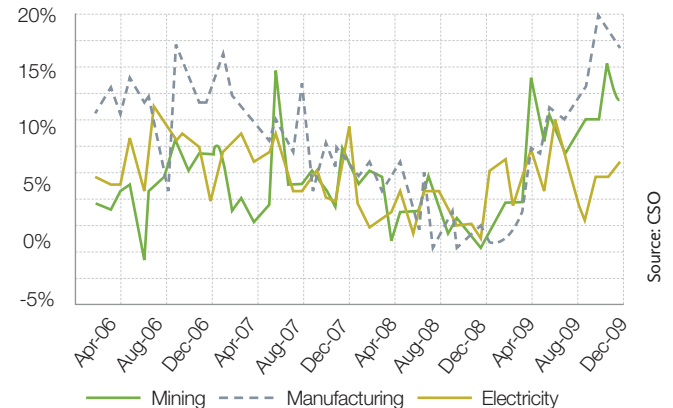


Chart 3: Contribution to IIP Growth in March 2010

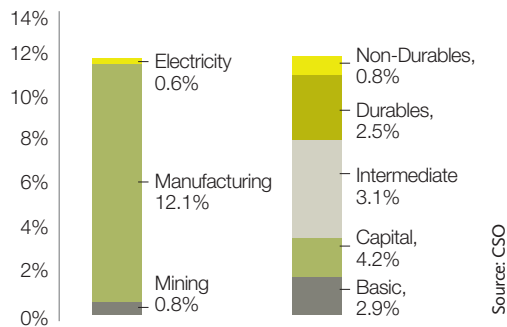
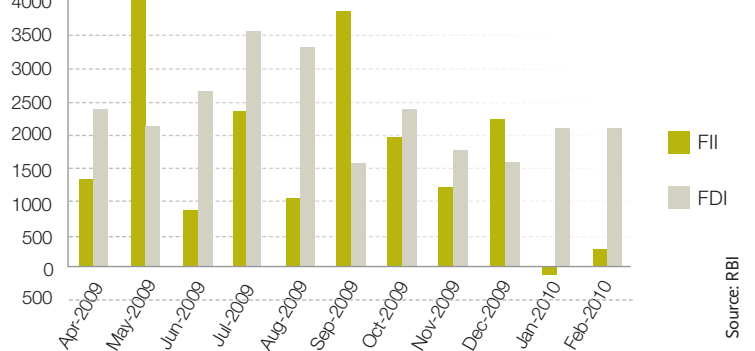
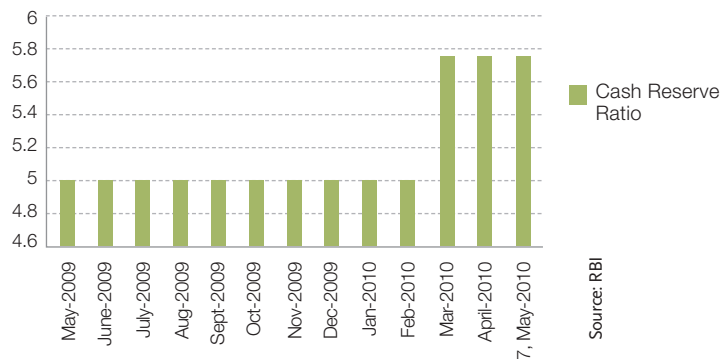


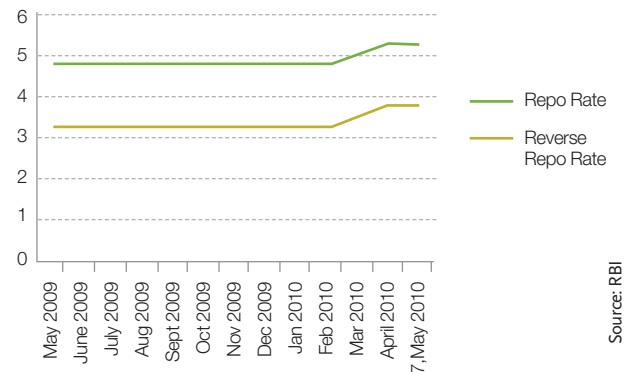
Chart 4: FDI & FII Inflows



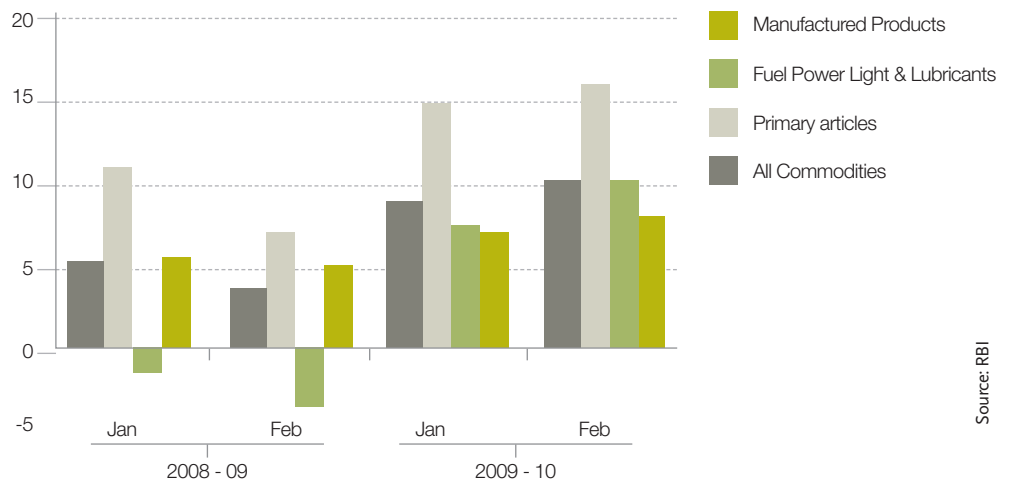
Cash Reserve Ratio



RBI Policy Rates



Monthly trends in Wholesale Price Index- monthly average (% change)



STOCK MARKET

Date	BSE Sensex	% Change	S&P CNX NIFTY	%Change
1.12.09	17198	11.6	5122	12.2
4.01.10	17558	2.1	5232	2.1
1.02.10	16356	-6.8	4900	-6.4
2.03.10	16772	2.5	5017	2.3

Source: RBI

CURRENCY EXCHANGE RATE

Date	INR/USD	INR/GBP	INR/JPY	INR/EUR
Sep 09	48.82	79.73	53.39	71.03
Nov 09	46.74	77.54	52.40	69.64
Jan 10	46.18	74.60	50.55	65.96
Mar 10	45.50	68.53	50.25	61.80
May 10	45.08	68.09	48.23	58.75

Source: RBI



COMPANY DASHBOARD

- ▲ **FIRST CAR IN INDIA:** Honda City
- ▲ **ESTABLISHED (IN INDIA):** Dec 1995
- ▲ **EMPLOYEE STRENGTH:** 3,394 associates
- ▲ **SALES VOLUME:** 61,185 (April 2009 to March 2010)
- ▲ **MANUFACTURING UNITS:** Greater Noida, UP, and Tapukara, Rajasthan

DRIVEN TO SUCCEED

The journey so far has been smooth and Honda knows that the road ahead is even better—consistent growth has led the company to invest more, and expand its service network. As the firm readies to launch its first world-class concept car in India, its confidence shows. **BY SHREYASI SINGH**

GLOBAL AUTO giant Honda couldn't have better timed its entry strategy to India. It's an advantage they have profitably leveraged, as the company is now the car manufacturer of choice across several automobile segments. "The Indian automobile industry was at a growing stage when Honda entered India. We anticipated the growth prospects of the industry when there were not too many international brands available for the Indian customer," says Jnaneswar Sen, vice president (marketing), Honda Siel Cars India.

Honda Siel Cars India Limited (HSCI) was incorporated in December 1995 as a joint venture between Honda Motor Company Limited, Japan, and Siel Limited, a Siddharth Shriram Group company, with a commitment to providing Honda's latest passenger car models and technologies to Indian customers. Over the past decade-and-a-half, the company has made an investment of INR 2,4000 crore (US\$527 million) in India. "Consistent growth has made us invest more, extend our product offering, and expand our service network here in India," adds Sen.

HSCI set up its first unit at Greater Noida, UP, in 1997.

Spread over 150 acres, the green-field project has a capacity of 100,000 cars. Its second plant at Tapukara, Rajasthan, went online two years ago. Occupying 600 acre of land, it has a capacity of 60,000 cars. The combined investment in the two projects exceeds INR 24,000 crore (US\$5.2 billion).

Rising sales are driving the investment. Last year, Honda sold nearly 62,000 cars, 18 per cent more than the previous year. The company has a strong sales and distribution network across 70 cities. From the new small car, Jazz, to the popular City, and luxury sedans Civic and Accord, Honda has a car for every segment.

"We have introduced some of our best global products in the Indian market. We entered the market with the Honda City, which became the best-selling sedan," says Sen, adding that the sedan has defined the company's journey in India. Since its launch in 1998, the Honda City has maintained its bestseller position in the premium car segment. It was 2009's Indian Car

of the Year. The model has won awards for its engine performance, reliability and design.

Honda knows that the Indian car market will continue to grow. Right now, only eight in every 1,000 Indians own cars, as against 800 in every 1,000 Americans. While the numbers are good for comparison, they also suggest that the American market is saturated, and the potential for the growth of the Indian market is tremendous.



**INDIAN
AUTOMOBILE
INDUSTRY WAS
AT A GROWING
STAGE WHEN
HONDA
ENTERED. WE
ANTICIPATED
THE GROWTH
PROSPECTS OF
THE INDUSTRY
WHEN THERE
WERE NOT
MANY CHOICES.**

—Jnaneswar Sen,
Vice President, Marketing,
Honda Siel Cars Limited

The cost competencies in India also make it a better investment option for companies. "In fact, India has emerged as an automotive hub and favourite investment destination for global automobile manufacturers," says Sen.

The Indian market is also considered to be more stable than most parts of the world, showing profits, growth in figures and rising sales even during the slowdown.

HSCI says this indicates that the fundamentals of their business are in shape here.

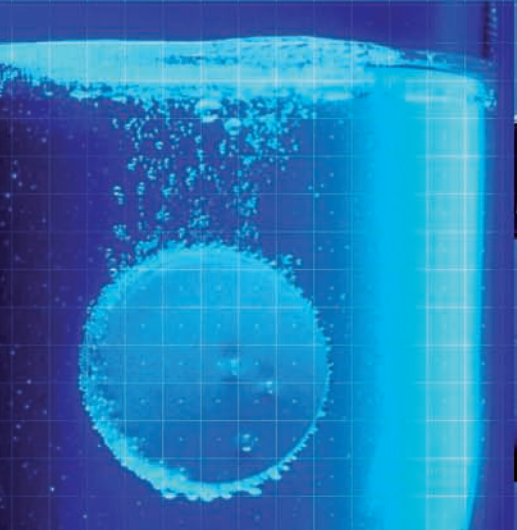
Their journey has been a positive case study for several companies who have similarly forayed into India.

Several European and American car manufacturers have followed Honda's instinct about the Indian market.

For them, Sen has some useful advice. "Indian customers are smart buyers and are aware of the new products and technologies. We were able to capture the mindset of evolving and discerning Indian customers and responded by offering our latest global products at regular intervals to suit their requirements. We are committed to introducing the latest technology products for our Indian customers, and we take their feedback regularly to improve our customer-service levels."

In fact, HSCI unveiled its new Small Concept Car at the Tenth Auto Expo in New Delhi, earlier this year.

Still being developed, the new car is the concept model of a small-sized vehicle, especially for India and other emerging nations. It is pegged to be a "true Honda"—running on a futuristic design with maximum cabin space. It is for the first time that Honda has chosen India for the world premiere of a "concept car", in what is a clear indication of its continuing confidence in the Indian market. www.ibef.org



Think Big Think Smart

Placing the customer first, Indian manufacturers are redefining processes, harnessing their workforce, and making India attractive for global manufacturers and investors.

BY DEBASIS SEN

India is one of the top 20 global powerhouses of manufacturing. It is easy to see why.

The right products and processes; an environment that promotes capital engineering; long history of manufacturing; a solid higher education system, and cheap and skilled manpower.

Having grown at nearly seven per cent annually over the last decade, India's manufacturing sector is now the 13th largest in the world, according to a recent CII-BCG report. What's more, the report predicts that India can jump to fourth place, if its assets grow, exports rise and the productivity of labour increases in the next 15 years. By 2025, India's assets would need to rise by almost INR 80 lakh crore (US\$ 1.7 trillion) and exports, by nearly 20 per cent, the report adds.

It is easy to gauge why manufacturing is so integral to the Indian economy—half of all exports come from this sector that employs 12 per cent of the total workforce, and contributes 15 per cent to the nation's GDP.

The government has said that it will announce a national manufacturing policy by August, this year. The right policy measures and the private sector's credit growth can help the GDP rise by 9.5 per cent this year itself. This would mean producing many more manufacturing champions – increasing the number of companies and raising annual revenue.

But the news is good so far. Indian manufacturers have been in an innovation mode—to raise operational efficiency, add new features and meet consumer needs. They have raised the quality bar for goods.

Ravi Kant, Vice Chairman, Tata Motors, explains, “By lowering interest rates and improving the efficiency of capital markets, the government has turned

India into an attractive business destination. Then, there are young entrepreneurs with a global vision and a growing middle-class with more money to spend.”

From local to global

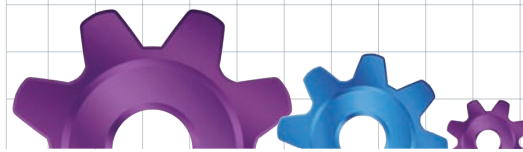
Once considered its weakness, India's burgeoning population is now transforming into one of its greatest strengths. As a result, investors are eyeing India for its demographic dividend. It is estimated that its employable population will rise by 70 per cent by 2030, the highest such rise in the world. More than 2.5 million graduates join its workforce every year. By 2015, the number will touch 70 million, accelerating the transition from teeming millions to ready resource.

An Investment Commission of India report talks about a set of industries that will collectively boost growth and expand investment opportunities by earning more than 180 billion dollars. The industries are: steel and aluminium, textiles and garments, electronic hardware, chemicals, automobiles, auto components, and gems and jewellery.

Dilip Chenoy, CEO and MD, National Skill Development Corporation, NSDC, says: “The time is ripe for us to become a manufacturing destination.”

Global manufacturing giants like Nokia, LG, Motorola, Samsung, Hyundai, Ford, Suzuki, GM, JCB and Caterpillar, ABB, Schneider, Honeywell and Siemens, have set up shop here. Though they began with the idea of servicing the local market, most found facilities strong enough to support and serve the overseas markets.

In the automobile sector, the investors'



A LARGE AND GROWING DOMESTIC MARKET

Over 300 million Indians (63 million households) are expected to have a household income of over \$6,000 by 2015. India is experiencing a rapid growth in consumer spending. The economic reforms since the early nineties have unleashed a new entrepreneurial spirit, creating a vibrant economy supported by rising per capita income. The average Indian can adapt to global trends, thanks to rapidly-growing disposable incomes and easily available consumer finance. This has created one of the world's largest markets for manufactured goods and services.

Growth in key sectors like infrastructure, services and manufacturing continues at about 10-12 per cent per annum.

The market for basic goods such as groceries and textiles is already large, driven by the demands of an enormous population. Markets for other products are equally large, and growing rapidly.

- Over 225 million telephone subscribers, growing at more than 75 million per annum.
- Over 8 million TV sets and 4 million refrigerators are sold annually and expected to grow at 20 per cent per annum.
- Total production of vehicles crossed 14 million (and more) in 2009-10, up from 2.3 million in 1998-99.

India has been ranked first by AT Kearney in a Global Retail Development Index of 30 developing countries.

—SOURCE: INVESTMENT COMMISSION OF INDIA

pilgrimage to India is powered by the rise of the Indian middle-class and the growing economy.

The stagnating auto markets of the US, Europe and Japan, have only accelerated the pull. The preference is expected to continue, as more companies taste success. Global consultancy firm, Deloitte, says that by 2020, at least one Indian company will be among the world's top-six car makers.

Hyundai Motors entered the India market in 1996. It set up a plant near Chennai for small cars.

