

FiRESiDE

The House Magazine of the Thermax Group Volume 40 No. 2 April-June 2010



Editor
A M Roshan

Assistant Editor
Natasha Rodricks-Naidu

Design
Shashi Karmarkar

Production & Circulation
S Muthukrishnan

Printed at
Vyoma Graphics, Pune



Cover

A familiar scene that doesn't change with the change of seasons. For many, the relentless search for drinking water continues even as the skies open up and the ground gets drenched. The camera captures details from a daily expedition: the girl unmindful of the drizzle; the flimsy umbrella that a strong wind can upturn; and the walk over puddles and mud.

A photograph is also a window inviting us to look beyond its margins and imagine the lives of others: food that has to be cooked, children who have to be bathed, lessons that need to be learnt. The sheer hard work of returning with those pails of water. And, where are the boys and the men?

(Picture by Bhushan Mate)

**Inside
Back Cover
Bathena Foundation
Summer Camp**

Comment

“ Inspiration comes from working everyday. ”

– Charles Baudelaire



Printed on recycled paper

Correspondents : J. Natesan Heating Mahesh Pujari Cooling Umesh Barde Power Veena Coutinho Chemical Jaise Itty Water & Waste Solutions D. Bhanja Enviro Jenny Alexander Finance Sunil Godse Human Resources S. B. Chandak Administration Jiju K. T. Business Technology Group D. W. Bapat Research & Development R.B. Menon Manufacturing Nisha Rane Industrial Relations Kirti Pitale Mumbai Rama Delhi Swati Aditya Kolkata Laxmi Gupta Chennai Noorjahan Khan Boiler & Heater N. Haridas Thermax Engineering Construction Company

Fireside is the quarterly house magazine of Thermax Limited, Pune. For private circulation only. Company related news/features may be reproduced only with the permission of the Editor. Address : Thermax Limited, Thermax House, 14 Mumbai Pune Road, Wakdewadi, Pune 411 003, India. Tel : (020) 25542263 Fax : (020) 25541226 *Fireside* is also hosted on the website : www.thermaxindia.com Email : roshan@thermaxindia.com natasha.naidu@thermaxindia.com



MEMBER

CONTENTS

2

What's New?

Thermax Power wins an important order as it gears up for a hectic phase of growth ☐ Thermax inks a technology transfer agreement with Lambion, a German company ☐ Provides drinking water to Andhra villages through the Naandi Foundation ☐ Thermax heat pump slashes the energy costs of an auto major ☐ And the Water and Waste Solutions prospects for business in Oman with a representative agreement

6

Expressions

Meher Pudumjee stresses the importance of listening to customers and empowering employees to solve their problems. She exhorts each employee in the chain to give customers better reasons to continue to do business with us

8

Round up/Limelight

Highlights of Thermax business wins in Egypt, Thailand and Philippines ☐ New Chiefs for Cooling & Heating, and for Human Resources ☐ Thermax's CFO ranked among India's best ☐ In its 10th year, Swar Sandhya continues to charm audiences ☐ Ammonia chillers and thermosyphons gain new customers ☐ And achievements of Thermax employees and their family members

17

Focus

A feature on three Thermax volunteers who are mentoring children at the Akanksha Learning Centre and helping them move on in life

20

Up Close

K. Chakravarthy talks to AM Roshan about his shift from energy to the environment business; why we need to take risks to make sense of opportunities and wonders what is happening to the Thermax tradition of using first names

22

Signposts

Excerpts from Arun Maira's book, *Transforming Capitalism*, in which he examines the nine theories that retard inclusive growth and prevent corporations from listening to citizens

26

Voices

Lalitha Pillai shares how a health crisis in the family made her conscious of life's fragility ☐ Ashwathy Zachariah's imagination runs riot on a space adventure ☐ Vijay Chaudhry reflects on an experience that is changing his life ☐ And the sounds from an earlier time helps Piyush Ghelani come to terms with life in a new country

32

Slice-of-life

A sample guide for parents to spot their child's future career leanings ☐ The importance of humour for survival in the Antarctica ☐ And a graph on what really works when troubleshooting computer problems

Thermax Power bags order from ONGC confident of increasing presence in



Crescent Power at West Bengal : an independent power plant commissioned by Thermax

WHAT'S NEW?

Thermax has bagged a Rs. 580 crore order for a captive cogeneration plant from ONGC Mangalore Petrochemicals Limited (OMPL). The gas based combined cycle plant will generate 72 MW of power and steam for the refinery's aromatic complex that is planned in an upcoming Special Economic Zone.

The project comprises two gas turbine generators, one extraction-cum-condensing turbine, two fired heat recovery steam generators and two oil/ gas fired boilers. Thermax will also provide water and waste water treatment systems and other auxiliaries. The entire engineering, procurement and construction of the power plant including power evacuation, instrumentation, civil works, piping and miscellaneous balance of plant shall be done by Thermax on a turnkey basis in a time frame of 29 months.

The project will be completed under stringent standards such as the API grade for gas turbines.

For Thermax, it is a return to gas based power plants after a long gap. It was in the

late '90s when it built the 55 MW gas based power plant for Arvind Mills. The OMPL order also gives Thermax the impetus to extend its services to more public sector units. The Power Division is already executing a project for SAIL's Rourkela Steel plant.

By the end of 2009-10, Thermax Power division had commissioned 851 MW of power. An additional 1044 MW from 29 projects is under commissioning which



Captive power plant for SAIL Rourkela under construction and (inset) safety pledge at site : presence in PSUs



GC Mangalore Petrochemicals Limited: PSUs and IPPs

includes power projects in South East Asia and the Middle East. Apart from gas based power projects, till date Thermax has contracted over 60 turnkey power projects including a few independent power plants (IPPs). These plants are based on various fuels including coal, biomass and waste heat

from the steel and cement industry.

Thermax Power is currently setting up a turkey 270 MW IPP in Andhra and a 120 MW captive power plant for a Ferro Alloy unit in Orissa. It expects to commission an additional 2000 MW by the end of 2012.