Today, it exports nearly 300,000 cars each year. Suzuki's plant at Manesar, near Delhi serves as its global hub for small cars. Nokia uses its plant at Sriperumbudur in Tamil Nadu, to export mobile handsets to 50 countries, though the MNC has nine factories located in Brazil and South Korea, too.

Recently, the chairperson and CEO of GE, Jeffrey Immelt, announced the company's intention to enter the Indian market—both for local consumption and export. “Not surprising,” says NSDC's Chenoy. “Indian manufacturing will grow through a combination of domestic demand and skill-driven export competitiveness,” he explains.

If the trend continues, Americans may soon buy an SUV designed and built in India. Mahindra spent \$120 million to design the Scorpio. The company now plans to launch a version of the four-cylinder, diesel-powered vehicle in the US, via a partnership with Global Vehicles, USA. The company says that more than 300 dealers have already signed up to sell the vehicle.

The impetus will come from other quarters, too. Reliance Industries' three-year old Jamnagar complex combines a petroleum refinery and petrochemical plants. It manufactures a range of fuel from simple

A Credit Suisse Group study predicts that consumption will continue to grow by 16 per cent for the next two years, fuelled by the \$1 trillion construction projects, nation-wide.

petrol to high-purity Aviation Turbine Fuel. The complex also produces plastics and fibre intermediates.

In the late seventies, Reliance began with textiles. Over the years, it has pursued a strategy of backward vertical integration in polyester, fibre intermediates, plastics, petrochemicals, petroleum refining, and oil and gas exploration and production. It is now a fully-integrated company, along the materials and energy value chain.

“In the past six years, firms have restructured their manufacturing operations and implemented world-class practices,” remarks Arindam Bhattacharya, Managing Director, Boston Consulting Group in India. “They have started building a globally competitive manufacturing base in pharmaceuticals, auto components, cars and motorcycles.”

Besides auto parts, telecom equipment and pharmaceuticals, India has the potential to compete in skill-intensive industries. Think fabricated metal products, high-end chemicals, consumer electronics and computer hardware. The fulcrum of manufacturing, however, is the engineering industry, standing at nearly \$28 billion, five years ago.

Building capacity

Benefits of large capacities, which bring in economies of scale, have caught the attention of Indian companies across categories. Today, the automobile industry accounts for 20 per cent of all goods manufactured.

Several home-grown manufacturers have achieved global status. Hero Honda is the world's biggest maker of motorcycles; Moser Baer the second-largest maker of optical discs in the world; United Spirits number two manufacturer of alcoholic spirits and Tata Motors is the world's fourth largest manufacturer of trucks.

Britannia recently increased its capacity by 60 per cent, implemented a long-term distribution-manufacturing strategy and put into place a continuous replenishment supply efficiency system. Improved supply chain management means stocks are now refilled within 24 hours, nearly doubling their nation-wide availability. Britannia claims that the strategy has saved the company nearly \$30 million.

Rising demand in the automobile, white goods and infrastructure sectors is pushing

up the demand for steel. A Credit Suisse Group study predicts that consumption will continue to grow by 16 per cent for the next two years, fuelled by the \$1 trillion construction projects, nation-wide.

Japanese tyre maker Bridgestone Corporation plans to invest nearly \$37 million at its Indore manufacturing unit to produce truck and bus radial products. Ford India's Chennai plant is meant to be “Ford's global low displacement engine” hub. The facility will produce both petrol and diesel engines that will initially go into its small car—Figo. With an investment of \$500 million, the plant would produce 200,000 cars and 250,000 engines. Swiss company Holcim plans to invest \$1 billion in setting up three greenfield manufacturing plants in India in the next five years.

Srithai Superware Pcl, Thailand, the world's largest brand in melamine-ware, plans to invest in four manufacturing plants. Each will have a 3,000-tonne capacity and will require an investment of \$8 million.

The first plant would go online next year. With 10,000 designs and 3,000 shapes, Srithai aims to capture a fifth of the INR 1,200 crore (US\$256 million) organised tableware market in India.

Made in India

Indian auto parts manufacturers have

Indian auto component industry is expected to double its current income to \$40 billion by 2015 (ACMA).

already proved their mettle, and Kanpur leads the charge. Though Kanpur is far from any car making factory, a cluster of 30 companies in that city manufactures high-value and critical automobile components for giants like GM, Toyota, Ford and Volkswagen, for their North American and European markets.

“Earlier, even to make a dye we would travel to Taiwan or South Korea. Now, entrepreneurs are making their own dye here,” says R.K. Agrawal, Managing Director, Netplast, one of the Kanpur cluster companies. Agrawal, a senior technical executive who has worked in China and India, believes it is all about “advantage India”. “The intelligence, even at a worker's level, is superior. Democracy and economic liberalisation have left their impact.”

India's engagement with quality manufacturing began in the early nineties, after the government did away with licences for producing goods and services. The liberalisation of the Indian economy after 1991 opened more windows. The Confederation of Indian Industry (CII) began to train auto-part vendors in quality management. Companies took the next step of inviting Japanese “quality gurus” to build processes in manufacturing units. Slowly, the just-in-time production method became a norm, as companies saw its benefits.

The acceptance of international practices raised quality, and productivity. As a result, 30 Indian companies have received the Deming Award, often called the Oscars of manufacturing. Interestingly, many of these manufacturers are based in and around Chennai.

Such “localisation of components” has reduced costs, especially of cars, being sold here. Grooming multiple vendors helped the industry bounce back after the recent global downturn.

“Each of the half-a-million cars that India will export this year, is a high-quality vehicle built to exacting standards with more than 95 per cent components made in India,” says Surinder Kapur, Chairperson and Managing Director, Sona-Koyo, a maker of steering assemblies. India is on its way to becoming the fourth-largest car exporter in Asia, overtaking China. Recently, Delphi Automotive, operating in India for 14 years, invested over \$200 million in a bid to

expand its range of localised products for the local market.

The Indian auto component industry is expecting to double its current income to nearly \$40 billion by 2015. According to the Automobile Component Manufacturers' Association (ACMA) of India, this signals an annual growth rate of almost 11 per cent between 2008 and 2015.

Innovation drive

R&D and innovation have gained the respect they deserve. "We question everything, nothing is sacred," says the operational head of an auto-component manufacturing company based in Faridabad. Continuous innovation has helped to produce better goods and add features without raising the price substantially.

Recently, Maruti Suzuki asked its 200-odd vendors to cut component costs by three per cent, across the board. These vendors were supplying nearly 80 per cent of the components to the company. The reduction saved Maruti INR 700 crore (US\$ 150 million) and every car buyer, nearly INR 7,000 (US\$ 150). Everyone is a winner.

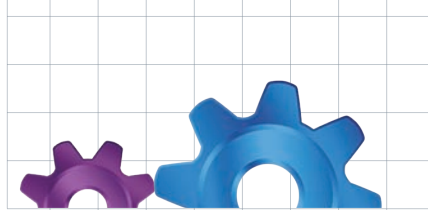
So far, the CII Institute of Quality has conducted 10 batches of Six Sigma Black Belt certification programmes, for more than 100 organisations. Companies are proactive about delighting customers and maintaining market share. Last year, Britannia removed 8,500 tonnes of transfat from its biscuits, without any regulatory compulsion—the only biscuit manufacturer in India to have taken such a step. It also fortified half of its products with vitamins and micro-nutrients.

Continuous technological upgrade is becoming quite the culture in the cement industry. Nearly 93 per cent of all the cement is produced with the eco-friendly dry-process technology.

Constant innovation and thrust on R&D ideally should enhance global competitiveness of the Indian manufacturing sector, believes Dayanidhi Maran, Union Minister of Textiles.

Brain power

After 1991, competition forced companies to dump the culture of import-substitution of products. A generation of savvy entrepreneurs emerged, who looked at the future without the baggage of the past. Their sky-



80%

of FDI between 2000 & 2003 went to six states and one union territory.

is-the-limit attitude paid off.

Far-sighted companies utilised India's pool of scientific talent that helped to de-automate, and locally design and procure some of the more expensive aspects of auto parts manufacturing. A BCG report stated that such process engineering cut capital costs of component plants by 40 to 60 per cent. The ripple effect touched several multinationals.

Today, India is a destination for global R&D investments. Close to 225 Fortune 500 companies have R&D centres in India, besides a host of government and privately-funded organisations. A Thomson Reuters study, "Global Research Report: India" released last October, forecasts that within eight years, the country's research productivity would be comparable to most G8 nations.

Sun Pharmaceuticals, one of India's biggest drug company by market capitalisation, will spend \$70.24 million in R&D of low-cost versions of original drugs to be sold in the domestic and global markets.

Apollo Tyres is all set to make Chennai its hub for manufacturing and R&D. It is setting up a \$432 million manufacturing facility.

Larsen & Toubro reached a milestone in the Indian power sector by establishing the country's largest transmission line research and testing centre at Kanchipuram (near Chennai).

The crispy chip

The semiconductor industry is also priming up for growth. The government has cleared 12 proposals under its \$33 billion Special Incentive Package Scheme (SIPS) for the industry.

The states are chipping in, too. Karnataka has announced a comprehensive semiconductor policy, promising financial aid to companies in the electronics systems and semiconductor space. The policy aims to help start-up semiconductor units engaged in design and embedded software.

Semiconductor sales in India are mainly driven by telecom, automotive, industrial electronics and consumer electronics. Solar and renewable energy and automated healthcare services sectors, too, are beginning to push demand and growth for semiconductor products. Utilisation of fabrication units, less than 50 per cent a few months ago, has picked up. One of the biggest consumers of the chips, the wireless handset market, is growing. The automotive sector is also showing an increased appetite for chips.

This sector could also earn handsomely from the government's decision to modernise its armed forces and from WiMax, 3G, DTH, medical electronics, photovoltaics and nanotechnology.

The Centre for Railway Information Systems is also planning to use a micro-controller based chip technology, developed by NXP Semiconductors, for its Automatic Ticket Vending Machines.

According to the India Semiconductor Market Update, this sector will earn nearly \$8 billion this year, up from \$6 billion, two years ago. The update is compiled by the India Semiconductor Association and Frost & Sullivan.

Fast-track growth

According to a recent KPMG report on the manufacturing sector, India is one of the fastest-growing large economies in the world, representing an economic opportunity on a massive scale.

India is one large part of a still larger Asian story. The world's economic centre of gravity is shifting-away from the established, wealthy economies of Europe, Japan, and North America and towards the emerging economies of China, India, and

the states of South East Asia. This shift is probably unstoppable. The established economies are high in costs, especially manufacturing costs, and poor in population resources. Great improvements in physical and communication infrastructures and the dismantling of barriers to investment and trade mean that economies like India and China can now leverage their mobile and low-cost labour pools on a global scale, says the report.

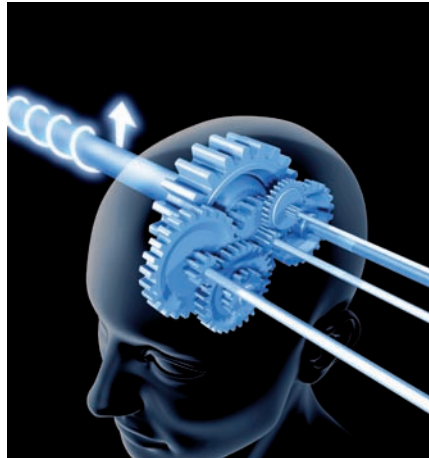
The result is Asian growth rates that are now and are anticipated to remain well above the global average. China has been growing at 10 percent or more since the beginning of the decade. India has grown at over five percent, expanding at over eight percent this year, and most likely the next. Compare that to the European growth of less than two per cent on a 10-year average, and U.S. growth of around three per cent. On these trends China and India are anticipated to be the world's two biggest economies by mid-century, the report adds.

Advantage India

Making a comparison between India and China, the report quotes many commentators as saying they assume that China will eventually be the world's largest economy. This is not assured: half a century is a long race, and India has some advantages that China lacks.

India has changed, and fast. "If you had asked me 15 years ago I would have said there was no hope for India, economically," the report quotes Kuldip Khushoo, head of manufacturing at Honeywell Automation India, as saying. "There were so many regulations and restrictions. But now there has been a sea change, a real opening up of the economy."

Will it be India or China to win the race to dominate the world economy in the second half of this century? Many assume it is China, the economy that has been growing and drawing in manufacturing investment at an astonishing pace for the last two decades. But this is a long race, and India has several long-term advantages. According to the CII, the average return on investment in India is over 19 per cent, compared with just over 14 per cent for China. That higher return is a reflection of the higher value-added manufacturing investment



Maharashtra has attracted the **largest amount of foreign direct investment among states.**

that India attracts. "If you are looking at high volume and relatively low technology manufacturing, China tends to be more competitive," says Khushoo. "But in lower-volume manufacturing where technology use is more intensive, then India is better," he says. Another foreign manufacturer with many decades' experience in India agrees:

India is very competitive at low volume, high specification engineering work, which is why businessmen are now talking about using India as a global source point for these products.

Remuneration costs are also at the low end of the emerging economy scale, says the report. India is marginally more costly than China for most senior managers, such as directors of HR and manufacturing, and CFOs. But costs are significantly less in emerging economies, such as Brazil

"In lower volume manufacturing, where technology use is intensive, India is better."

— Kuldip Khushoo,
Head of manufacturing,
Honeywell Automation, India

and Mexico. "Top level skills are still cheap compared to their equivalents in Europe – and that includes managers with real international experience," says Suhas Kadlaskar of DaimlerChrysler. Kuldip Khushoo of Honeywell agrees, saying, "I have recently been involved in setting up high tech production lines in India, and it is really quite cheap to get engineers in India, and they are good engineers – they still cost maybe a half or a third of what they would in Europe."

Six states of success

According to the World Bank Investment Climate Report 2004, a large part of the recent foreign direct investment (FDI) in India has gone to the following states and one union territory: Delhi, Maharashtra, Karnataka, Tamil Nadu, Gujarat, and Andhra Pradesh and the union territory of Chandigarh. World Bank's Investment Climate Report 2004 said that over 80 per cent of FDI in 2000-2003 went to those states.

As the political hub of India, Delhi attracts representative offices from a wide range of businesses, although many have their main production plants elsewhere. Local industrial policy is to develop that trend: the Delhi State Industrial Development Corporation seeks to encourage more small-scale investments to the territory, and does not usually approve large-scale investments. High value-added small-scale manufacturing with a small environmental footprint is preferred. Delhi scores very highly on most ease of doing business measures.

Gujarat is a relatively wealthy state and scores well on corporate perceptions of

labour regulation and on perceptions of infrastructure. It is seen by some corporations as an attractive base that is close to Mumbai, the commercial centre of India, but with significantly lower costs than Maharashtra.

Maharashtra has attracted the largest amount of foreign investment by any state in India since 1991, benefiting particularly from the historic status of its capital Mumbai as the country's commercial hub with a rich reserve of management, legal and technology services. Maharashtra is easily the most industrialised state in India, and the most urbanised and corporate perceptions of labour regulation and infrastructural obstacles are fair. State policy is to develop technology industries in Mumbai—large-scale heavy manufacturing companies are often attracted to smaller cities such as Pune, where capital grants and tax incentives are higher, although Mumbai is the biggest port city.

Karnataka's capital, Bengaluru, is the capital of India's IT revolution. The state is an important educational centre in India (with over 70 higher educational institutions devoted to technology, Karnataka produces a large proportion of engineering graduates). However, infrastructure is under increasing strain in Karnataka's cities, especially Bengaluru. The concentration of talent and the attraction of culture and climate in Bengaluru draw new investors to the city.

Chandigarh is a geographically small 'capital territory' of less than a million inhabitants, serving as the capital city of Punjab and Haryana. It owes its position in the list of 'high FDI' states to its attractiveness to service companies, especially financial institutions seeking to serve the north-western states. Local industrial policy is focused on attracting IT investment.

Andhra Pradesh scores relatively highly in terms of investment attractiveness, attracting a wide range of industrial investments. The reason is that investors report that easier labour regulation and fewer infrastructure constraints make the state investment friendly. Andhra Pradesh has also benefited from a structured and targeted investment policy, with capital subsidies and long-term indirect tax holidays for incoming industries.