Thermax-Lambion technology transfer agreement to upgrade green energy systems

Thermax signed a technology transfer license agreement with Lambion Energy Solutions, a German engineering company with expertise in converting waste to energy.

The agreement signed by Hemant Mohgaonkar, Executive Vice President of Thermax and Axel Lambion, Managing Director of Lambion Energy Solutions will upgrade the biomass based systems that Thermax offers to clients for generating energy. It will provide Thermax with high efficiency combustion systems for using biomass, high in moisture content, for energy generation. They will be integrated to its boilers and heaters with heat output ranging from 4 MW to 30 MW.

A dedicated team from Thermax has already begun work with Lambion to absorb and deploy this technology.

The agreement is valid for a period of five years. Thermax will have an exclusive license to market heating systems, equipped with the new technology in India and SAARC countries, South East Asia, Middle East and Africa.

Thermax is already supporting its customers with a range of technologies to generate energy from a wide variety of biomass.

The new agreement with Lambion and subsequent technology upgradation will help the company to provide industry in Indian and select overseas markets with advanced systems for extracting energy from



Partnership for green energy systems : upgraded technology

waste in eco-friendly ways. M S Unnikrishnan, Managing Director and CEO of Thermax says, “We are happy this partnership with Lambion and the new technology infusion will reinforce our product offerings in the area of green energy.”

For Lambion the partnership offers an opportunity to promote its expertise in new markets. Says Axel Lambion, “We are confident our proven technology will help harness renewable energy from the diverse types of biomass in India.”

Lambion has a 90-year family tradition in the efficient and ecologically viable thermal uses of a variety of biomass substances, solid fuels and waste material. It has built 3000 such efficient energy plants worldwide. The company is managed by the fifth generation of the Lambion family.



Thermax RO systems provide drinking water to Andhra villages: **supports Naandi Foundation in four districts**



At a village installation : clean water free of fluoride

Thermax is using its water treatment expertise to provide drinking water to villages. It has supplied Reverse Osmosis (RO) systems to the Naandi Foundation, and has installed some units in the villages of four districts of Andhra Pradesh.

Naandi Foundation, a non-profit organisation established with the aim of improving the lives of the underprivileged, has already established a self sustaining model of selling drinking water on a subscription basis. It has been working with a few water treatment companies and contacted Thermax to support its initiatives to supply safe drinking water in Andhra

villages. Thermax has already supplied over 5000 RO units to customers who include mainly industries and some public utility services like the Delhi Metro.

Thermax's Water and Waste Solutions group customised modular, plug-and-play skid mounted units for Naandi. The units provide potable water by removing fluoride present in the ground water in several Andhra districts. Thermax installed the units with the help of its channel partner, SS Chemicals. At every site, it has also a trained a person identified by Naandi Foundation for operation and maintenance of the units.

Thermax heat pump slashes auto major's energy costs

A Thermax heat pump installed at its paint booth is helping an auto major reduce energy costs by 35%. And, in what could become an industry norm, several others are switching over to this energy efficient form of heating.

The auto plant located near Chennai had been originally designed to meet its requirement from a hot water generator earlier supplied by Thermax. This system had been operating on hi-speed diesel (HSD). As paint booths in auto units need both cold and hot water for their continuous operations, Thermax proposed an innovative solution to improve the energy efficiency of the plant. The plant's cooling was done by an electrical chiller. Could we make use of an absorption heat pump to harness



Paint booth on an energy diet, and a Thermax heat pump

the heat from the cooling water coming out of this chiller?

The otherwise wasted heat, combined with the heat generated by directly firing oil, would activate the heat pump and then generate hot water at the desired temperature for process applications. Approximately 55 kg of HSD is saved per hour and active energy consumption is reduced by 35%.

The hot water generator now connected to the heat pump is designed to take over only when the pump operates at part loads.



Exchanging the partnership agreement : together in Oman

Thermax signs representative agreement with Al Sulaimi Group in Oman

The Water and Waste Group's foray into select international markets gathered momentum as it signed a representative agreement with the Al Sulaimi Group, a reputed business house of Oman.

The agreement is for a business partnership between Al Sulaimi and Thermax to jointly prospect for business in water and wastewater treatment and recycle systems. They would focus on the oil & gas industry, and the municipal-urban sectors.

Among the 17 group companies of Al Sulaimi, Thermax will work with WALS Energy Services which caters to the oil & gas

industry and with Technical Trading Company that deals with standardized products. For Thermax, the partnership provides the opportunity to promote its products and an opportunity to bid together with Al Sulaimi as a consortium, for large water and wastewater projects in the region.

Elsewhere, in South East Asia, WWS also commissioned a demineraliser plant of 100 m³ per hour capacity in Indonesia. The project was for an old Thermax client, PT South Pacific Viscose, who was expanding its Indonesian plant. The Thermax plant would treat water for boiler feed applications.

EXPRESSIONS

More often than not, companies are busy trying to reduce the cost of the product. While this certainly needs to be done, ultimately it is beyond just 'cost' that matters to the customer. The 'benefit' proposition plays a major role in deciding the value and thereby differentiating the offering. Benefit to the customer can be in the form of faster delivery, lower downtime, robust and speedy execution of a project, prompt service and so on.



We have come out of a challenging year. With a lower order backlog at the beginning of last year, our total income stood at Rs. 3235 crore and profit after tax before extraordinary items at Rs. 256 crore, a decline from the previous year. Thermax's export income also decreased by 28% to Rs. 656 crore.

In my last column I had shared with you the conclusion of the long standing business dispute with the US company, Purolite. Though we are paying the liability in four equal instalments this calendar year beginning April 2010, we decided to take it as a one time extraordinary item of Rs. 115 crore (net of tax) in the 2009-10 Profit & Loss Account. This, then paves the way for us to move ahead and focus on growing and strengthening our energy and environment businesses.

On behalf of the Board, our thanks to Unny and his entire team, for steering the company through this difficult time and preparing our people to identify and capture opportunities that lie ahead. We also thank and appreciate the support and contribution of all our stakeholders - our employees, customers, supplier partners and business associates. Our thanks to all our shareholders for being with us through both prosperous and difficult times. I would personally like to thank our entire Board of Directors who have been there to support the company and provide their valuable insights for which we are deeply grateful.



While I was penning my thoughts on the year end and as I read the fact that our exports have reduced by 28%, I was concerned. I could not help thinking why Thermax, which has only a marginal global market share in any of its products, reduce export earnings even if there is a global recession. Moreover, what prompted me further was the recent survey conducted by the company to understand and measure the requirements of our customers and to assess how we are meeting their expectations.

What is apparent is that many of our



businesses have improved in addressing our customer's needs, but so has the competition. Some of our business divisions feel that due to the emergence of unorganised players, there is little product differentiation and the customer chooses the product with the lowest price. Sure, that is bound to happen if the customer does not see a value to the offering. And this is exactly where a company like Thermax can and should make a difference.

As I reflected on this topic, I thought of what my father, the late Rohinton Aga, had replied to a salesperson faced with the same predicament - "also-ran products have to be turned into champions." If offered the right value proposition, and with a feeling of "I care" through the life of the product, the customer is ours.

Today, 60% of our business comes from repeat orders, which is very encouraging. However, maintaining this needs constant innovation, be it our products, service or our business model. This reflection was reinforced during our Innovation Council meeting when one of the members highlighted the importance of value in this way: Value = Benefit - Cost.

More often than not, companies are busy trying to reduce the cost of the product. While this certainly needs to be done, ultimately it is beyond just 'cost' that matters to the customer. The 'benefit' proposition plays a major role in deciding the value and thereby differentiating the offering. Benefit to the customer can be in the form of faster delivery, lower downtime, robust and speedy execution of

a project, prompt service and so on. This is the concept Dr. Mashelkar has talked to us about on numerous occasions – delivering more from less for many more.

My son and I had visited a jewellery store a few months ago to buy a gift for a friend. It was Zahaan who pointed out how he would want to go back to shop only at Tanishq, since the quality of service, from the security guard at the door to the salesperson, made us and other visitors feel special. They had offered to value a piece of jewellery I had, even though I did not eventually buy anything from them. The whole experience made us feel like they wanted to understand our need and were keen to serve us, even if it did not result in a sale. If we want more loyal customers, we need to give them better reasons to continue to do business with us.

I would like to share another story of customer service, which remains etched in my memory even after nearly 13 years. My family had bought a flat in Pune some 15 years ago. After it was handed over we had not used it for two years, and when we went to see it, noticed a crack in one of the flush tanks. The security in-charge, on noticing our disappointment, immediately said he would have it replaced (without a phone call to his superior). I was amazed at the prompt response and the empowerment this man displayed. How many of us would have the courage of our conviction to take a call when we are in the wrong, to correct ourselves when we have made the mistake, without making the customer feel like he is at fault? This, to my mind, is what captures a customer's heart for life.

I would like to add here that there is a basic underlying assumption that quality, delivery and performance output are taken for granted.

Over the years, more than customers, it is their business requirements that have changed – either their customers have become more demanding or their competition has increased. It is only by truly "listening" and understanding our customer's difficulties, pain points and emerging needs that we can provide them

the right solution. If our minds are pre-occupied with figuring out how to "plug in a boiler or a water treatment plant" in order to hit a turnover target or profit figure, we will never really open our eyes, ears and hearts to our customers. Also, this is not the job of just the frontline sales or marketing people, but of everyone in the chain.

Can we be obsessed with listening, processing and converting our customer's problems into solutions? Peg Neuhauser, a management consultant says, " Long-term success requires long-term listening to customers" and this is something that we need to do at all times – listen to customers, competition, suppliers, channel partners and of course our employees. This listening followed by empowerment will definitely provide the right ideas and direction for the company to constantly improve and move forward.



This year, it was heartening to see many employees participate in celebrating Technology Day on 11th May. We had representation across divisions and regions, and our people came up with a number of innovative ideas. While it is very important to generate new ideas for Technology Day, it is equally important to keep this process continuous throughout the year. It reminds me of 'Mother's Day', which is the day in the year when mothers (primarily in the West) are pampered and demonstrated with love, care and attention by their children. I always wonder about the remaining 364 days of the year?

My congratulations to Dr. Sonde and his team at the R D Aga Research Technology and Innovation Centre (RTIC) for being the catalyst, energy and exuberance behind these celebrations. Cheers to '365 day' ideations!

Warm Regards,

Meher Pudumjee

It is only by truly "listening" and understanding our customer's difficulties, pain points and emerging needs that we can provide them the right solutions. If our minds are constantly pre-occupied with figuring out how to "plug in a boiler or a water treatment plant" in order to hit a turnover number or profit figure, we will never really open our eyes, ears and hearts to our customers.



Enviro signs its biggest export contract with cement firm in Egypt



Pollution abatement in Egypt : prestigious project

In a prestigious project that could open up opportunities in the international market, the Enviro division has signed a contract worth USD 19.85 million with Tourah Portland Cement Company of Egypt. As the biggest export order for its air pollution control business, Thermax will replace and retrofit the client's existing electrostatic precipitators with state-of-the-art fabric filters bringing the unit in line with the country's latest air pollution control norms. The turnkey project that includes

supply and installation will reduce emissions to 20 mg/nm³ (normal cubic meters).

The Tourah Portland cement Company is part of Suez Cement Group of Egypt, owned by Italcementi, Italy. The project is part of the Egyptian Pollution Abatement Project (EPAP-II). Enviro won this contract through an elaborate international competitive bidding process under guidelines issued by the World Bank, who is also co-funding this project.

ROUND UP

Innovative Product Award for Thermax Cooling



Prize winning Thermax team : innovative design

Thermax received the Runners Up prize for innovative product design in Bry-Air's annual national awards. The award was for the development of an exhaust-gas driven, Lithium Bromide absorption chiller with a 12% higher co-efficient of performance.