Tamil Nadu, with an eastern seaboard,

THE NUMBERS LOOK GOOD

India has an advantage. Its working-age population will grow for the next 20 years at least, while China's is now declining. Demographics drive growth: over the last century, the relationship between youthful populations and economic growth has been clearly established. Population may put Indian growth well ahead of China by mid-century, says a Goldman Sachs report. This exciting potential is closely linked to India's remarkable demographic advantage. By 2020, India will create the equivalent of the combined working population of France, Germany, Italy and the UK. Writing for *BBC News*, Kaushik Basu, Professor of economics, Cornell University, USA, had said many years ago, that by 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan. By 2030, India's dependency ratio should be just over 0.4, meaning there will be more people in the 15 to 64 years working age group, than outside it.

scores among the top six 'high FDI' states. It scores moderately well in terms of corporate perception on infrastructure and labour regulation. Foreign investors have located chemicals, textiles, and auto production in Tamil Nadu—Hyundai and Ford, for example, are now significant auto exporters from their production plants in Chennai.

And Nokia recently announced plans to set up a new manufacturing plant in the state. State policy is to build on these investments, with 10 per cent asset investment subsidies available for particular industries, including auto parts and pharmaceuticals.

Auto pilot

The KPMG report clearly states that India is now the world's fastest-growing large market for passenger cars. India's automotive industry is in some ways typical of the country's industrial development. Automaking has a long history in the country, longer than in many emerging economy competitors—General Motors began assembling Chevrolets in India in 1928. The turning point was the government's decision in 2002 to lift all equity caps for foreign investors in the sector. Other barriers to foreign manufacturers have also fallen. "There are hardly any important non-tax barriers now," says Suhas Kadlaskar of DaimlerChrysler. "Product certification for example is no longer much of a problem."

Disposable income is rising fast and, according to research on consumption patterns by Deutsche Bank, Indian consumers are more strongly predisposed than other Asian consumers to commit rising incomes

to buying vehicles. India currently has one of the world's lowest per capita passenger car ownership rates, with less than six cars per 1,000 people in 2004. The next 10 years are likely to see the market grow dramatically as consumers upgrade rapidly, according to the report.

Foreign manufacturers began a serious move towards India in the 1990s, and many now operate as wholly owned subsidiaries, although many are joint ventures—for example, the biggest manufacturer of passenger cars by market share (by volume), Maruti Udyog, is now wholly controlled by former JV partner Suzuki of Japan. Maruti, with around 51 per cent of the market, is followed by South Korea's Hyundai (18 per cent) and India's Tata Motors (16 per cent). The seven companies in the top 10 by market share each have less than 3 per cent of the market; only one, Hindustan Motors, is Indian (the others are Ford, Honda, Fiat, GM's Opel, Toyota, and Skoda). However, in commercial vehicles Indian companies dominate: Toyota is the only foreign manufacturer that has a significant market share in light commercial vehicles, while the truck market is overwhelmingly dominated by India's Tata, adds the report.

There are around 400 auto component manufacturers, and a large proportion of them (some 40 per cent) are joint ventures with foreign manufacturers. (Bosch, Ford, General Motors and a large range of Japanese manufacturers have joint venture presences in India.) Indranil Chowdhury of Volvo believes that the component supplier network is now well developed. "Whether

you use it depends on your volume,” he says. “We import a lot of components, because it is expensive to develop local partners for a low volume of components. But the availability is there. The technology is there. It’s just a question of volume.”

Auto components are increasingly exported from India by manufacturers, says DaimlerChrysler. The company says, “We don’t export cars, but we do export components back to Europe, and we have about a 15 per cent cost advantage over European sourced components.”

The market overall is increasingly competitive.

The biggest maker of passenger cars, Maruti, has had to share the market in recent years with newer entrants. Indian competitors are offering a strong challenge to foreign manufacturers: Tata, for example, has developed a small car to be priced at INR 100,000 (US\$ 2,136) less than half-the-cost of the lowest-priced passenger car now on the market. The auto sector is already one of the most significant attractors of FDI in India, and competition is making it one of the most fiercely contested markets, the report adds.

Says Indranil Chowdhury of Volvo: “The auto industry in India has really matured. We are very upbeat about India, because we have been growing fast and we think we will go on growing fast.”

In conclusion, the report says that over the last 15 years India has changed much faster than many predicted.

The door to foreign investment is now open, and the ambition to make investments work is tangible.

The task of building an efficient economy remains an enormous one, but companies agree that, whatever the faults in execution, India’s policymakers are moving in the right direction. “There is no problem with industrial policy,” says Khuldip Khushoo of Honeywell. “Look at what the latest policy documents say—they say we will dismantle the regulatory system, we will bring in technology, we will upgrade Indian industry.”

“What has the invested dollar returned to us in India, compared to say China?” asks Pradipta Sen of Emerson India. “We have been in India for 25 years, and 17 years in China. Every dollar we have put into India has earned a very good return. Every dollar

invested in China promises a terrific return, but it is still only a promise. Investing in India is justified in terms of a solid historical business case.”

Government participation

The gradual removal of import licensing, reduced tariffs and liberalised exchange rates have all contributed to a sustained domestic consumption-led boom. The focus on increasing manufacturing growth through SEZs, private participation in ports and massive investments in roads, is paying dividends. The growth of Indian manufacturing has been driven primarily by domestic consumption. While the services sector has grown at a rapid pace, the share of the manufacturing sector in the country’s GDP has stagnated at 15 per cent. The government proposes to create National Manufacturing and Investment Zones (NMIZ).

They will provide infrastructure, a progressive exit policy, structures to support clean and green technologies, appropriate investment incentives and business-friendly


approval mechanisms. Each zone will have a combination of production units, public utilities, logistics, environment protection mechanisms, residential areas and administered services.

In April this year, while releasing the “Strategy Paper on the Growth of Engineering Exports” (commissioned by EEPC India—a central department set up by the ministry of commerce—and carried out by Ernst & Young) Union Minister of Commerce and Industry Anand Sharma said that engineering exports from India have grown considerably in the past few years with a growth rate that has been higher than the world average. Sharma stated that the paper has set a target of US\$ 110 billion for total engineering exports, to be met by 2014. “This is a robust target. If the engineering sector is able to maintain its share of nearly 22 per cent in total exports by 2014, India’s total exports should be in the range of US\$ 500 billion,” he added.

“The global recession is likely to leave its mark for some time more, particularly in the developed world, and hence it is important that our exporters concentrate on two critical ingredients for growth: remain competitive and maintain quality, and secondly diversify into new markets. The strategy paper, I hope, has enough inputs that members of EEPC India can productively deploy and benefit from,” Sharma added.

Sharma believes that the next decade is crucial for India’s future, as over half-a-billion young people will leverage its demographic dividend. To emerge as the world’s leading manufacturing centre, focus will have to be on attracting new technologies such as green manufacturing and developing skills.

Take the Delhi Mumbai Industrial Corridor Development Project for instance—it will generate significant economic activity along the dedicated rail freight corridor between Delhi and Mumbai. It aims to double employment potential in seven years, treble industrial output and quadruple exports in nine years.

In India, the tide is set to change with global players opting for the country as a destination for their manufacturing activities. And with stagnation in the US and European markets, any growth story cannot be but linked with India’s story. 



The Delhi
Mumbai
Industrial
Corridor
Development
Project is
estimated
to cost \$90
billion.



PHOTO: PHOTOS.COM

SEEDING Green

Innovation is the buzzword for the new Indian entrepreneur—the driving force behind the country's march to greener pastures. BY SHREYASI SINGH

By 2020, industry experts say that renewable energy will be a nearly US\$10 billion business in India. The size of the energy efficiency market is said to be many times that number.

At a recent conference, Ajay Mathur, director-general of the Bureau of Energy Efficiency, said India's energy efficiency market was worth about US\$15 billion.

These numbers suggest India will be a major player in green businesses, and Indian companies will have to lead the eco-brigade. The Bureau of Energy Efficiency says to deliver a sustained economic growth rate of 8 per cent to 9 per cent in the next 20 years and to meet lifetime energy needs of all citizens, India needs to treble, even quadruple, its primary energy supply and increase its power generation capacity by six times.

Undoubtedly, India needs careful planning and creativity to successfully execute green business projects. Analysts say the country has definite leadership potential in greening the cement, paper, building and renewable energy sectors. This confidence flows from the incredible entrepreneurial buzz in this sector. Clever new ideas have mushroomed across industries like clean technology, eco-tourism, green building materials, recycle/reuse technologies, sustainable agriculture, renewable energy and water management. "Every day, we get three to four proposals," says Poonam Garg, Assistant General Manager at IFCI Venture, which launched the Green India Venture Fund in 2008 with a corpus of INR 330 crore (US\$ 70 million). "I have worked with IFCI Ventures for more than 15 years. But, in the last year, that I have been focused on the Green India Venture Fund, I have seen great, great growth," adds Garg.

Since its launch, the fund has disbursed nearly INR 180 crore (US\$ 38 million) to

five companies. In fact, the fund has already exited from one of its portfolio companies, Luminous, with an unprecedented 42 per cent return in the first year. Luminous manufactures power inverters, solar inverters and several packaged power products.

"In the last two years, both consumers and businesses have shown awareness of being environmentally conscious," says Karan Gupta, Director, Breathe India Ventures, a new \$30 million venture capital fund for seeding green businesses.

"Workshops, conferences and investor events have doubled and tripled in the last year. We have already processed 150 entrepreneurs," adds Gupta. He is especially bullish on small hydro electric projects and other off-grid energy generation ideas. "There is a bigger market for proven technologies rather than new ones. Earlier, these technologies probably did not manage to mainstream themselves for lack of support. Now, a strong government push and availability of commercial capital have ensured there is a huge potential in the off-grid sector."

Niche areas are emerging, too, like fuel cell technologies, off-petrol products and eco-tourism. But investors believe the sun has just risen. The Green India Venture Fund says entrepreneurs were earlier cautious about inviting investments, but in the last six months specifically, there has been a great thrust. "For example, the solar sector has received a lot of attention.

Probably in two more years, this field will mature and show profitability. Similarly, things are moving well in wind energy. The success of these industries also shows there is much more scope in industries that manufacture and supply to them. Backward integration is taking significant steps ahead," explains Garg. She adds that the government can help growth by initiatives like instituting a body similar to the Technology Development Board, dedicated to nurturing green technologies.

Other industry observers agree, saying that the money coming into India is at the deployment stage. They believe the huge untapped R&D potential will move after the new technologies start getting traction with consumers.

"What's also great is that from a clean tech perspective, this entrepreneurial energy is a pan-India movement, though each industry does have its clusters. For instance, there are more hydro projects in the north, and more innovations in bio gas in central India," continues Gupta. Investors face another big challenge - to justly capture good ideas. There is a lot of innovativeness in the rural areas, especially in off grid sectors, but reaching these is not always easy.

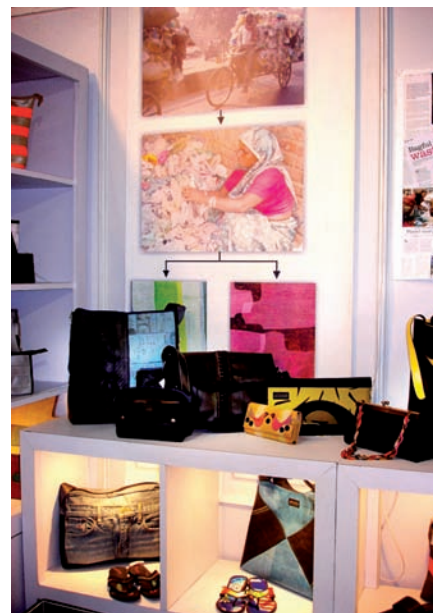
But, with the grit and ingenuity many of our green entrepreneurs have shown, it'll be wise to expect even more phenomenal growth in this powerful, emerging field. We look at a few companies who symbolise this spirit.

Conserve India

It's an unusual proposition but one that defines global inter-connectedness. At a factory in a crowded, industrial neighbourhood of Delhi, Shalabh and his wife, Anita Ahuja craft a stylish range of clothes, carpets, footwear, bags and jewellery for a foreign clientele from a material they call "HRP" or Handmade Recycled Plastic.

Shalabh and Anita's company, Conserve India, has developed an alternative recycling or up-cycling process that converts discarded plastic bags into HRP. Conserve supports a motivated and well-trained team of rag pickers who scour overflowing land fill sites for the refuse.

The bags are then processed into recycled sheets, using a process that is more energy efficient and ecofriendly than the conven-



tional recycling methods.

They convert used polythene bags into "renewed" innovative material with significantly different properties and great visual appeal, without using any colour or dye. Founded in 1998 as a social mission to work in energy efficiency and waste management, Conserve started making HRP in 2002.

Products made out of HRP now grace high street shelves across Europe, often retailing for as much as US\$400. It's a successful business model that delivers both high fashion and life-giving opportunities. The firm employs over 1000 people across three slums in Delhi using the ubiquitous plastic bag as an unlikely resource for income generation. It uses its profits to run welfare projects in education, health and training of workers.

Conserve products sell in 2,500 retail stores in Europe, USA and Australia and the firm is also a New Ventures India portfolio company, which says, "the company exemplifies the recycling spirit by converting trash to treasure". NVI believes Conserve's true value lies in the fact that by tackling the dual problems of waste and poverty, it manages to attract a captive audience of those who buy "fashion with a conscience".

"When we started the business side of Conserve India we decided that our products would be a better fit in European,

Company exemplifies recycling spirit by **converting trash into treasure, combats waste and poverty.**



American, and Australasian markets. This was partly a pragmatic choice. Selling abroad meant that we were in higher value markets and could earn more from our products," say the co-founders. Sales abroad have validated this profitable gut with a clear trend indicating that a "right-fit" clientele is willing to pay more for fair-trade articles, thus delivering large profits for a low-cost process.

International buyers already demand a higher volume of their existing products, and their product line can grow to other items such as shower curtains and floor tiles.

Conserve is also preparing to launch its first store in Delhi, staffed by many workers who started out as rag pickers. "Attitudes are starting to change in India. There is now an understanding of the importance of preserving as much of the world's resources as pos-

sible. People do want to make the statement that they care about the environment." India will soon be the third largest consumer of plastics in the world, and Conserve will keep weaving threads of success.

Ecomantra

Ecomantra is a sustainable tourism venture promoting eco-friendly, activity-oriented eco-holidays.

It was founded in 2001 by a group of nature lovers and members of the Bombay Natural History Society.

They began with promoting eco-friendly home stays near Mumbai and Pune and conducting eco-workshops in Mumbai. But soon, Ecomantra was running an eco-camp, The River Trails, in Kolad, Maharashtra where it conducts programmes on proactive learning.

Ecomantra has partnered with the local

community in Kolad to build, manage and run the camp. "In fact, the idea for the camp came about in 2004 when we were invited by a villager who owned a small piece of land," recalls Mahrukh Goel, a former advertising professional who forms the nucleus of the firm along with her partner, Ravi. "Mahesh used to run a small boating operation in the river next to his land, a stunningly located 1.5 acre plot. But, he was running into debt which is why he asked us to take over his land and do something. What emerged was a community tourism project," adds Mahrukh. She says the camp was entirely constructed by local residents, rendering a rustic look, and ensuring the project was low-impact and participative. It is also Maharashtra's first and only community-owned campsite.

The adventure trail and customised itineraries for travellers, generate a turnover upwards of INR 1 crore (\$10 million) for Ecomantra. "The mass tourist is not our target audience. We only aim at the well educated, upper middle class. As a genuinely eco-company, we can demand higher tariffs," Mahrukh says.

Plans are afoot to grow to multiple sites, and Ecomantra is looking to attract suitable equity partners to chart this growth. The founders admit that raising funds is not going to be easy. Investors aren't showing the same zeal for the business, but the capital should eventually trickle in. "Eco-tourism is growing rapidly, worldwide, but it is new in India. The potential is very, very large."

Solkar

K.E. Raghunaathan personifies the spirit of brave entrepreneurship. He set up Solkar Solar Industry Ltd, in 1985, a time when terms like renewable energy and green business weren't even coined. An engineer, Raghunaathan has stayed true to what he calls his passion.

His company's mission statement underlines his belief: "to bring the sun closer to the common man."

"Nobody would dare enter this industry then," says Raghunaathan. His journey began with manufacturing industrial solar water heating systems. The first company with an ISI certification for this product, Solkar has installed nearly 45,000 sq feet of solar collectors, nationwide. Collaborating

with a German scientist to make solar meal makers won Solkar the Best Small Scale Industry Award in 1996. Such meal makers are only made in India.