R Balu, P Babu & Swapna Kulkarni, the innovators from Cooling engineering received the award from Sunil Advani, CMD of Blue Star at New Delhi.

Used on a typical two MW gas engine, this innovative product design would save Rs.15,00,000/- per year through lower costs

of operation. The harnessed exhaust would also reduce 200 tons of carbon dioxide emissions per year.

Bry-Air (Asia), Delhi, instituted the Annual National Awards for excellence in heating, ventilation, air-conditioning and refrigeration (HVAC&R) engineering to recognise outstanding contributions from professionals and encourage innovative system and product designs.

The Cooling engineering team had won the top Bry Air award earlier in 2006 and 2007.

Hemant Mohgaonkar is the new **Cooling & Heating** chief

Hemant Mohgaonkar took over as Executive Vice President (Cooling & Heating) and member of the Executive Council in May 2010. He joined Thermax from Tata Auto Comp Systems (TACO) where he was President and Head-Business Group II, overseeing three businesses – Interiors and plastic division, Automotive composite business and Tata GS Yuasa battery business. Earlier, he headed the engineering services business of TACO, and had been responsible for setting up engineering centres in Japan and China.

In a career spanning over 21 years, Hemant also worked with Knorr Bremse India, Tata Toyo Radiators Ltd., FAG Precision Bearings Ltd., Indian Seamless Metal Tubes and Bharat Forge. He has

vast experience in strategy development, marketing, sales, engineering and technology.

A B.E. Mechanical from Nagpur University, Hemant is also an MBA from Symbiosis, Pune and has completed a Diploma in General Management from Netherland's Maastricht School of Management. Hemant enjoys Hindustani classical music, sports and reading. He was a visiting faculty on Strategic Management at Symbiosis.

Hemant is married to Priyadarshani and they have a son, Akshay and a daughter, Avani.

*Hemant :
new direction*



And **Sharad Gangal** takes charge of **Human Resources**

Sharad Gangal, took over as Executive Vice President (HR/IR/Administration) and member of the Executive Council in June 2010. Sharad joined Thermax from HDFC Standard Life Insurance where he headed Human Resources with focus on employee engagement, talent retention, career planning and structured communication across the organization.

He brings in 26 years of rich experience in the areas of human resources and industrial relations from a career spanning Cadbury India, Asian Paints and Boehringer Mannheim.

A Master of Labour Studies from Mumbai University, Sharad also holds a

graduation degree in law and commerce. He has also been involved in voluntary service to a co operative bank on HR processes. Sharad enjoys reading and traveling, his most memorable trip being the Great Ocean Road coastline drive in Australia.

He is married to Anjali and they have a daughter, Shruti and a son, Kunal.

Fireside welcomes Hemant and Sharad and wishes both of them mutually rewarding careers with Thermax.

*Sharad :
healing touch*





Gopal receiving the Award from Shri Pranab Mukherjee : commitment to CSR

Gopal Mahadevan ranked among India's best CFOs

Gopal Mahadevan, Thermax's CFO, has been ranked among India's best chief financial officers by Yes Bank and Business Today.

For the Yes Bank-Business Today Awards, instituted since 2005, winners are short-listed after a rigorous analysis of the financial parameters of their respective companies and scrutiny by an eminent

panel of judges. This year, a high powered jury chose Gopal on the basis of Thermax's 'Commitment to CSR.'

Gopal received the Award from Shri. Pranab Mukherjee, Union Finance Minister at a function held in Delhi in April 2010.

Fireside congratulates Gopal and wishes him continuing success.

Thermosyphon gains new customers in the food sector

When Gemini Edible and Fats at Patalganga operates a Thermax packaged boiler, besides additional savings in cost of power and maintenance, they also don't have to worry about the risk of contamination in the final product. Gemini is using a Thermosyphon, a high-pressure natural circulation unit which uses water as the heating medium over traditional industrial heating media like thermic-fluid.

Thermax's solid fuel fired thermosyphons reduce chances of synthetic or mineral oil leaking into the finished product. Since thermic fluid is also non biodegradable, the new product offers, environmentally, a better alternative. Slowly but surely, the food sector is beginning to use the thermosyphon for its commercial, health and environment benefits.



Thermosyphon : healthy, viable alternative

This equipment is also gaining customers in the markets of South East Asia and Africa, where there is a wide range of solid and agro fuels – bagasse, mustard stalk, cotton stalk, rice husk, coffee grounds, de-oiled bran, wood chips, roasted chaff, lignite, washery rejects, paper sludge and coal. It offers a viable alternative to oil based steam generation.

Cooling & Heating Service edges past the 100 crore invoicing mark

The Service business of Cooling & Heating group (C&H SBU) crossed the Rs. 100 crore invoicing milestone in April 2010. The team celebrated the occasion by inviting Unny to punch in the invoice that would take them past the centurial mark. In the colourful words of Shardul, the leader, the event was a milestone in the SBU's journey "from the incredible to the credible."

C&H Services SBU offers products and solutions for improving energy efficiency in industrial and commercial establishments.



Celebration time : credible journey

Over the past 4 years they have helped customers across sectors to combat high energy costs. Besides India, the group operates in the Middle East, South East Asia and Africa.

Like the C&H service arm, Thermax has similar dedicated service units for its other businesses. They support clients with O&M of power plants and water and wastewater treatment plants, retrofits and upgrades of equipment, erection and commissioning, spares, breakdown maintenance services, and energy management in utilities.



Thermax boiler for sugar industry : Thai installation

Biomass-fired Thermax boilers for Thailand's industry

Here's a case of delighting the customer and reaping twice the benefit. The client in this case is Mitr Phol Group of Thailand, a leading sugar industry for whom Thermax is installing two high pressure traveling grate boilers for co-generation.

The first order was for a 170 ton/hr capacity boiler for the group's Kalasin Bio-energy Co. Ltd. It will use a combination of bagasse, rice husk and wood-chips as fuel. The boiler will be commissioned on a turn key basis by September 2011.

As the Kalasin project was going on, Mitr Phol considered various Indian and Japanese manufactures for another high pressure boiler for its Dan Chang plant. Thermax's progress at the Kalasin project swayed the order in its favour. The Dan Chang project is scheduled to be completed in October 2011.

One of the Thermax boilers at 105 bar (gauge) will be the highest pressure installation among biomass fired boilers supplied to the sugar industry of Thailand.

PHOTONEWS



Anu Aga accepting the Padma Shri from the President of India, Smt. Pratibha Patil at Rashtrapati Bhavan, New Delhi on March 31, 2010.

In May 2010, Anu was also invited to be part of the second National Advisory Council (NAC), formed to help set the social agenda of the Indian government.

Swar Sandhya continues to regale



Ten years of making music : gifted performers

To mark its 10th year of existence, Swar Sandhya, the talented band of Thermax musicians, presented a ghazal themed concert in June 2010. The group drawn from employees, their spouses, ex-employees, family relations and children regaled the audience at RD Aga Community Centre with a mix of Hindi and Marathi classical and film songs.

Over the years, Swar Sandhya has selected interesting themes for their performances: 'Melodious 1967 to Rocking 2007' to coincide with Thermax's 40 years of

existence, 'R.D. Burman Special', 'Marathi Bhav-Geet special' and 'Mausam Mastana'. They have performed on various stages and for various causes to raise funds. The group has also gone international with Madhav Agharkar performing at Swar Sandhya Shanghai with a different set of gifted musicians.

Ravi Kshatriya, from EXIM, who co-founded this group in 2000 credits the musicians, his colleagues and an appreciative audience for the 'songful' decade.

Ammonia chillers reach out to new markets

Ammonia vapour absorption chillers (AVAM) of Thermax are connecting with new customers in various markets. For a quick check on the application front, prospective customers only need to look at the work done by Thermax Cooling SBU for Gujarat Fluorochemicals Ltd. (GFL) at Dahej in Gujarat. Here, Thermax successfully commissioned a 150 TR ammonia absorption unit for chlorine generation.

GFL's aim was to replace the existing system with an absorption chiller and save energy costs. In addition to the chiller, it asked Thermax to supply a chlorine liquefier – a heat exchanger to liquefy chlorine gas so impurities can be vented off. Thermax's

engineering and research helped develop a design for the critical operation in the chlor alkali plant of GFL. The installed system, today handles a chlorine liquefaction load of 144TPD, more than the committed figure, and controls the chlorine pressure within a narrower range than stipulated.

In related cooling news, Malabon Soap commissioned a Thermax AVAM for the production of margarine at its plant in Manila, Philippines. Gharda Chemicals, Lote, Maharashtra commissioned a 600 TR ammonia chiller as a centralised chilling plant for their processes.



***Thermax chillers
at Daboj and
Manila (above) :
cooling options***



***Pause and take
a break : memorable
outing***



Kolkata office parties at the beach

In January 2010, the 70 strong Kolkata office team pressed the pause button for a well deserved break. They boarded a train with their families and headed for a picnic at a sea side resort in Shankarpur, 195 Kms from Kolkatta. Treks, sumptuous food, frolicking on the beach, dancing, outdoor games and an overnight stay made this picnic a memorable occasion.

*At the workshop :
Strategies for growing organisations*



Honing the
entrepreneurial
instincts of our
Channel
partners

Forty-five Thermax Channel Associates (TCA) participated in an entrepreneurship workshop held in two batches in April and May. Facilitated by the Channel Management Group, the residential programme was conducted by the Symbiosis Centre of Management & Human Resource Development. The participants discussed various aspects of financial and human resource management, business analytics and business strategies for growing organizations.

The third batch is scheduled for July 2010.

*Thermax systems for
managing water :
impressive credentials*



Water
management
for the
power sector

Water and Waste Solutions (WWS) of Thermax has impressive credentials in the country's power sector. It recently provided total water management solutions – from treatment of raw water for processes to effluent and sewage treatment – at Punj Lloyd's Chabra TPS Stage 1 and Reliance Infrastructure at Yamuna Nagar.

Other customers in the power sector

include NTPC, Tata Power, JSW Power, Essar Power, KPCL & State Electricity Boards of Maharashtra, Gujarat, Tamil Nadu, Orissa, Andhra Pradesh and Rajasthan.

As several power plants are coming up near the coast line, WWS also geared up to provide desalinated water using reverse osmosis technology.

Engineering showroom for **Thermax products** at Vijayawada

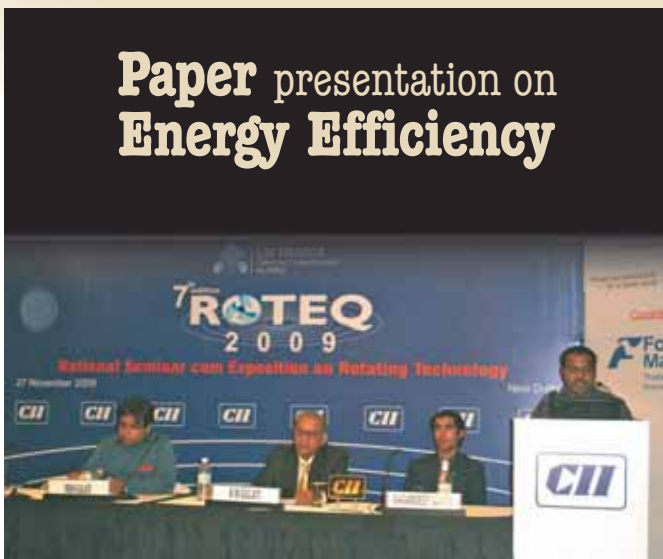


*Spares and
new products:
inviting customers*

Here's a Thermax First: Vensai Associates, our channel partner has opened an engineering showroom in Vijayawada in May 2010. The showroom aims to make customers aware of Thermax's offerings and new product launches. Genuine spares will be made available here and customers will have the benefit of product demonstrations.

Inaugurated by Rabindranath Pillai, CRM, Southern Region, the Vijayawada showroom will cater to the industrial hubs in the neighbouring districts of Krishna, East Godavari, Prakasam and Guntur.