Solkar, however, has specialised in lighting, spanning a wide range of portable, indoor and outdoor products. In 2007, they launched a revolutionary LED Street Light, priced at INR 10,000 (US\$ 213). They also sell all-solar fans, mobile phone chargers and torch lights through more than 100 dealers across India.

An excited Raghunaathan says: "The market has picked up only last year. Consumers are aware, the need is high and people can afford it. I can finally see it taking off. What subsidy couldn't all do those years, public



"e-Waste is a rich source for metals, such as platinum, gold, palladium and silver, and base metals like copper, and tin, which **we source, extract and sell at commodities market at MCX rate.**"

— **Rohan Gupta**, COO,
Attero Recycling

demand will." The company employs 75 people and reported a combined turnover of a little more than INR 6 crore (US\$ 1.3 million), last year. They have manufactured an affordable, innovative solar lamp named Wonderlite. Solkar has partnered with ExNoRa, a Chennai-based NGO, for Light A Home, a programme that aims to donate one million solar lamps to the poor.

ExNoRa's campaign aims to replace the ageing and polluting kerosene lamps across Tamil Nadu.

"We need to create greater awareness, funding solar pilot projects at schools and engineering colleges," adds Raghunaathan.

Attero Recycling

Nitin and Rohan Gupta see business in waste. Founders of Attero Recycling, an integrated end-to-end electronic waste recycling company, the Guptas have an eco-friendly solution to e-waste. Attero means waste in Latin. The idea germinated three years ago, when the brothers were struggling with trying to dispose of an old laptop. "We figured it was not only an environmental issue, but a viable business opportunity, too," says Nitin Gupta, an IIT Delhi graduate.

At Attero, e-waste is an important resource. "E-Waste is a rich and cheaper source for metals. It contains precious metals like platinum, gold, palladium and silver and base metals like copper, lead, tin, etc. We extract all the precious and base metals that we source from across the country, and sell them in the commodities market at multi commodity exchange (MCX) rates," say the Guptas.

Now, Attero is the first e-waste recycler to be registered with the Central Pollution Control Board (CPCB) under the Ministry of Environment and Forests.

Within months of setting up, Attero raised equity financing of nearly INR 25 crore (US\$ 5.3 million) from Draper Fisher Jurvetson and NEA-IUV.

Since computers carry hard drives and drives carry data, Attero helps its clients retrieve the files for security and privacy. India generated close to 440,000 tonnes of e-waste in 2008. The volume of e-waste is rising at 20 per cent in India. This is mainly because more people are buying electronic goods, and are discarding them far sooner than before, adds Nitin. ■



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Banking: Sector ushers in a more liberalised time of transactions **Pg 31**



Aviation: Industry takes off to a strong start **Pg 34**

SECTORAL UPDATE



IT SECTOR

IT in India: Poised for take-off

New and better reasons why the sector is feeling happy about its prospects.

BY CHARU BAHRI

The year 1996 had all the makings of a grand success story. A few technology companies set up shop where the best talent was available to serve the best paying markets. It mattered not that the delivery centres were situated in India and the clients were thousands of miles away. The medium of delivery, the internet, had come of age, facilitating fast and reliable data transfers. Infosys, Tata Consultancy Services and Wipro tasted success. Aditya Nath Jha, head of global branding, Infosys Technologies Ltd, observes, “Global delivery

“Small businesses are seeing IT as a business driver.”

Ditarup Chakraborti,
Principal Research Assistant,
Gartner

model separated talent centres from the markets without any loss of quality in services, giving the Indian IT industry an unmis-

takable edge.” The boom progressed unfettered until the economic meltdown of 2008. Fortunately, the slowdown turned out to be no more than a speed bump for India’s IT and ITeS sector. Governments in countries across the globe moved fast to contain the impact of the recession, and before long, it was back to business for these industries.

IT @ Home

In the near future, the key opportunities in the domestic market lie in application services, IT infrastructure management services, and IT consulting services. According

to Gartner, these services will benefit from greater IT spending by retail and utility firms and the government.

The government and state-owned bodies are outsourcing IT to improve internal efficiency. Government IT investments, estimated at INR 15,000 crore (US\$ 3.2 billion) last year, are expected to touch INR 25,000 crore (US\$ 5.3 billion) next year. The National e-Governance Plan is expected to generate business opportunities worth a staggering US\$9 billion.

Significant opportunities are also envisioned in the small and medium business (SMB) sector where PC adoption is growing at more than 30 per cent rate. Diptarup Chakraborti, principal research analyst, Gartner, observes, "Medium-sized businesses made major investments in IT in the past couple of years. And now it is the turn of small businesses, which are increasingly seeing IT as a business driver instead of an overhead expense. They are adopting technology in a big way, in a move to improve their productivity to compete with the local and increasingly global competition."

The Gartner Hype Cycle for information and communication technology (ICT) in India 2009 forecasts that the SMB sector will lead a new wave of investment in enterprise resources planning (ERP). The GHC evaluates technologies and trends that IT leaders should consider as they develop emerging-technology portfolios.

Looking for tactical cost saving and output raising measures, companies will push green IT-solutions that lower energy loads and improve IT infrastructure utilisation. "At the same time, business intelligence solutions and Software as a Service, may gain momentum if vendors push newer and better versions of these tools (advanced

The IT market in India, including computer hardware, software, IT services and telecom, will rise to about **\$89 billion in 2013**, posting a compounded annual growth rate (CAGR) of 11 per cent from 2009.

analytics and cloud computing, respectively) into the market," adds Chakraborti.

Advantage ITeS

The Indian ITeS sector is coming of age. Low cost, favourable business environment, an eager government and employable English-speaking graduates have made India a "most preferred" off-shoring destination. But the industry would truly come of age when its employees progress beyond taking calls and performing data-entry jobs. And that time is now. The Indian business processing outsourcing (BPO) industry is also expanding its voice and data processing units.

The ITeS sector is expanding on multiple fronts. Companies are now moving from performing repetitive jobs to decision-making tasks. This movement up the value chain has spawned offshoot industries employing higher calibre engineers, lawyers and business graduates.

Ashutosh Vaidya, head, Wipro BPO, calls this the "third wave" in outsourcing. While the first two waves focussed on standardisation, labour arbitrage, and process and operational excellence, the third wave marks the shift from process outsourcing to func-

tion outsourcing. The spotlight is now on business transformation and intelligent outsourcing. But the brightest star on the horizon is possibly the domestic BPO market. It has grown at 35 per cent over the last three years and is expected to open up an additional US\$15 billion opportunity.

"Till a few years ago, the domestic BPO was seen as a poor cousin of its offshore counterpart. Not any more, as the global meltdown and growing domestic market have led to a significant paradigm shift. Opportunities are emerging in retail, health-care, automobiles, financial services and telecom. It's because MNCs are planning expansion in India without compromising on quality, and Indian companies are eager to provide the local consumer a global experience," notes Vaidya.

Prevailing in the long run

Expansion in the scope of services of the ITeS industry is healthy. However, operating an outsourcing centre in the metros is rapidly becoming costlier. Also, East European and South Asian nations are waking up to the lure of the BPO, raising pertinent questions about the sustained growth of these centres of success. Essentially, what would it take India to retain its first-mover advantage? To get a sense of how high the stakes are, Nasscom forecasts that if India maintains its current share of the market, IT-ITeS exports from India will exceed US\$330 billion by 2020. Currently, exports stand at US\$47 billion. To reduce its dependence on the US market alone, the sector is attracting clients in Australia and the Middle East. But that is not enough. If the sector is to prevail, it must improve its cost competitiveness and productivity. Real estate prices in and around IT hubs in the

DOMESTIC DATASHEET

Domestic IT services market in India

Estimated to grow to \$12.8 billion in 2013 from \$5.7 billion in 2008-09, representing a compound annual growth rate (CAGR) of 18.6 per cent from 2008 to 2013

(Springboard Research-200)

Estimated CAGR of key sectors in the domestic IT market (2008 to 2013)

- ◆ Applications services – 19.6 per cent.
- ◆ IT infrastructure management services – 18.1 per cent.
- ◆ IT consulting services – 16.4 per cent.

IT GLOBAL POWER

US\$ 60 Billion Industry
2 Million People
275 Fortune 500 Clients



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metros are touching the roof. The industry, therefore, must look beyond the cities. According to Mohammad Saif, deputy director (consulting-ICT practice), Frost & Sullivan (South Asia and Middle East), "India's immediate focus should be establishing and running BPOs in its Tier-2 and Tier-3 cities, to gain from the lower costs of real estate and employment." According to Raju Bhatnagar, vice president, government relations, Nasscom the move to such cities will significantly lower wages and attrition rates and bring more loyal employees. In fact, he goes so far as to suggest that BPOs in the smaller cities may emerge as the next big thing on the ITeS landscape, with the government's support.

Developing a talent pool

Training is expensive. Why? Because the industry is still a bit disconnected from the educational institutions. "It may sound clichéd, but to retain its competitive advantage, India needs to produce more and more committed doctorates of high calibre," observes Bhatnagar. He also says that both the industry and the government need to invest in relevant education. "IT companies engaged in R&D need individuals of high calibre focused on innovation. They should have a design mindset as opposed to a process driven, mechanical outlook," says L. Ravichandran, COO, Tech Mahindra. "The

IT companies engaged in R&D need individuals of high calibre focused on innovation. They should have the design mindset to be better.

SHINING BRIGHT

Frontrunner ITeS sectors

- Domestic BPO market growing at 33.3 per cent (IDC India)
- Animation industry growing at 30 per cent
- Engineering services outsourcing sector likely to grow at 26 per cent

ITeS sector needs to focus on making the internal ecosystem employable and productive," adds Saif.

Simultaneously, "India Inc. needs to breakdown barriers restricting the sourcing of talent and expertise," says Rajesh Nambiar, general manager, IBM (global delivery). "There is no doubt that India has superior IT capability in its talented professionals and cutting edge skills. But, we will only be able to keep up the momentum if we accept the fact that global integration paves the way forward. This means having a global footprint for talent and expertise and sourcing it from where it makes most sense," he explains.

Government initiatives

As two of the fastest growing industries, IT and ITeS have immense potential to take the Indian economy to the next level. The government has responded keenly with a number of helpful measures. There is no excise or customs duty on specified capital goods and raw materials for electronics and IT hardware. The government has allowed 100 per cent foreign direct investment (FDI) in data processing, software development and computer consultancy services, software supply services, business and management consultancy services, market research services, and technical testing and analysis services. Is it enough? Bhatnagar sees more room for measures to simplify the tax administration procedures. "The direct tax code is a step in this direction, but the approach, on some aspects of it, needs to be reviewed. The time is also ripe to revisit archaic labour laws about hiring women for shift duties," he adds. "Special economic zones (SEZs) are still not within the reach of smaller companies," says Ravichandran. He'd also like the software technology parks of India (STPI) benefit to be extended beyond March 2011 and more tax concessions to those who set up R & D laboratories and suites.

Good tidings

IT continues to be one of the sunshine sectors of the Indian economy, showing rapid growth and promise. And the outlook is good, in fact, quite promising, for the years to come, too.

According to a McKinsey report prepared for Nasscom, the exports component of the industry will reach US\$ 175 billion in revenue by 2020. The report is entitled "Perspective 2020: Transform Business, Transform India". The domestic component, too, will contribute US\$ 50 billion in revenue by 2020. Together, the export and domestic markets are likely to bring in US\$ 225 billion in revenue, as new opportunities emerge in areas such as public

sector and healthcare and as geographies including Brazil, Russia, China and Japan opt for greater outsourcing.

The revenue from the domestic software and services market is estimated to have grown from US\$ 2.6 billion in 2001-02 to US\$ 12.4 billion in 2008-09, according to the Department of Information Technology.

According to Nasscom's strategic review, the domestic IT-BPO revenues are expected to grow at almost 8.5 per cent to reach US\$ 42.3 billion this year. Market intelligence firm IDC India's "Domestic ICT Market-Top Predictions 2010" report released in January this year, states that the combined

domestic IT-ITeS market will grow at a rate of 15 per cent in 2010, to achieve a revenue worth US\$ 26.4 billion, compared to US\$23 billion last year. Indians have been using IT services for more than 20 years.

A lot has changed during this time and the market has gradually transformed from facility management services to a process-oriented delivery model.

After the initial delivery of onsite managed services, the market started to transform to a hybrid of offsite services delivery either through Remote Infrastructure Management (RIM), or a combination of RIM services and onsite delivery. **END**

TELECOM SECTOR

Strong signals from the telecom sector

Business communication is slowly but steadily picking up in the Subcontinent. **BY AMAN SHUKLA**

India will soon be Asia Pacific region's third-largest producer of telecom equipment, after giants China and South Korea. A Gartner research survey states that India has a 5.7 per cent share of the region's market. Last year's revenue was US\$180 billion, placing the country fourth in the list. But by 2014, the revenue will touch US\$300 billion, pushing India up to third place, with a market share of 8.5 per cent.

While growing, the industry will consume twice the quantity of semiconductors between now and 2014, says the report. Indian manufacturers of telecom equipment currently use semiconductors worth US\$2.6 billion. The jump in the consumption will be the highest in the Apac region, adds the report.

A large share of the Indian production relates to assembling imported devices and producing standard equipment for the



IMAGING: SURESH KUMAR

military and Indian Railways. Most such manufacturers are in the public sector.

The Indian telecommunications industry is one of the fastest growing in the world and India is projected to become the second-largest telecom market, globally. One gets a sense of how the industry is growing, by leaps and bounds, by studying the following figures from the Telecom Regulatory Authority of India (TRAI): in just one month, from November to December 2009, the number of telecom subscribers in the country increased by more than 1.9 crore.

The telecom industry notched up US\$ 8.56 billion in revenues during the quarter that ended on December 31, 2009, helped by a recovery in earnings from both mobile and landline services.

According to Business Monitor International, India is currently adding 0.1 crore mobile subscribers every month. It is estimated

that by mid 2012, around half the country's population will own a mobile phone. This would translate into 6.12 crore mobile subscribers, accounting for a tele-density of around 51 per cent by 2012. According to a study conducted by Nokia, the communications sector is expected to emerge as the single largest component of the country's gross domestic product with 15.4 per cent by 2014.

The Indian equipment market was estimated at US\$ 24 billion in FY09. Nokia is the market leader, with over US\$3.4 billion revenues in 2008-09, followed by Ericsson at US\$2.11 billion.

With the availability of the 3G spectrum, about 2.75 crore Indian subscribers will use 3G-enabled services, and the number of 3G-enabled handsets will reach close to 3.95 crore by 2013-end, estimates a recent report by Evalueserve (a knowledge processing centre).

Indian consumers take the digi-map route

Smartphones account for only 4 per cent of the nearly 10 crore mobile phones sold in India, each year. These are GPS-enabled sets that support digital maps. Still, four million smartphones is not a small number, and that is why multinational GPS companies are now entering India's coordinates into their travel and business itineraries. More Indians are travelling and driving cars, pushing the market for mobile GPS devices and maps.

Earlier, the industry—characterised by strict norms and security concerns, and plagued by a general lack of public awareness—was in a poor state. Now, growing consumer demands have made the phone vertical into one of the most aggressive markets. While in the US, the auto sector drove the digital navigation market, in India, mobile phones are doing the trick. Though digital mapping is at its infancy here, in a few years it is slated to change the manner in which India navigates. Case in point; sale of MapmyIndia navigators has increased exponentially—figures are expected to hit the 100,000-unit mark by the end of 2010.

Navteq is slated to make its foray into the

“By the end of 2010, there will be three million devices that will have Navteq application in India.”

—Richard E. Shuman, Senior Vice President, Navteq

Indian market and their maps are already available in Nokia, Samsung and LG mobile phone sets.

“By end of 2010, there will be three million (and more) devices that will have Navteq applications in India,” confirmed Richard E. Shuman, senior vice president (sales-Asia Pacific), Navteq. He added that the number was slated to grow. Currently, the company has a manufacturing and R&D unit in Mumbai that employs around 1,300 people. It plans to increase its head count to 1,600 by 2010 end. Recently, the company also announced a “2010 NAVTEQ Global LBS Challenge” aimed at selecting location-based applications—the company received 500-odd applications based around fitness and tracking services, enterprise solutions, location-based advertising and mobile couponing, social networking, navigation, search and news services.

DoT boost for telecom

Recognising the current changes, the department of telecommunications (DoT) is taking action—it has recommended the rationalisation of taxes, creation of specific manufacturing zones and a corpus of INR

5,000 crore (US\$ 1.1 billion) to boost manufacturing and research (R&D). According to DoT estimates, the global telecom equipment industry is estimated at US\$200 billion per annum. Of which the requirement in India alone is slated to reach INR 5 lakh crore (US\$ 107 billion) mark by 2015. However, there is more that may be done for the sector. Chinese companies are backed by their

government. They receive loans at zero per cent interest and support in terms of dealer-supplier networks. Indian firms, on their

part, receive only soft loans at low interest rates. According to research, indigenous manufacturing and R&D is limited, because R&D cost is also limited.

But to change this, the Centre set up a committee, headed by K. Sridhara, a former member (technology) of the telecom commission. The committee gave macro-level guidelines to the DoT to enhance indigenous manufacturing and R&D capabilities in June 2009. DoT secretary P.J. Thomas formed another committee in September 2009 that made recommendations enhancing the manufacturing base and R&D, developing interception and monitoring technologies. Another new panel, headed by DoT adviser (technology), D.K. Agarwal, also submitted a report to Thomas in April 2010.

Some of the recommendations by the panel and internal committee are as follows

- DoT will forward latest report to cabinet secretariat, from where it will be discussed within the government before becoming a policy.

- DoT would seek opinion from the Telecom Regulatory Authority of India on proposals before they become law.

- DoT's internal committee recommends that taxes on core telecom equipment (made in India) should be 5 per cent less than in competing economies

The panel has also suggested a 5 per cent tax reimbursement to service providers who buy equipment from Indian manufacturers.

- As for the INR 5,000 crore (US\$ 1.1 billion) corpus, the panel has suggested creating it by levying a 2 per cent R&D and manufacturing cess on the adjusted gross revenue (AGR) of telecom service providers which would be borne by the users.

The corpus would provide a line of credit to equipment makers at a 5 per cent interest to be repaid in four installments starting from the third year.



- Another recommendation from DoT is the creation of telecom manufacturing zones equipped with infrastructure and facilities initially owned by the government and given on lease. It can have the option of buying the facility from the government after 10 years at the market price.
- The panel suggested that these firms should not be subjected to existing labour laws, except those concerning health and safety and provident fund rules so that makers treat their staff like any other contract-based employee.
- It also suggested introducing a mechanism of skill certification and developing an Indian standard for telecom equipment.
- And finally, to extend credit to foreign customers if they buy equipment from Indian manufacturers by requesting the central bank of India, Reserve Bank of India (RBI), to frame guidelines for banks.

Telecom turns green

Telecoms firms are increasingly looking at energy-efficient and recyclable products in India, as companies try to save on energy costs, and consumers check labels for environmental credentials. By going green, companies aim to reduce costs and create a sustainable environment. In addition to this, emergence of tariff wars has dented the profitability of the mightiest. It has generated a wave reducing costs and improving financials. Efficient power management holds the key to improving financials, since energy expenses constitutes nearly 25 per cent of the total network operating costs. Equipment vendors such as Ericsson, tower companies including Bharti Infratel and network services provider, GTL, are investing in bringing out green products and solutions to cut operators' expenditures.

Anup Changaroth, director, Nortel Networks, says that initiatives towards energy efficiency make sense due to the impact of climbing oil prices. "Typically, commercial benefits that result from producing energy-efficient equipment supersede the costs that go into it," Changaroth explains, adding that his company's chips are 30 to 40 per cent more efficient than those from the previous generation.

Sony Ericsson unveiled two models that use less packaging, more recycled materials and consume less energy. The company has

plans to push greener features across its product line in the next two years. Ericsson has launched its wind-powered radio base station (RBS) site solution in India, offering construction and maintenance costs. Idea is using bio-diesel in some of its base stations on a pilot basis. Aircel Cellular has already deployed solutions, which include solar systems, micro-wind turbines, adoption of free cooling methods and energy audit.

Future of managed services

In recent years in India, managed services have turned into a fast-growing, US\$16-billion industry attracting operators from across the world and providing services, such as network build—including planning and design—field operations, network operation centre (NOC) operations, application and service development, and billing.

According to research conducted by Forrester, managed services industry in India will be an US\$8.7-billion industry by 2013, with a total CAGR of 19 per cent. A latest industry report also states that almost 40 per cent of Indian businesses outsource their infrastructure managed services.

In the past two years, customers may have doubled (from 300 million to 600 million), but average revenue per user has halved from Rs 280 (US\$ 6) to Rs 140 (US\$ 3). Now, telecom operators are making



Banking, financial services and insurance (BFSI) firms are the biggest contributors to the managed services market.

the same amount of money, though their administrative costs have gone up thanks to the "growth paradox in telecom". The focus is on breaking through the constant level of 400 minutes per user, as operators wrestle with fast-changing technology and explosive scale of growth in network connectivity. The next step: rural expansion.

Manoranjan Mohapatra, CEO, Comviva, believes that India will be the pioneer in telecom managed services. It can even grow to be a US\$400 million business by 2014. Mohapatra predicts a bright future for managed services as operators seek to drive revenues and expand customer base, breaking the paradox of falling per user revenue.

Now, companies and executives are intending to adopt managed service model, rather than strategic outsourcing. Professionals believe that it will be convenient to use managed services, as by doing so, they will have access to the best of services without losing IT control.

The market for enterprise networking equipment in India is estimated to grow from US\$1 billion (2008) to US\$1.7 billion by 2012, according to a Springboard Research study—"Epicenter of Growth-Indian Enterprise Networking Equipment Market Report". The Centre is planning to connect the villages in a big way, too. In the next two years, it will add nearly 160 million connections in the villages, taking rural tele-density to 40 per cent.

A Department of Telecom communique recently spoke of taking high-speed fibre connections to a quarter-of-a-million villages by 2012.

More M&As in 2010

In 2010, experts predict that the sector will witness quite a few mergers and acquisitions (M&As) that will permanently change market dynamics especially the service delivery, coverage, pace of roll out and tariffs sectors.

Though 2009 witnessed an addition of new subscribers and lower tariffs, the competition affected the financial health of the majority of telecom companies, such as RCOM, Airtel, Idea, MTNL and Tata. Also, telecom stocks did not perform as well as expected.

As a result, it affected the confidence of both institutional and retail investors. This compelled TRAI to revise its M&A guide-

DYNAMIC AND GROWING MARKET

20 Cities account for
10% of India's Population
60% of Total Surplus Income
21% of Total Spending



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lines. The body is considering waiving of the three-year restriction imposed on mergers since April 2008. Thus, the number of operators, expected to rise from 8 per circle in 2008, could either revert to the original number or shrink further, depending on the M&A norms that TRAI eventually supports.

It is expected that some of the fore-runners, such as Loop, Datacom, Swan or Etisalat, Unitech or Telenor and STel, that have global ranking as well, could be soft targets, since they currently occupy a low market share.

However, pan-India incumbents, expected to play a predatory role, could do less than what is expected of them.

One of the key features of Indian telecom operators is that all large player are multi-product and multi-service companies, though the revenue is a major contributor in their top line. The only exception is Bharti Airtel—for which the telecom sector is the core offering.

Seeing the market dynamics, it is expected that there will be more acquisitions and takeovers, than mergers, since some entities post-merger have not done as well as hoped.

The country is gearing up for the launch of the 3G, or “Third Generation” technology. The technology possesses the potential of keeping people connected at all times.

3G: A new dawn

India is gearing up for the launch of the 3G, or “Third Generation” technology. Auctions have seen nine operators vie for 22 circles available—with cities like Mumbai and New Delhi, and states such as Karnataka and Maharashtra, being the most sought after.

After 23 rounds of auctions, the Centre is already richer by approximately INR 60,000 crore (US\$ 12.8 billion).

The technology possesses the potential of keeping people connected at all times. It offers enhanced multimedia applications and internet at a minimum speed of 2Mbps (a bandwidth measurement) and a maximum of 14.4Mbps. Video conferencing and live TV are thrown in, too.

10%
OF ALL NETWORK
USERS IN NORTH
AMERICA AVAIL
3G NETWORK
SERVICES, SAYS
CDMA


The next launch would be of the 4G and WiMax technology, with the Centre already announcing plans for 4G auctions.

If we take a look at 3G's acceptance in other parts of the world, it has not been “strongly” successful. Even in Europe, 2G remains a preferred medium.

According to code division multiple access's (CDMA) Development Group-2009 report, North America has around 135-million users, and only 10 per cent of 3G network users avail the service. This is after nine years of implementation. The reason behind the cautious use of 3G technology could be high tariff rates.

In India, the trial launch of 3G by BSNL in 2009 saw 700,000 customers in eight months. India's majority remains cost conscious—and this is where 3G might face its biggest challenge. The cost doesn't end with its licence alone. The infrastructure expense is higher, resulting in higher tariff and internet rates. Users also need to upgrade phones.

Even with 2.5G technology, GPRS and MMS were not entirely successful. Benefits were better voice quality and emergency net access.

MMS was welcomed, but it lost its advantage after a while. For the time being, the service does not seem suitable for all income groups. And for those who can actually afford it, will they prefer to wait for the better technology? 

BANKING & FINANCE

Infra finance firms get a leg-up

RBI encourages non-banking financial companies to boost infrastructure spending. **BY ULLEKH NP**



bank. Rajiv Lall, chief executive officer and managing director at IDFC, was quoted as saying in the *Indian Express* newspaper: “There will be a lot of interest from infrastructure companies following RBI’s modification in terms of ECBs. We will also be taking the ECB route to raise funds in the next few months. This step will help us lengthen the maturity profile and also diversify our base.” Under existing ECB norms, funds can be raised in overseas markets at a maximum rate of the global benchmark interest rate—Libor plus 200 bps (basis points) if loan is for three years, up to 300 bps if debt is for five years and 500 bps if it is above five years.

The central bank said that all the other aspects of ECB policy such as US\$500 million limit per company per financial year under the automatic route, eligible borrower, recognised lender, end-use, aver-

In a bid to enhance the flow of funds into the core, the central bank of the country, Reserve Bank of India (RBI), has allowed non-banking financial companies (NBFCs), categorised as infrastructure finance companies (IFCs), to raise money from overseas through the automatic route.

IFCs in the country can now raise external commercial borrowings (ECBs) up to 50 per cent of their owned funds automatically. So far, they could do so only under the approval route. “As a measure of liberalisation of the existing procedures, it has been decided to permit the IFCs to avail of ECBs, including the outstanding ECBs, up to 50 per cent of their owned funds under the automatic route, subject to their compliance with the prudential guidelines already in place. ECBs by IFCs above 50 per cent of their owned funds would require the approval of RBI and will, therefore, be considered under the approval route,” RBI said in a recent notification.

The RBI move is significant as the country aims to double its infrastructure spending to US\$1 trillion during the 12th Plan (2012-17) period from the current Plan level.

Infrastructure companies have welcomed this move by the central

age maturity period, prepayment, refinancing of existing ECB and reporting arrangements would remain unchanged.

The infrastructure segment includes power, telecom, railways, roads, bridges, sea ports and airports, industrial parks, urban infrastructure (water supply, sanitation and sewage projects), mining, exploration and refining. In March, the central bank allowed companies setting up cold-storage facilities to raise funds abroad, thereby giving such projects infrastructure status.

RBI had, in its April monetary policy, relaxed some norms for infrastructure lending to meet the growing need for more funds. It had noted that rights, licences and authorisations of borrowers, charged to banks as collateral in project loans, including infrastructure loans, were eligible to be recognised as tangible securities. However, since toll collection rights and annuities offer some material benefits to lenders, the bank had proposed that such annuities under the build-operate-transfer model be treated as tangible securities subject to the banks’ right to receive them.

For safeguards such as escrow accounts with regard to infrastructure lending, RBI had also proposed that infrastructure loan

accounts classified as substandard would attract provisioning of 15 per cent instead of 20 per cent. However, this would be subject to banks having an appropriate mechanism to escrow the cash flows as well as a clear and legal first claim on such cash flows, it had said.

Greek crisis won't hurt much, but RBI cautious

Monetary stimulus measures in India won't end anytime soon, due to the debt crisis in Greece and other parts of Europe.

The RBI has indicated that it won't exit the easy monetary stance in the wake of the crisis in Greece which, experts fear, may spread to other European countries, besides triggering short-term volatility in Indian markets.

RBI, in its annual policy statement released in April, had hiked its key two policy rates—the repo rate and the reverse repo rate—and in the cash reserve ratio, as part of its move to gradually withdraw monetary stimulus measures it had put in place over the past two years to help companies ride out the bad times.

"With the uncertainty in the market, RBI may not prefer to withdraw the support at this stage. The calibrated withdrawal of the stimulus may be reviewed," Abhijit Sen, Chief Financial Officer, Citibank, was quoted as saying by the Press Trust of India.

However, the long-term impact of the crisis may not be severe, Reserve Bank of India's deputy governor Subir Gokarn has said. While there could be capital outflows from emerging markets, India as a relatively stronger market, may not face severe effects, he said.

"Though India is in a stronger position among the emerging markets, we cannot rule out net capital outflows," Gokarn said. "We might see some volatility. Every time there is some development somewhere, the immediate reaction of the investors is to move to safe havens," he said.

In the last week of April, Standard & Poor's cut Greece's credit rating to junk status, and reduced Portugal's rating, too, which led to a plunge in stock markets across the world.

"There may be some nervousness among investors worldwide which may provoke capital outflows from emerging markets in the

There has been a lot of interest from infrastructure companies following RBI's modification in terms of ECBs. RBI is taking the ECB route to raise funds. This step will help lengthen the maturity profile and also diversify RBI base.

short-run, so there is a risk of short-term vulnerability of capital outflows," Gokarn said.

The *Business Standard* newspaper also quoted him as saying that the market is somewhat nervous as no one is certain about which country would get mired in a debt crisis after Greece. It is well known that there are similar debt-related concerns about Portugal and Spain.

He said that the longer-term impact of the Greece debt crisis will not be as severe as the global financial turmoil. "We are getting more and more comfort from the global economy, notwithstanding Greece," he added.

Gokarn added that the central bank did not expect any pressure on liquidity in the April-September period despite high government borrowings. "We are watching the developments very closely and manage liquidity in a non-disruptive manner."

When asked if capital outflows could lead to the strengthening of the dollar, Gokarn said, "There could be a strengthening of the dollar against all other currencies."

European policymakers have unveiled a loan package worth almost US\$1 trillion to contain the Greek debt crisis. "It will be reasonable to say the long-term impact is not going to be severe, as some solution will be found out," Gokarn added.

On his part, finance secretary Ashok Chawla was far more optimistic about the impact of the debt crisis in Greece. "As far as India is concerned, the impact on us will be minimal. In fact, in the short run, that is, purely in the short run, it might help us in terms of India being regarded as a relatively safe haven," Chawla said.

"We were immune when there was a much larger international financial crisis. The

Greek crisis is much smaller in scale and magnitude to what the world has seen in the last one-and-a-half years," Chawla added.

Financial inclusion: SBI announces plans

State Bank of India (SBI) wants to extend its footprint to 11,943 unbanked villages with a population of at least 2,000 this financial year, according to a report. The country's largest lender recently submitted its plan to RBI.

RBI had asked all Indian banks to submit their plans on financial inclusion, duly approved by their respective boards. The central bank also wanted to know the coverage plan for unbanked villages, said a report in the *Business Standard*.

Out of 6,00,000 villages in the country, about 64,000 villages with a population of more than 2,000 are deprived of a formal banking channel.

The proposed target for SBI shouldn't be difficult as the bank has already extended banking facilities to 1,00,000 villages, that were unbanked before, said the report.

It added that, according to the plan submitted to the central bank, SBI will open branches in 512 villages, while the rest will be covered by business correspondents (BCs). The state-owned lender will start charging customers who are accessing banking facilities in the unbanked villages through the BC model, a senior official from the bank was quoted as saying.

RBI has allowed banks to charge such customers.