Paper presentation on Energy Efficiency



Vikas at the seminar : efficient technologies

Vikas Tripathi from Cooling Business Marketing presented a paper on energy efficient technologies, cogeneration and green power at the 6th ROTEQ 2009 National Seminar.

ROTEQ highlights technological advances in rotating equipment. For the last five years, the event has been organised by the CII-LM Thapar Centre for Competitiveness for SMEs.

Black Belt in Six Sigma

Prashant Kulkarni from Enviro, has been awarded a Black Belt in Six Sigma by Dr. Mikel J. Harry Six Sigma Management Institute, USA.

He is now trained to evaluate a business process and incorporate business, statistics, and engineering techniques to improve upon it.

Prashant is also an assessor for CII Exim Bank Business Excellence Award and a SAP solution consultant for materials management.



*Prashant :
certified evaluator*

Be the wind beneath their wings

Meet the Thermax volunteers who mentor children at the Akanksha Learning Centre. They find time to be with the students, listening to them and helping them find their voices. Sharing their experiences with *Fireside*, they invite others to step forward and open the doors of opportunity for young people.

FOCUS



"The children need help with their immediate difficulties."

"Poornima, the 10th standard student I was mentoring was terrified of geometry. That fear affected her overall confidence. She thought she wouldn't be able to make it in the final exams. And if she failed, marriage could inevitably be the next step. I helped her with her geometry lessons three days a week after 7.30 p.m. and on weekends. As we went along, I could see her becoming more confident. In a 45 day crash course, we completed the basics and most of the syllabus.

Once she got the hang of geometry, she gained confidence in other subjects too. I am happy Poornima did well in her SSC exam, scoring 71%. I do hope her wish of becoming an IT Engineer comes true.

What made me spend time at Akanksha? I had felt something lacking and wanted some meaningful, direct involvement with the social sector. This experience has given a new direction to my life. Gradually, I would like to spend more time with the children and balance it with my life at office and at home.

I learned a lot from these mentoring sessions. It is all nice to talk about the future, but to help children like Poornima, one needs to help them with their immediate difficulties. 10th standard is a make or break stage for children with Akanksha, especially the girls. The children here are sharp and down-to-earth. Their communication skills are good. If some of our people can put in even a few hours a week with the basic concepts in Math and Science, it would help them very much."

■ **S Krishnan**
Chemicals



"I eagerly look forward to the weekly sessions and so do the children."

"Preeti, one of the children I mentor comes from a home where her parents wish a better life for her. They nurture her and support her education. She is fortunate because many children coming from similar backgrounds often receive no encouragement or have no role models at home. Preeti had difficulties with her geography lessons and I have tried to make the subject interesting so that she can study better. She is now in her 9th class and I am confident, with care and support, Preeti will do well in her life.

Informally, I have also helped another boy who used to walk six kilometres to attend our sessions at the Akanksha space in Thermax House.

Along with my wife who is a teacher, I have always been

interested in the welfare of the girl child, and specifically, her education. Often, society and circumstances deny her the opportunity to grow to her full potential. I also encourage children to take part in team sports. This helps them to channel their aggression, deal with success and defeat, handle stress and make friends.

I eagerly look forward to the weekly sessions and so do the children. For them, I am now a friend, a teacher and a career guide. Personally, this experience has helped me at home with my own children.

I do hope more of our people from Thermax can volunteer. These children at Akanksha, like other children, need someone who can spend some time, understand and encourage them, and help them to discover their natural skills. "

□ **Satish Srikantiah**
Chemical & Water Services



"It is tough to change social practices, but I am determined to continue."

When the SSC results came, Sheetal, the student I was mentoring passed her exams. This was good news, as she had a tough time keeping herself interested in her studies. During our sessions at Akanksha, I tried to explain to her that if she didn't do well, her parents could get her married off and she would be forced into a life no different from theirs.

But it was also sad to know that even before the results came, Sheetal's marriage had taken place. Today, I realize how tough it is to change social practices and conventions. Probably we need to prepare the parents for change, as much as we spend time with the children.

After I responded to our Outreach Manager, Sanyal's mail and signed up for the mentorship programme, I realized these children had no awareness of options, about what education can do for their lives. The biggest hurdle is the ignorance and rigid mindsets of their parents, their neighbours. I am glad I can work to make a difference to some of them. Am I discouraged by the set back in Sheetal's life? True, it was disappointing, but it only makes me more determined to spend more time so that I can continue to work for change.

Personally for me, this had been a good experience. Seeing these children with so much energy even to come to school on weekends, to learn new things, has given me more enthusiasm for life.

□ **Nilesh Sakpal**
Cooling & Heating





Budding artist, **Arghya**

Arghya, 11 years old, enjoys painting and quiz. This student from City International School, Pune has participated and won several painting contests organized by schools, clubs and institutions like ICICI Bank and UTI.

Arghya is the son of Mahuya and Subir Banerjee of Enviro.

Sudarsh, an eco pal

Meet Sudarsh, an eco-conscious fifth standard student from CMS English medium school, Pune. He has made presentations on industrial pollution, participates in tree plantation drives and garden visits, and helps to take care of the greening of his own housing society. Recently, Sudarsh was awarded a certificate for his performance in the 'Paryavaran Ratna Award' examination conducted by the Indian center for wildlife and environmental studies in South East Asia region.

Sudarsh is the son of Vaishali and Vinod Patil from Cooling.



Civic conscious **Maithili**



Maithili Puranik made a presentation on how education could alleviate hardship faced by street children at the Young Changemakers – Pune Conference, an event that highlighted the civic issues of Pune. As team leader, this ninth standard student of Jnanaprabodhini School (Sadashiv Peth), Pune, visited street chowks, railway platforms and NGOs to understand the lives and aspirations of these children.

Daughter of Varsha and E.G. Puranik from WWS, Maithili has also won awards for dramatics.