The report in the daily also said that other public sector banks are also gearing up for the expanded financial inclusion project and have submitted their plans to RBI. Bank of

India is planning to extend banking services to 7,000 such villages in the next three years, of which 2,100 will be covered before March 31, 2011.

Bank of Baroda will be extending services to 3,000 unbanked villages, with a population of more than 2,000 in the current year.

Union Bank of India also aims to provide banking facilities at least once a week to 4,500 villages having more than 2,000 people. In addition, it will spread banking services to 2,500 "un-banked" villages, over and above the plan that has been submitted to RBI.

SBI is the 'strongest bank' in Asia

State Bank of India has won the prestigious Asian Banker Achievement Award for being the strongest bank in Asia Pacific region, instituted by the Qatar Financial Centre Authority and the *Asian Banker* magazine, a Press Trust of India report said.

It said that the award is in recognition of SBI's combination of financial performance and key business improvements, making it the region's strongest bank with strong and steady income growth rates of 29 per cent, 14 per cent and 28 per cent for the past three years.

Already the largest bank in the world's second-fastest growing large economy, the state-owned lender has attracted customers and talent from the private sector and other state-owned banks, as well as market share in deposits and loans, the award citation said.

Dhanalaxmi Bank to raise funds via QIP

Private-sector lender Dhanalaxmi Bank plans to raise (approx) INR 400 crore (US\$ 85 million) via a qualified institutional placement to fund loan growth in 2010-11, according to an agency report.

The board approved issue of about 2.1 million shares to institutional investors by September 2010 to augment the tier I capital base, Bipin Kabra, chief financial officer, Dhanalaxmi Bank, told Reuters. "We have the board approval and will start the process for the issue by applying before RBI for approval," he was quoted as saying by the agency.

The report added the bank is expecting loans to grow 70 per cent in the current year, Kabra said. The loan book is INR 5,000

crore (US\$ 1.1 billion). The lender also expects to raise share of retail lending in its loan book to 30 per cent, from 10 per cent now, he said. In the March quarter, the bank posted a 75 per cent fall in net profit. Profit fell to INR 5.6 crore (US\$ 1.2 million) mainly on the account of higher capital expenditure investment in people, technology and infrastructure. "The bank spent INR 190 crore (US\$ 40 million) between January and March, a rise from the INR 110 crore (US\$ 23.5 million) that it spent a year ago, on recruiting people, setting up branches and technology," Kabra said. Its net interest margin for the quarter was at 2.7 per cent, up from 2.5 per cent, while the gross non-performing asset ratio was down to 1.54 per cent, from 1.99 per cent a year ago. The lender's capital adequacy was at 12.47 per cent, according to the Basel-II norms.

Yes Bank wants to be No 4

Yes Bank said it aims to be the No. 4 private sector lender in the country by 2015, after ICICI Bank, HDFC Bank and Axis Bank, a report has stated.

The report in *Economic Times* stated that to achieve this goal, the private bank has modified its corporate philosophy and chalked out plans to enter the retail and SME (small and medium enterprises) business segment for the first time to boost volumes.



India aims to double its infrastructure spending to \$1 trillion during the 12th Plan period (2012-17) from the current Plan period.

"We are adding muscle to our existing strength," believes Somak Ghosh, Yes Bank's co-founder and group president for corporate finance and development banking.

In the report where he was quoted, Ghosh said Yes Bank doesn't want to compete with HDFC, ICICI or the Axis banks. "By 2015, we would like to be number four in the private banking space," he said.

The bank plans to focus on its proposed retail and SME business. In a five-year period spanning 2010-2015, it plans to achieve a 40 per cent share for retail and SME businesses of its total lending, the report said.

The bank is targeting a business mix of INR 1.5 lakh crore (US\$ 321 billion) by March 2015 from INR 22,800 crore (US\$ 4.9 billion) now. "We plan to grow at a 35 per cent compounded rate in the next five years and we think it's achievable," Ghosh told the daily. It plans to launch personal loans and credit cards, too. It typically caters to the richer segment and is expected to continue with this strategy, the report added. The bank, which currently has 140 branches, plans to take the figure to 750 by March 2015.

Kotak Mahindra eyes CitiFinancial

Mid-sized private sector lender Kotak Mahindra Bank is in talks with Citigroup to buy the U.S. bank's consumer finance business in the country, according to a news report.

Kotak Mahindra is conducting due diligence on CitiFinancial, which gives home and personal loans to retail borrowers in the low income segment, the *Mint* (an Indian newspaper) reported, citing an investment banker it didn't name. A Kotak Mahindra official told the *Mint* that talks between the banks were "currently at a very, very preliminary stage" and "general" in nature.

Kotak Mahindra Bank, with an asset base of INR 37,439 crore (US\$ 8 billion), has 249 branches across 145 locations and 492 automated teller machines. CitiFinancial has been tackling bad loans and loss since 2007, the report added. The losses largely accrued due to higher delinquencies in unsecured personal loans. CitiFinancial reported a net loss of INR 729 crore (US\$ 15.6 billion) in fiscal 2009 against a profit of INR 19 crore (US\$ 4.5 million) in 2008. [ENR](#)

AVIATION

Cruising Altitude

India's aviation industry is off to a good start. **BY HEMANT KUMAR**



By then, the industry would have grown at more than eight per cent per year.

Robust economic growth, higher disposable incomes, and growth in tourism and business travel, are the major demand drivers. The long-term potential of the industry is immense and experts say they expect strong growth in demand over the next few years as the growth drivers fall into place. According to estimates, the demand for domestic air travel is expected to grow at above 25 per cent for the next five years.

The authoritative Centre for Asia Pacific Aviation (CAPA) has predicted that domestic traffic will grow at 25 to 30 per cent per year, till the end of this year. This will push the numbers up to more than 70 million passengers. Aircraft manufacturer Boeing has raised its 20-year market forecast for Indian commercial aircraft purchases to US\$86 billion, from US\$72 billion for last year.

International aircraft manufacturers, Boeing and Airbus, are buoyant about the potential and opportunity

in the Indian aviation space. In addition, with the fleet expansion plans of non-scheduled airline operators, small aircraft manufacturers are also expected to garner aircraft orders from the Indian air taxi players.

Competitive scenario

Naturally, therefore, the industry is consolidating. From a fragmented sector with more than 10 players, the industry now has just three major players, with a combined market share of 80 per cent. Experts believe consolidation will help the industry to increase passenger yield and match demand.

Passenger numbers are rising, across the board. The demand for airline service or passenger travel depends upon demand for business and leisure travel. Increased economic activity is directly linked to the demand for business travel, while rising incomes are pushing up the demand for leisure travel.

Delhi and Mumbai alone generate half of all air traffic in the country. With passenger boarding expected to double by 2025,

When you compare operating revenues, India accounts for just a little more than one per cent of the half-a-trillion dollar global aviation industry. Still, it is one of the fastest growing aviation markets in the world. The growing middle class and its purchasing power, ever lower airfares, the tourism boom and a growing economy have fuelled the take off. Not long ago, aviation was an entirely government-owned industry. Now, privately owned companies own nearly three-fourths of the Indian aviation market.

India is rapidly upgrading and modernising its airports spending an estimated US\$9 billion. A lot of it was accelerated by the forthcoming Commonwealth Games. Analysts believe that much of this sector's growth will come from the regional distribution of passengers and the steadily rising international traffic. India is also one of the fastest growing tourism destinations of the world. The World Travel and Tourism Council has estimated that India's tourism economy will emerge as the world's third fastest growing over 2007-16.

and aircraft operations expected to triple by the same time, the number of passengers traveling by air is on rise. Domestic air traffic will touch 180 million passengers per year, while international traffic will exceed 80 million, according to a CAPA report, in association with SITA. Today less than 2 per cent of Indians fly in any given year. India's domestic air travel market is currently just 20 per cent of that of China. In order to meet predicted growth over the next 10 years, airlines will need to invest US\$120 billion in new aircraft and another US\$20 billion in the airport sector, says the report.

Rewing IT up

Kapil Kaul, CAPA CEO, South Asia says, "In terms of the drivers for investment in IT, the survey element of the report found that the airport sector is primarily concerned with compliance and efficiency measures, aimed at reducing costs."

According to Kaul, "There is less emphasis on deploying technology as a point of differentiation or to enhance the customer experience to raise revenue. However, the feedback indicates that mobile technologies, self-service kiosks and biometrics will be key areas of investment in the future for airports. We also found that airlines appear to be further advanced than airports in their embrace of technology as a strategic tool rather than a support mechanism."

Airlines believe that self-service options are the best way to enhance customer convenience, by deploying products such as kiosks for lost baggage reporting, flight disruption management, flight transfers, bag drop and automated boarding gates.

Low-cost carriers (LCCs) are more aggressive than full service airlines in using IT to drive their business. LCCs' investment in IT is more strategic in nature, as they do not regard IT as mere support functions, unlike full service or legacy carriers. They therefore, display a greater level of readiness to adopt newer solutions that both redefine the customer experience and cut costs.

The report highlights five technologies - mobile devices, Web 2.0, Near Field Communications, RFID and biometrics—that

With low-cost airlines leading, the aviation industry has emerged from a two-year period of challenges in 2009. It recorded an **8 per cent growth** in air traffic in 2009. Domestic airlines flew nearly 45 million passengers last year.

will be of great importance as the industry responds to the growing needs and expectation of Indian travellers. The report also notes the sea-change that has swept the industry since 2003 with the arrival of the first low-cost carriers; dramatic reforms such as an open domestic skies policy; the introduction of airport modernisation with the privatisation of Delhi and Mumbai airports; and the upgrading of 35 non-metro airports and greenfield developments.

The report identifies sales taxation on aviation turbine fuel as the most pressing cost issue for Indian carriers, and with withholding tax on aircraft leases and service tax on first and business class fares. Congestion at airports, on the ground and in the air, and shortage of skilled personnel are also areas that need to be addressed, the report says.

thrust on capacity expansion. This trend has led aircraft manufacturers Boeing and Airbus to project that they will sell almost 1,000 new aircraft to India over the next twenty years, says the report.


The report quotes industry analysts as saying that they feel the potential for regional jets is substantial in India. Having identified this big opportunity fairly early, leading manufacturers of small aircraft, Bombardier and Embraer, have made forays into the Indian aviation market.

Low ceiling, high returns

With low-cost airlines leading, the aviation industry has emerged from an almost two-year period of challenges. It recorded a nearly eight per cent growth in air traffic over the previous year. According to the Directorate General of Civil Aviation, domestic airlines flew nearly 45 million passengers last year, up from 41 million in 2008.

According to the Deloitte-CII report on the Indian aviation industry, the factors contributing to the air traffic growth can be broadly classified into economic and policy factors.

The report sums up the matter as follows: "The aviation sector in India has been transformed into a more open, liberal and investment friendly sector since 2004."

The estimated growth rate of over 20 per cent has attracted global attention and interest. There has been an exponential growth in air traffic aided by the high growth in the number of passengers flying. The entry of low cost carriers has changed the face of this sector, creating a large new market. Still, the fact that only one per cent of the total population flies, indicates the enormous untapped potential of the market. 

80
MILLION AND
MORE INDIANS
WILL AVAIL
INTERNATIONAL
FLIGHTS BY 2025.

The growth story

It has been generally observed that air transport grows twice as much as the GDP, says a Deloitte-CII report on India's aviation industry. In India's case, the report says, air traffic has grown because of the entry of low cost carriers, higher household incomes, economic growth, increased foreign direct investment (FDI), surging tourist

inflow, increased cargo movement, strong business growth and supporting government policies.

The growth of Indian aviation has thrown up many lucrative business opportunities, especially since the recent global economic downturn. In that light, the role of developing economies like India assumes greater significance with their



PHOTO: PHOTOS.COM

THE NEW LIFE OF Pi

Bright Indian entrepreneur develops sleek e-reader.

BY HEMANT KUMAR

Vishal Mehta is bright. He has to be—he studied operations research at Cornell and management at MIT. He worked with Dell and Amazon.com. Then why did he toss a promising career and travel all the way to Ahmedabad? To pursue his dream, he says on his website.

Website? What website? Three years ago, he launched a retail website called *infibeam.com* that records four million hits a month, selling everything from books to mobile phones to motorcycles. But what's got him in the news is something else—he has developed an electronic book reader called Pi, just like Amazon's Kindle or Sony's e-book Reader. All right, now settle down with a cool-cool shake and something to munch. What would you like to read? Sleek and handy, the device fits into the palm of your hand and holds more page-turners than the average bookshop. Seven inches long and a little less than five inches wide, the half-inch thick and all-Indian Pi weighs like a standard paperback. It supports 18 Indian languages, and, of course, English.

"Unlike most readers on the market, Pi supports local Indian languages," said Vishal Mehta in a telephone interview.

The well-designed Pi is a pretty smart reader. You can obviously turn pages backward and forward, jump to any page, increase and decrease font size and bookmark a page. You can even rotate the screen to switch between portrait and landscape views. And if you'd like to take a break from the intense pages of Maurier's *Rebecca*, you can play some refreshing Sudoku using function and navigation keys. It might take some learning but you'll get there.

Its six-inch, black and white E-ink display is crystal clear. You can read clearly in daylight but not in the dark, as it is not backlit. Pi's open source Linux core operating system means developers and innovators will soon start pushing applications and plugins. That's the exciting part, because if it fires the imagination of

Mehta says he plans to market Pi not just over his website, but to educational institutions and governments, as well. Having being an exceptionally bright student, he understands the value of a book reader that can hold all the books you will ever need...

some bright-eyed whiz kids with restless fingertips, this innovation will turn into serious competition for the heavyweights—Amazon and Sony.

Pi does not have WiFi, internet, Bluetooth or infrared. Essentially, you download the e-books and other files using your computer and its internet, and then transfer the files to Pi using a USB connector. That's a little cumbersome, especially since Kindle has spoiled the consumer with 3G wireless and other goodies. But then, the price tag is attractive—much less than Kindle.

"Our price is US\$214 (INR10,000), all inclusive. Sony Reader may be US\$200, but tax and shipping will take it up to nearly US\$385 (INR 18,000)," added Mehta, comparing Pi to the competitive touch-screen

Sony product. Pi supports a range of file formats like pdf, epub, html, text, mobi (a domain) and doc files. With an internal memory of 512 megabyte (MB) and an SD-card slot expandable to 4 gigabyte (GB), Pi has enough room for thousands of

books. A standard ebook, without pictures, graphics, sound or video, will occupy a mere 200 to 300 kilobyte (KB) of disc space. That's almost five such books per megabyte. With its 4GB SD-card, Pi can store a virtual library. Pi does not have text-to-speech support, but you can listen to mp3 files using

headphones. The device doesn't come bundled with free paperbacks, especially the new releases. You will still need to buy them online. But there are millions of free books available on the internet. You can read for free, books whose copyright has expired. Project Gutenberg (www.gutenberg.org) itself has a catalogue of 30,000 such books that include classics and text books. You can also visit Mehta's website to buy the books you want.

Having been an exceptionally bright student himself, Mehta understands the value of a book reader than can hold, say, all the books you will ever need for medical school or management classes, whether you are a student or a teacher. The launch of Pi has established beyond doubt that Vishal Mehta is not just bright. He is smart, too.

But he has to hurry and innovate even more rapidly. Sony's website announces that the 6-inch e-book, Reader, is now priced at US\$200, and it has a touch screen, too. Amazon's Kindle is still priced higher, at US\$260. But it has 3G wireless and text-to-speech support, even if experimental. What's more, they are both giants, with billions at their disposal. "Pi is simple to use and you will find that it has superior reading clarity. With touch screen, reading clarity may be compromised. Pi also has easy-to-use navigation," added Mehta. Still, what's innovation without the continuous challenge of competition? His dream drove Mehta to innovation. Now, competition will force him to innovate further.

All in all, a jolly good read! 

Pi
SMART READER
WITH 6-INCH,
BLACK AND WHITE,
600X800 PIXEL
E-INK DISPLAY



How do you lend money to the poorest of the poor? Your borrowers are not only illiterate, but also unorganised. They have no idea how to save money, for they have no money. They have no skills, land, collateral, credit history, business plans or track record. Banks are wary of them.

In time and with help, you could still reach the poor men of the remotest Indian village. But how to reach the poorest women of India? That would mean digging in—for the long haul—with the arsenal of the government, resources of a bank and the heart of a non-government organisation (NGO).