All rounder, **Dhwani**

Dhwani, school topper with 96% marks at St. Helena's at this year's 10th standard exams is keen on taking the science option, but is also exploring career options in environment studies and literature. She has been the head girl of her school, has been learning Bharathanatyam for the past eight years and has won awards at the international and state level for abacus mental arithmetic.

Dhwani is the daughter of Kavita and Sunil Lalai, Company Secretary.



Shantanu, IIT scholar



Shantanu secured an all-India rank of 586 at the IIT Joint Entrance Examination 2010, from around 4.5 lac aspirants. He wants to pursue his engineering studies at IIT Bombay.

Shantanu is the son of Aparna and Kiran Thakar of Thermax Sustainable Energy Solutions Limited (TSES), the subsidiary.



Rhythm Maker, **Alex**

Alex is a musician who plays the guitar, drums and tabla. Practicing from an early age, he has now formed his own band 'Melentropy'. He is inspired by the music of 'Indian Ocean' and his own father, an accomplished musician himself. Alex is pursuing a course in sound engineering and music production.

Alex is the son of Francis and Veena Coutinho from Chemicals

University toppers, **Mayuri** and **Nitin**

Thermax Graduate Engineer Trainees, Mayuri Kataria and Nitin Chimote received gold medals at the 97th Convocation of Rashtra Sant Tukdoji Maharaj (Nagpur) University from Dr. D.Y Patil, Governor of Tripura.

Mayuri, a student of Laxminarayan Institute of Technology, Nagpur, secured first rank in Chemical Engineering with an aggregate of 80%. Nitin topped the Power Engineering course from the National Power Training Institute, Nagpur with 77% aggregate.

Nitin and Mayuri are posted at the Power and Chemical Divisions, respectively.



Faculty winner, **Marcelle Samuel**



Marcelle Samuel is a senior lecturer in Economics and Banking at the Symbiosis College of Arts and Commerce. Her case study on identification and development of indigenous innovations was adjudged the best paper at a national conference on innovation for faculty.

She was also a winner in the contests for curriculum designing and research paper writing hosted by the University of Pune. Marcelle has conducted workshops and training programmes in public speaking and soft skill development.

Marcelle is the wife of David Samuel, Power division.

Best Franchisee, **Shuchi Mathur**

Shuchi Mathur won the Best Franchisee (Pune Region) award of UCMAS (Universal Concept Mental Arithmetic System) for the second year in a row. UCMAS is the pioneer in offering abacus based brain development programmes for children in the age group of 5-12 years.

Shuchi has been running the franchise successfully in Vimannagar for the past four years. She is the wife of Akshay Mathur, from the MD's office.



K. Chakravarthy from Water and Waste Solutions talks to AM Roshan about his shift from energy to environment business, and why we need to take risks to make sense of new opportunities.

UP CLOSE

From frontline appearances to back-end realities

Though the 2011 Census would verify his name as K. Chakravarthy, inside Thermax, the current SBU head of Water and Waste Solutions (WWS) has always been 'Chakra'. So one can imagine his unease when people begin to call him 'Sir'. He says with a trace of irritation, "There is so much of 'Sirring' around these days, it makes me wonder what's happened to our old fashioned first-name culture."

We are in the drawing room of Chakra's sixth floor flat in Baner's Ivory Estate. For the *Fireside* interview, we had agreed to meet on a Sunday, at his place, and round it off with lunch. So I had driven over from Kondhwa on this unusually bright June morning, when after a cameo, the rains have done the disappearing act. After introducing his wife, Sunita, Chakra settles down to talk to me about his life and times in Thermax. Their daughter Deepti, ailing from a throat infection, is sleeping inside.

In another two years, Chakra will complete 25 years in Thermax. Except for nearly two years in 2006-08, when he left to head the joint venture of Fisher-Sanmar, Chakra has been with Thermax all along. After his early years in Andhra's Nellore, known for its "cyclones and quality of rice", he topped the State's Diploma course in Mechanical Engineering. The rank gave him a passage to the 2nd year of the BE Mechanical course at Nagpur's Regional Engineering College (now an NIT). He joined Thermax in 1986 as a graduate trainee. Over the next 14 years, Chakra would work with the erstwhile PHD (now Heating) sales, moving up to become the CRM of the Southern Region and then the SBU Head of Heating (C&H).

Chakra says the CRM job gave him new perspectives. "It gave me the opportunity to work with business leaders. I learned many

things including the importance of engaging with people." Those years, before the video hook-ups came, the top management used to travel for the regional open forums. The promoter- family and the MD would be there and it was "a good experience to see Thermax values in action" in those sessions. In this role, Chakra also came to know the other Thermax businesses – from cooling to water.

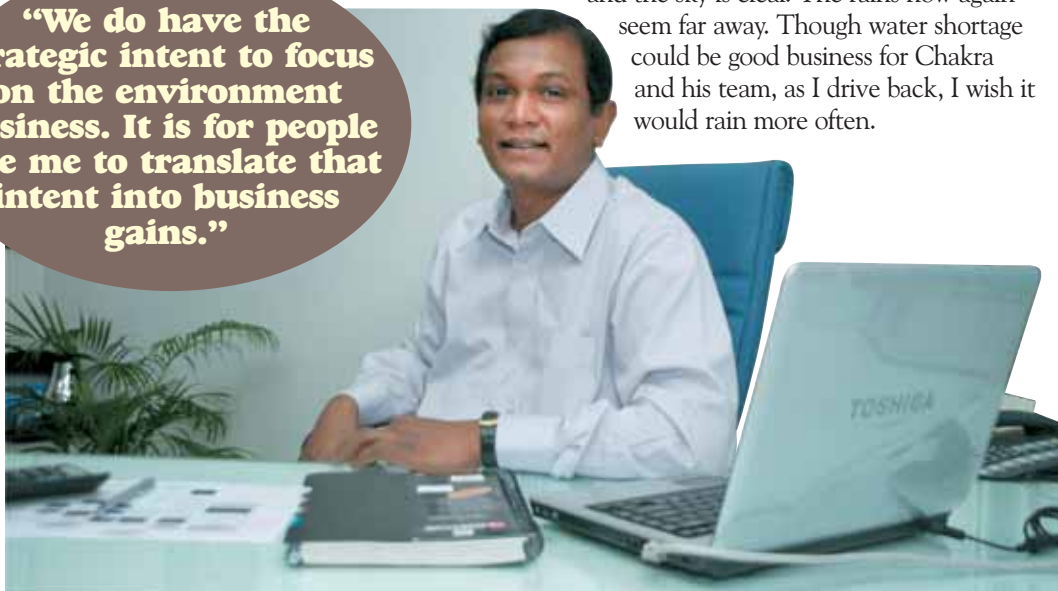
Essentially a heating professional, how was he taken in to lead the water business? "While working with the JV, several new offers came my way. One of the options was to take up the assignment in WWS that had come up. I thought this was the best bet." Chakra says his exposure to water clients during the CRM days helped him and anyway, the basics of doing business remain the same.