That was precisely how the National Credit Fund for Women, or the *Rashtriya Mahila Kosh*, was born. It was set up by the Department of Women and Child Development under the Ministry of Human Resources Development (MHRD). All the fund ever took from the government was a one-time grant of INR 31 crore (US\$ 6.6 million) at its inception, in 1993. Since then, it has never had to ask for a penny from the government or anyone else. Working astutely, it has, so far, disbursed upwards of INR 200 crore (US\$ 43 million) to nearly seven million needy women across India.

Working through NGOs only, the fund has taught them the value of savings, planning, investment, book keeping and repayment. In its own way, the fund has also taught them the essence of a business plan and its presentation. The fund asked NGOs to organise the needy women into small teams, called self-help groups. The group had to meet regularly, say, once a month, and show savings. It didn't matter how much, but each member had to save.

Groups that completed a full year of such savings, book keeping and regular meetings, then became eligible for loans for sustainable vocational activity. Finally, each member had to make a presentation before her own group, describing in detail how much money she needed, how she would use it and how and when she would return it. The requirements were not huge either. The amount hardly ever exceeded a few thousand Rupees. Women needed money to buy a goat for selling milk, or a gas stove to set up a street-side kiosk. Hard working and focussed, the women knew how much they



A little amounts to a lot


The runaway success of a credit fund with heart.

BY HEMANT KUMAR

could take on, and how it would turn their lives around. But it was not a dole; it was a loan, and they understood it. Each member presented her plan to a group; each group took its plans to the controlling NGO, and each NGO then approached the fund for the release of funds. Accountants and auditors drawn from National Bank for Rural Agriculture and Rural Development (NABARD), Reserve Bank of India (RBI) and other financial institutions pored over the plans and projections with magnifying glasses. Once satisfied, they cleared the funds for disbursement, but with a warning: it was the sole responsibility of each NGO to ensure the loans were repaid. The fund adopts a quasi-informal delivery system, which is client friendly and uses simple procedures, keeping the poor, overworked and illiterate women in mind. The disbursement is quick and links thrift and savings with credit. In using the group concept, it has transformed credit into an instrument of women's empowerment, socio-economic change and develop-

ment. The fund's experience has shown that groups of women are better customers than men - they are better managers of resources. Also, the benefits of loans are spread wider in the household if loans are routed through women.

From basket making to floriculture, the fund helps women through any vocational activity that can help them find their feet. Now, it has widened its scope and helps women in the following areas, too: land acquisition, redemption and leasing; health and other consumption needs; skill upgradation; crop credit and off-farm activities, and; the setting up of kiosks and internet cafes. More than 150 million Indian women live below the poverty line. The fund estimates that even if only 30 per cent of them need micro credit, it has to reach out to 45 million women, and counting.

The fund has so far disbursed micro loans to nearly seven million women. It's not even half way up there, but they say well begun is half done. 



PHOTOGRAPHER: GIREESH C V

THE LIGHTS ARE ALWAYS GREEN FOR **REVA**

The tiny Indian electric car packs a high voltage punch. **BY INDU PRASAD**

The charismatic Chetan Maini believes that the time is "right for an Electronic Vehicle (EV) revolution in India". The India-born founder of REVA Electric Car Company has captured a neat chunk of the UK EV market, where his G-Wiz, or REVA-i, finds regular mention in the magazines. Inspired by its success, other auto manufacturers are now looking at London as "the place" to launch their versions. Norway has been bitten by the REVA bug as well—the country wishes to promote them as an alternative to public transport. Maini has forayed into Central America, too, with a launch in Costa Rica.

Despite some roadblocks, REVA is cruising, with a presence in half of Europe. By 2015, REVA plans to establish itself as a truly global brand. "REVA is the only company in the world with a 100-million-km EV-user experience. It helps us seek better performance under different climatic and road conditions, and evolve," Chetan Maini

DOING THINGS THE REVA WAY

Chetan Maini once explained, "REVA doesn't do different things, but does things differently. We could not afford the conventional way of doing things, so we did everything our way."

Maini couldn't afford to market his car conventionally. So, he took the online route, especially in the UK. The company appointed no dealers, or showrooms, advertising and salespeople to draw in customers. Interested parties could test drive cars at one of the 16 designated points in and around London. If they wanted to buy it, they could go online and book using a debit, or a credit card. The plan clicked: each of the 1,000 G-Wiz cars sold in the UK till date has been a direct, online purchase.

In India, where he knows people would be more skeptical, Maini rented out the REVA for a week. People could drive the car for that week after paying a non-refundable deposit between INR 1,500 (US\$ 33) and INR 3,000 (US\$ 65). If they decided to buy, the amount would be adjusted against the cost. "People were curious and they thronged the shops, but few actually bought," remembers Maini.

However, two-thirds of the people, who tried out the REVA, were converts—the EV revolution, if you can call it that, had begun.

On the manufacturing front, Chetan Maini opted for running chassis platforms where cars move on



own wheels, instead of the regular assembly line, to keep costs down.

For the body, recyclable, dent-proof panels mounted on a steel frame were used, instead of steel panels. Apart from lowering production costs, these were found to be effective in case of minor accidents since they reduced the risk of dents and scratches.

Maini knew that experienced personnel would be skeptical about working for a start-up—especially, one as "innovative" as his. Expertise and experience in electric vehicle technology were non-existent in India at the time.

Keeping these two points in mind, Maini chose to hire freshers from top engineering colleges. It was not merit alone—he chose students who shared his vision. The fresh group of thinkers were joined by international consultants. He roped in people like R. Chandramouli, President (sales and marketing), who had spent years with TVS Motors and Maruti Suzuki.

Another hire was Girish Rakhe, President of India

Operations, associated with Maruti Suzuki for several years. When initial investments barely trickled in, Maini opted for outsourcing the components.

Today, REVA outsources all its components; only the core technology work is handled in-house.

An all-new, 30,000-capacity assembly plant in Bengaluru was recently completed. It is currently the world's largest operational example of a plant especially dedicated to the assembly of battery electric vehicles.

The building is LEED accredited (Leadership in Energy and Environmental Design), making the plant leave one of the lowest dirt-to-dust carbon footprints in the automotive industries sector.

On September 24, 2009, REVA and General Motors (India) announced a collaborative partnership to bring electric vehicles to the Indian market. It will also be partnering with Bannan Automotive to set up a manufacturing base in upstate New York to produce the NXR model.

explains. His vision involves more than just a numbers game.

"We are, and wish to be, a total systems solution provider. REVA develops key EV technologies—energy management and fast charge and telematics systems in-house keeping the company at the forefront," he says.

Driving Down Pollution

When REVA drove up in the late nineties, the world was still waking up to global warming, fuel prices were low and researchers were toying with the idea of the electric car, while real people drove "real" cars. As a student at the University of Michigan, USA, Maini made a solar powered car that won the 1500-km Florida to Michigan Sun Race. More importantly, it finished third in the 3,000-km Australian cross-country race from Darwin to Adelaide, right behind Honda. That was Maini's Eureka moment. If one could cross a vast continent on solar power alone, what more could be done with natural resources? He set out to discover. At that time, Maini was working for a friend's father at Amerigon, a start-up that focussed on electric vehicle technology. But, it was not all invent, drive and profit.

"Financial resources were limited and convincing institutions was a challenge. Often, the question asked was: 'Where else in the world has the idea succeeded?' Also, a month before our India launch, the government doubled the excise on electric cars and took away subsidies. We also did not have a regulatory platform to register such cars in India," Maini told an interviewer, recently.

"Looking back, my decisions were brave; especially by start-up standards. We were clear that we needed to break down perceived barriers; patent energy and battery management systems; and look at cost-efficient designs, manufacturing processes and methodologies of integration of electronics that would prove fairly unique to REVA—which is what we did." The first of the REVAs rolled out in Bengaluru, a strategic move, considering the city is tech-savvy and loves to embrace new ideas. Electric vehicle technology may be expensive, but Maini has beaten the odds and launched it in London, its first overseas market. Admittedly, REVA was not the first electric vehicle, but it was the

SOURCE: NEWSWEEK AND REVAGLOBAL.COM

first to go commercial, while the Hondas and Toyotas were still at the R&D stage.

Resplendent REVA

REVA has sold 3,000 cars, one half in India and the other abroad. It may not appear to be too many cars, but it is worth noting that the vehicle has single-handedly changed the perception of EVs in India. REVA was instrumental in getting the Delhi government to grant a nearly 30 per cent subsidy to alternate fuel vehicles—a first in the country.

The odds are in favour of REVA. The company caters to the 'second-car' market which accounts for 40 per cent of all cars sold.

REVA has set a high benchmark. Its UK distributor, GoinGreen, sells the car as G-Wiz. London has set an example with its policies—exemption from congestion charge, free parking and charging, and a high-level of EV awareness.

At last year's Frankfurt International Motor Show, REVA showcased two new models—NXG and NXR. "NXR will, for the first time, bring the lithium-ion battery to electric cars, making them more economical, longer-lasting and trebling the mileage per charge."

REVA's design has also evolved to adopt a more European silhouette. Naturally, it uses 80 per cent fewer components than the conventional or the hybrid car. The NXG, which is the REVA Next Generation, will go into production in 2012. Styled by Dilip Chhabria of DC Design, it will take NXR's style further, while maintaining REVA's principle of leaving the least carbon footprint. "We added mag wheels and painted them bright red. We also fitted it out with a wireless tablet, an embedded appliance that integrates into a high-resolution, single-touch screen display system. Dashboard function includes information on speed, battery charge, range and critical sensor inputs and personal communication tools." Maini is quite the mentor—Dilip Chhabria stressed that he chose to work with REVA because they were the "only credible EV manufacturer in the world". He put in 25,000 man hours into designing the NXG.

On a business level, REVA is modelled as the ideal 21st century knowledge company. "REVA is lean (250 employees), agile and operates with four core areas of business—

BIG PLAYERS IN THE EV SECTOR

Tesla Motors—Designs and sells high-performance, highly-efficient electric sports cars.

Aptera—Whether running errands, driving to work, or out on a holiday, Aptera's 2e has a feature for every need.

Phoenix Motors—Phoenix Motorcars, born in 2001, is set to manufacture zero-emission and freeway-speed fleet vehicles. After years of research, Phoenix found the right fusion of platform

and technologies to provide two best-in-class, all-electric vehicles.

THINK Global—Together with Porsche Consulting, this Norwegian Company is the closest runner to REVA's global presence and popularity.

Detroit Electric Holdings—The company's product plans range from high performance sports cars to stylish sedans capable of driving over 320km or 200 miles in a single charge.

EV product development, mobility solutions, technology licensing and franchised manufacturing," he explains.

Techno Tomorrow

The company completed a new environment-friendly, LEEDS-certified assembly plant in Bengaluru, with a capacity of 30,000 units per year. REVA has a strong product development programme in place and plans to introduce one new model, and one variant, every year.

The company's R&D, spearheaded by Chetan Maini himself, is focussing on the latest EV technologies.

However, a battle lies ahead. As P. Balendran, Vice President of Corporate Affairs, General Motors-India, explains, "EVs would work better if there was better infrastructure

to support them." REVA is working on driving some unique business models—technology licensing, manufacturing franchise and EV mobility solutions. The GM-REVA collaboration is an example of technology licensing. But manufacturing franchise involves setting up low-cost local assembly units. "We are evaluating franchising projects in America, Europe and the Asia-Pacific," Maini says. The EV technology is still evolving, which means limited capability, low demand and high costs.


Deloitte adds REVA will benefit from a quick adoption of EVs, driven by changed consumer mindsets. However, most consumers still expect their EVs to travel a significant 500 kilometre per charge.

Short Fuse

"REVA has never produced a polluting car, and never will. Every REVA is born green, using processes that use less energy, and it emits lesser carbon," emphasises Maini.

In transitioning from fuel-based to electric-only technologies, the world is still getting used to the idea of the hybrid vehicle. But Maini says he believes EVs will grab the attention of most auto makers in the next three years. The reason: EVs are more efficient and more affordable.

As the magazine went into press, Mahindra & Mahindra announced that it had bought a 55.2 per cent stake in REVA.

Chetan Maini has a few sage words, "When you have an idea that you absolutely believe in, it is critical that you surround yourself with people who share that dream." 

Every REVA is born green. The vehicles are brought into the world using processes that use less energy.

ARTS & CULTURE



◀ **Betrayal Flesh:** Sumedh Rajendran's work often deals with notions of margins and urban spaces—how these are affected by the power struggle both within, and outside the self. The artist admits that he resorts to satire frequently to sort out his ideas and expressions.

Sculpting Brilliance

Sumedh Rajendran continues to dazzle viewers with his cerebral art.

BY ULLEKH NP

Delhi-based Sumedh Rajendran is truly a master of fine art. That he has an MFA from the Delhi College of Art is just underlining that fact. He continues to dazzle art lovers with his thought-provoking cerebral art, mainly sculptures. It is near impossible to breathe life into industrial elements, but Rajendran transforms iron, steel and ceramics into organic materials. His art is at once restless and calm, evocative and distant, involved and indifferent. It is disturbing, but scrapes the paint beneath the conscious layers of thought, compelling introspection, and reflection. Rajendran, 38, commands respect from artists and critics alike for his skilful and dreamlike juxtaposition of a range of subjects and ideas. His first solo show was held in Lahore. It was, however, his Mumbai exhibition of 2005, *Street-fuel Blackout*, that catapulted Rajendran into the big league of India's blue-chip artists. One of his stunning works at that show, *Darkly Massive*, created waves back then in Mumbai



for its subtle portrayal of conflicts—political, social and cultural—and the dilemmas of the urban society in the post-globalisation era.

Rajendran's work has both high finish and raw texture, hinging on the unfinished. Such is Rajendran's control of his spaces, that he can acquire a zen-like stillness in the middle of a 'hyper-mobile' arrangement. A frozen island in the middle of an ocean on fire, so to say. You can feel his work at all sensory levels, and it can leave you moved, or disturbed, depending on what you see.

Critics and artists alike, praise Rajendran's work.

Says Ranjit Hoskote, critic, cultural theorist and poet: "The artist savours the co-existence of forms,

Rajendran born 1972. BFA, College of Fine Arts, Thiruvananthapuram, 1994. MFA, College of Art, New Delhi - 1999.

Rajendran has held five solo exhibitions in Lahore, Mumbai, New Delhi and London. Group exhibitions in India and abroad include

a show called Chalo! India at the ESSEL Collection in Vienna, Austria, and Indian Summer at Galerie Christian Hosp in Berlin, Germany.

Married to Pakistan-born artist, Masooma Syed, the internationally-renowned sculptor lives and works in New Delhi.



periods and purposes, and to the manner in which history becomes spectacularly visible in everyday life and yet is naturalised to the point of invisibility, so requiring re-activation."

His favourite example of this phenomenon is the interstitial geography of Delhi: the historical periods through which the great city has transited are not arranged neatly in horizontal strata, but are articulated as the cobbled and sutured components of a fluid, miscegenated and plural contemporary. A mediaeval monument, for instance, might stand next to a shanty, a workshop or a middle-class apartment block.

Rajendran's stunning works mostly feature contemporary urban as well as primal-era shapes. Whether showing solo, such as *Final Call* and *Chemical Smuggle*, or in a group, Rajendran has influenced art lovers across India, the US and Europe. His recent solo show, *Dual Liquid*, at the Sakshi Gallery in Mumbai, had more to offer than mere magic with leather, tin sheets, perforated iron sheets, concrete and bathroom tiles; there were also photographic and collage works on display.

Rajendran has affluence of concern for the dispossessed, and he always puts the spotlight on torture, a recurring theme in his works.

Emotive art: 'Day Enlarged Hidden Wrath' (above left) is a work in mixed medium, using leather, stainless steel and resin. Like it, most of his pieces have a singular, strong focus, and to make his art talk, he uses several mediums. Smedh is an artist who is committed to the social implications of art—his work shows that.



This year, Rajendran will exhibit his visually pleasing and intellectually profound art at the ESSEL Museum, Vienna, Austria, and at a few other locations in Europe. Another show, called *Dual Liquid*, will travel to Delhi in September.

What does the artist actually want to achieve with his art? "I want to tear apart hierarchies," he says. That is, without doubt, an ambitious target, but the artist puts together his works with a surgeon's skill, by tearing apart objects again and again, only to put them all back together. And how. [ENR](#)

TOURISM UPDATE



PHOTOS: KERALA TOURISM.COM

◀ **Kathakali of Kerala:**

A highly stylised form of dance-drama that began in Kerala in the 17th century. It is characterised by bright make-up and elaborate costumes.

◀ **Thekkady:** The name is synonymous with wildlife and great weather. The Periyar Tiger Reserve is one of the best places to visit.

▼ **Munnar:** This pretty hill town has several tea gardens and estates—grab a packet of the fine herbs when you are there.

Sensory Spa

Kerala is an ideal getaway for the lonely traveller, the trek tourist and honeymooners. **BY ROHINI BANERJEE**

There is an exaggeration in the quaintness that is Kerala. The mossy carpet of coconut groves, its ribbon-like streams and the neat little wooden bungalows nestling in the shade—it is too picture perfect.

The clock, too, keeps a different time here. The women with fresh jasmine in their hair, the men in their white *mundus* and shirts, and the neatly-dressed schoolchildren walking without a hurry, teach you to slow down as well, and breathe in.

Kerala redefines the colour green, washes it and presses it till it shines. Come here and give your eyes and ears a vacation. The state is as lush, as it is silent—soulfully so.

In the plains there is the hegemony of coconut. Drink it, eat it, sleep on it or wear it—the tree and its fruit are an integral part of life in Kerala. A small state with a large heart—where do you start discovering Kerala?

Kochi. Strictly speaking, it is a small town, but strategically close to every destination, and some out-of-the-way ones, as well.



I was headed to Munnar, 4,000 feet above the sea and a little more than two hours of driving time from Kochi. Ever since my sister and her husband had shifted there to work in the tea estates, she had waxed eloquent about Munnar. “Walk as much as you like, as far as you like. It’s safe. It rains most of the time. It’s pretty. Come and see for yourself.”

Finally, I gave in, a little skeptical—after all, I hailed from the east of India. I had seen the Himalayas unfold through the morning mist. Would the Annamalai range impress?

My journey began in the plains of Kerala—on a road that cut through parrot green paddy fields. After a while, our car climbed up, and the sensory overdrive began.



▲ **Vagamon Hills:** Grassy hilltops, cool climes and great views, Vagamon is a trekker's paradise.

First, the green—fresh, darker and deep, covering every part of the earth. Then, the smells—heady and strong.

As my city nose struggled, my sister took pity and stopped at a smallish plantation. Cardamom, cinnamon, coffee, vanilla and black pepper—an army of aromas.

In Kerala, most plantations grow two or more of these aromatic substances. Sometimes, all of them are planted in a large magical garden where smells mingle with the wet earth to create a whiff so thick you can cut through it.

Higher up, the road spiralled through mountainous jungles. There was a lack of city noises, a hush that was just a little uncomfortable, to begin with. However, as the ears got accustomed, there were small jungle voices that spoke—the occasional bird, the loud cricket and the swish of the cool breeze through the leaves—carrying a hint of rain. And it rains, or drizzles, or pours, most of the time. The showers come unannounced.

The hills of Munnar are not the jagged-ragged kind, but smaller, rounder and with softer edges. We left the aromatic plantations behind, to travel through rolling tea gardens with their acrid-smelling leaves. And, the mist was everywhere, or were they clouds? I couldn't be too sure.

The small town of Munnar is as idyllic as it is rain-drenched and quiet. It smells of tea, and life revolves around the herb here. It has several estates and gardens devoted to it, some hotels and guesthouses and a tiny main market. The town hosts tourists from all over India, and a smattering of foreign faces—but, at the end of the day, it belongs to its residents, who take a quiet pride in their home.

Every place has its rules—Goa asks its tourists to “chill”, the Himalayas to “discover”. In Munnar, it is to relax. Breathe. Walk. Contemplate.

Indians designate pretty and lonely spots to honeymooners, or trekkers. Surely Munnar is for the two, but it is also for the lonely traveller. It is for anyone who wishes to wake

FIVE KEY HIGHLIGHTS

1. AYURVEDA



Herbal oils and touch therapy, Kerala Ayurvedic massages are the treat for tired limbs.

2. BACKWATERS



A cruise and a stay in the houseboat—must-see and must-do.

3. POORAM FESTIVAL



The annual temple festival held in central Kerala after the summer harvest is a riot of colours.

4. ATHIRAPALLY WATERFALLS



Peaceful and powerful at the same time, the place is a must visit.

5. TRADITIONAL THALI



Inexpensive, healthy and delicious, a thali is the quick meal for the hungry traveller.



▲ **Vanilla:** This aromatic plant may be the second-most expensive spice after saffron, but tourists can get a whiff for free while travelling.

up to freshly brewed coffee. It is for you, if you wish to take a morning walk breathing in the smell of wet leaves and greet busy pluckers (friendly, pretty women in ridiculously oversized gumboots, ready with a smile and a wave).

It is for the tourist who doesn't mind getting drenched before breakfast. And more so, afterwards. It is perfect for treasure hunts—play spot the stream, or find the falls, as you hear gurgling water.

When you get hungry doing so, roadside kiosks offer deliciously different vegetarian and non-vegetarian food that doesn't dent the pocket. Munnar is home to Hindu, Muslim and Christian communities, and all three have left their marks on the cuisine.

A quick online search reveals that Munnar, or “moon” (three) “aar” (rivers), is situated on the confluence of three mountain streams and is surrounded by the Annamalai range.

Websites let you know that the place is pretty, and pretty wet. However, only when you walk through it, do you see just how pretty, and how wet. Divine.

I was happy in my bungalow, overlooking tea gardens, exploring the surrounding estates with my sister's two dogs, my faithful companion-cum-guides. And reading. I even picked up the paint brush after years.

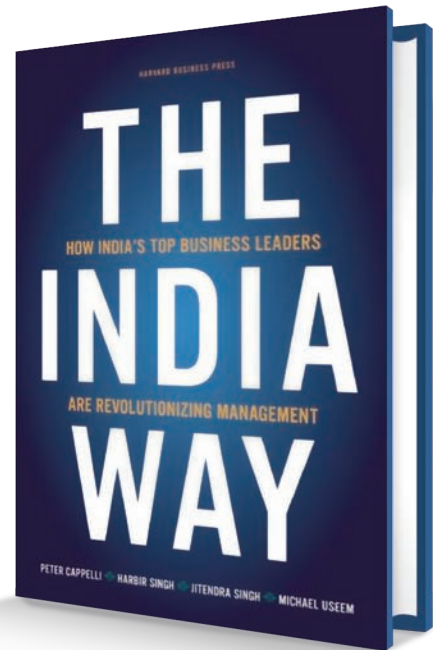
A day's drive can take travellers to a number of spots. For more information, a visit to the tourism office in the old part of the town is worthwhile. Impromptu treks also throw up a few picnic-worthy locations. Decide at leisure, while sipping a hot brew (tea, or coffee, we leave it up to you).

My visit to Munnar was in a year when I was at my harried and hurried worst. Before I knew it, half of the year had flown by in a scurry of assignments and papers. It was but a moment at Munnar, but, by the time I was back in the city, the clock had slowed and the senses had sharpened. I had breathed. And, I felt free.

Finally, I had to leave a little note to my traveller self—never be too quick to judge. 

The return of the guru

Four Wharton alumni laud the Indian way of doing business. **BY ULLEKH NP**



Harvard Business Press; Rs 695.

THE “unbridled pursuit of self-interest”, has been the hallmark of the American model of economic development, popularly called the “Washington Consensus”. But it is now clear that it has very often led to deep, self-inflicted injuries. And the recent global financial meltdown, the outcome of companies chasing profits, has offered enough reason to unlearn what we have learned from the Western economies in the last 50 years. Even Alan Greenspan admits that it was a mistake to push for “greater reliance on market forces and reduced government controls”. The former Federal Reserve chairman was one of the biggest votaries of that model. The Consensus focused on shareholders and their interest in profit maximisation as the primary goal of a business. According to *The India Way* (Harvard Business Press), in the US model, companies rely on constant restructuring through job cuts and outside hiring. Now that the whole world feels the pinch of that model, which the rest of the world blames

for the meltdown, the authors—four of them—look at how companies around the globe could take some big tips from businesses in India. It is time to learn from India, they say. They argue that the “India Way” represents a compelling alternative to the US model. As opposed to the American one, the India Way, is a collective term for general business practices of major Indian companies. The authors believe that the Indian companies are not driven by “solely profit motives”.

Drawing on extensive interviews with some 105 Indian business leaders, the book says that the Indian approach to “running companies centres on a concern for multiple stakeholders and their needs, not just the narrower needs of shareholders”.

It is this sense of mission, while preserving the heart of the capitalist mode of development, that makes the “India Way” too irresistible a proposition to dismiss, says the book. “Companies following the India Way go well beyond not doing bad to the social fabric to actually pursu-

ABOUT THE AUTHORS

All four authors are professors at the Wharton School of Business, University of Pennsylvania. Peter Cappelli: Director, Centre for Human Resources Harbir Singh: Co-director, Mack Centre for Technological Innovation Jitendra Singh: Steinberg Professor of Management Michael Useem: Director, Centre for Leadership and Change Management.

ing social improvement ...” says the book, co-written by professors Peter Cappelli, Harbir Singh, Jitendra Singh and Michael Useem of the Wharton School India Team.

The authors say the essence of the India Way is embodied in the thinking that the business leaders of the country “think in English and act in Indian”.

They quote Tata Sons’ executive director R. Gopalakrishnan as saying: “For the Indian manager, his intellectual tradition, his y-axis, is Anglo-American, and his action vector, his x-axis, is in the Indian ethos. Many foreigners come to India, they talk to Indian managers, and they find them very articulate, very analytical, very smart, very intelligent—and then they can’t, for the life of them, figure out why the Indian manager can’t do what is prescribed by the analysis.”

The authors talk at length about Indian businesses’ holistic engagement with employees, improvisation and adaptability, creative value propositions and broad mission and purpose.

They also discuss what the India Way means for global businesses and their leaders. “The place to begin adapting the India Way is for leaders to pay attention to the process of creating strategy, to focus on the business on a task ... what are we better at than our competitors? ... succeeding with the India Way begins by developing an answer to that question,” says the book.

The book argues that “the India Way seems to have settled voluntarily on a more bridled version”. The authors have deep knowledge of the US and Indian markets and cultures. They say that India’s leading business figures pursue “strategies not strictly tethered to the disciplined pursuit of private profits.”

The most important lesson they learnt from the India Way is that “it demonstrated the power of the collective calling over private purposes, of transcendent value over shareholder value”.

“The tight fit between the way executives lead their employees and the way they pursue business strategy, allows them to identify a social purpose and match it to business needs,” the authors add.

The major areas covered in the book include people management, executive leadership, competitive strategy, company governance and corporate social responsibility.

For sure, the book, pleasantly heavy with insider accounts, will help Indian businessmen understand themselves in the global scheme of things. It will also inspire managers elsewhere as they look for ways to compete in a changing world. Given India’s remarkable growth in these turbulent times, chances are not unlikely that home-grown business practices will soon become the country’s biggest export, after Yoga!

Business ethics demand that entrepreneurs consider everyone’s interests—the shareholders and the stakeholders. But single minded focus on profit maximisation causes a tunnel vision that is so hard to

One of the unique aspects of the India Way has been the capacity of the nation’s business leaders to find a competitive advantage where no one else was looking. **They have often built and followed radically different structures and strategies than the Western norm, yet the practices that have flowed from those decisions have frequently proved to be applicable in other markets.**

treat, leave alone cure, that businesses miss the point, altogether. What it does is, it may help you look far into the distance, but perhaps, too far ahead. “What’s the point of being fixated upon a target that takes you farther and farther from values? It’s a mirage, not a target,” says Wharton alumnus Ajay Chaturvedi, talking about business managers’ narrow interpretation of fiduciary responsibility.

He studied Management of Technology at the institute and has insights into how the institution perceives business and its practice.

A good entrepreneur sees business sense in the honest fulfillment of corporate social responsibility—he can remain a capitalist at heart, but his core is humanist. The authors of *The India Way* say that Indian business leaders stress broader societal purpose.

They take pride in company success — but also in family prosperity and national renaissance. The book is peppered with examples of Indian businessmen who have prospered by leaps and bounds, but who value the people they work with, just as much as, if not more than, the people they work for.

BOOK EXCERPTS

The single most distinctive feature of corporate governance across the Indian companies we studied was this determination to balance the interests of the firm’s diverse stakeholders, groups that have a claim on what the company does, including staff, customers, and community.

The executive chairman of Shree Cement, BG Bangur, told us he considered creativity so critical to his company’s competitiveness that he had been explicitly working to ensure that his managers were comfortable with a certain error rate in their decisions.

The India Way is the result of deep introspection, over decades, not merely the last few years. The economic meltdown accelerated the onset, transforming the chronic to acute, in pure medical terms. The crisis opened the seams of the corporate world’s gilded business tapestry, and what emerged was deeply disturbing—even to the hardy, not necessarily insensitive, MBAs and technocrats.

“Placing people before profits breeds loyalty and helps create lasting social harmony. People make us successful, not machines, not money, not technology. America has woken up to this reality, and the recent economic crisis has only underlined that fact,” notes Chaturvedi.

Oliver Stone’s 1987 blockbuster, *Wall Street*, may have been a tribute to his father who was a stockbroker during the great depression (1929-33). But, a ruthless Gekko’s memorable words in the movie epitomise the corporate world’s ethos, or the lack of it: “Greed, for lack of a better word, is good.” Playing Gekko won Michael Douglas the Academy Award for Best Actor.

Playing Gekko hasn’t been good, generally. 

RURAL UPDATE

Lateral thinking, and action: Wharton alumnus takes BPOs to the villages. BY HEMANT KUMAR



Offshoring has not only made millionaires out of software entrepreneurs and process architects. Like barnacles, vendors, realtors and service providers latched on to the business process outsourcing (BPO) blue whale, literally crossing the Atlantic for free.

While everyone was busy counting dollars, few paid much attention to one of the most important passengers of this trans-Atlantic journey—the BPO worker. But now, he commands a certain respect in HR circles and keeps a few job offers in his inbox all the time. Now, he can hit the ground running, so to say. And he is causing significant attrition. That, says Wharton alumnus Ajay Chaturvedi, is draining the BPO industry more than anything else. Because, for the longest time, companies have been busy building business and counting profits, not breeding loyalty. About the BPO business, it is said that if you aspire to be like the people you serve, then the people who serve you will become like you.

That is why Ajay is calmly sowing seeds of faith – not on the manicured lawns of Gurgaon’s business parks or in its colonnaded Italian marble corridors. But in the villages of Haryana, a stone’s throw from the glass facades and swishing elevators and musical fountains of the BPO hub.

He is investing in the villages because he wants to breed loyalty and trust, he says. That will not only keep costs down but also bring the benefits of offshoring to the needy.

“When you show them the harvest of faith and earn their confidence, you make them your partners in growth, not opportunistic employees. They don’t go job-hopping for just a few dollars more. Plus, people don’t leave villages if the jobs reach them,” adds a confident Chaturvedi.

The geographical mapping of his business plan is a marvel of how his mind works.

Slowly, but steadily, he is spreading laterally, and inward.

“That is the best way to go,” says a reflective Chaturvedi. “You can’t go



Ajay Chaturvedi

The Founder-CEO of Harva is an engineer from BITS, Pilani, an MBA from University of Pennsylvania’s Wharton School, USA. He has 17 years of combined experience of working with Citibank, IBM and others, handling multimillion dollar projects across IT, BPO and manufacturing sectors.

to a remote Indian village and say you will set up a BPO here. Who will listen to you? But if you pull a thread from the urban yarn, and take it patiently into the proximal and contiguous villages, it will not only find ready acceptance, it will actually be on time, too.”

Chaturvedi’s grand march into the rural hinterland of India’s offshoring success has opened up avenues for women that existed, but were never extended. In that sense, it is a never before. But he wants to take the experience to the next level by expanding into micro finance and community farming in the villages, once he has gained the confidence of the villagers.

And that’s one of the strongest reasons why his prime investor, Arpita Verma, is so convinced about Chaturvedi and his dream. “He has a keen sense of social responsibility. But he marries it so well to the viability of a business venture, that it was an offer I could not resist,” says Verma, beaming. END