He took over at a time when the water business was going through a difficult patch. Ram, the Executive Vice President for Chemical and Water, himself new at Thermax at that point of time, had just reorganized the Division along three distinct performance units, providing "a clear focus." Chakra worked with him, nursing the business back to health and shoring up the morale of the team. He set himself three top priorities: turn around the Division's negative cash flows; improve the order book position and speed up the ERP implementation process. The Group could reverse its cash flows in four months. The ERP migration happened on schedule, the order position improved, and today, the business is steadily growing. More importantly, "I am happy that the fundamentals of conducting business have now been internalised. The teams today know what's expected of them and how to achieve it." He appreciates the way Ram gave him space to set things right.

His two last roles as SBU Head of Heating and heading an external Joint Venture helped him to look beyond frontline appearances to back-end realities. "I woke up to a whole range of concerns, from vendor development to account realization. I had to collapse my learning time frames." Today, he is determined to stay focused on such vital areas of business that make such a big difference. Every month there is a rigorous review of the performance units, and convinced that his division needs to stay clear of the messy balance sheets so common with most Indian water treatment companies, he keeps a constant vigil on the cash flow position.

He is enthused about the future of Thermax's water business. Government schemes for urban renewal offer us a great opportunity to reach out to many Tier-2 cities. In many areas municipalities are not allowing industry to draw ground water, but offer sewage to be treated and used. Chakra says, as a company with EPC-design capabilities, and equipped with the right mix of technologies, we are well poised to cash in on the opportunities. In the industrial segment, Thermax is already a major player. "Here, we can move to the dominant position, if we manage costs, schedules and cash flows," he says confidently. He is proud of the experience and knowledge levels of his WWS team. "I don't think their competencies have been sufficiently recognized within Thermax."

"We do have the strategic intent to focus on the environment business. It is for people like me to translate that intent into business gains."



It has started to rain. I am happy my dusty car parked outside would get a free wash. We continue our talk over a beer. Deepti has woken up and is feeling much better. Chakra talks about her love for reading and adds that he should set aside time for his own reading. "I used to read both fiction and management books," he says with a tinge of regret.

Chakra feels that it is time to take risks by adopting some of the emerging business models. "We should not shy away from seeking professional help for the financial engineering required for these models," he says. The Division has also begun to reach out to international markets in the Middle East and Africa.

Primarily an energy business manager, today Chakra is leading one of Thermax's environment segments. Have we neglected to develop and grow the environment business? Chakra doesn't think so. "At the top we do have the strategic intent to focus on the environment business. And, it is for people like me to work out detailed plans and win the necessary backing and finances to translate that intent into business gains."

Lunch is ready and I am treated to a great meal. Chakra and Sunita are gracious hosts and I don't need any prompting to help myself to the superb Andhra traditional mutton preparation that Sunita has made for us.

Saying goodbye to Chakra and his family, I take the lift down. Outside my car is washed and the sky is clear. The rains now again seem far away. Though water shortage could be good business for Chakra and his team, as I drive back, I wish it would rain more often.



The Nine Barriers between Corporations and Citizens

SIGNPOSTS

*In his perceptive and humane book *Transforming Capitalism*, Arun Maira, Planning Commission Member and former consultant with international management consultancies, reflects on the changing role of corporations and offers ideas to facilitate the dialogue between business managers and civil society. In this excerpt, he examines nine dubious, quick-fix theories that drive our approach to economic progress. These theories could retard inclusive growth and prevent us from realizing that good corporations know how to listen to their customers; great corporations also know how to listen to citizens.*

Changing Mindsets for Inclusive Growth

The challenge of inclusive growth evokes a picture of four men in a boat. Two men at one end of the boat which is sinking into the water are bailing furiously. At the other end, rising into the air, two men are gloating, one saying to the other, "Thank goodness, the hole is not

at our end!" In September 2000, at the UN Millennium Summit, 147 heads of states, rich and poor, signed a declaration to make poverty history. They established the Millennium Development Goals (MDGs) that specified the results required in eight areas by 2015. A mid-term review shows that the goals are unlikely to be achieved. One part of the world is poor, yet to develop. The other is rich, and developed. The

MDCs, as they should be, are aimed at improvement of conditions in the developing world, which is affected by poverty, inadequate education and health facilities, and environmental degradation. They broadly reflect the goals of inclusive growth that India is also pursuing. The richer parts of the world, at the other end of the boat, are expected to help the poor on compassionate grounds, and it is not surprising that their support is not as forthcoming as may be necessary. The alarms about climate change have made people realize that everyone, whether in developed or developing countries, is in one and the same boat. Climate change will affect everyone, even the rich at their comfortable end of the world.

...

The nine theories that make mindsets

We must change our mindsets if we want sustainable and inclusive growth in India and the world. For this, we should examine the validity and implications of nine underlying 'theories-in-use' driving prevalent approaches to economic progress. Propounded often, these nine nostrums could be retarding inclusive growth.



'First grow the pie before you share it'

This implies that the poor are asking the rich to give their wealth to the poor and that, therefore, the rich must be allowed to increase their wealth even more so that there is enough to go around. What the poor are actually asking for a chance to participate equitably in the process of wealth creation. They want to get a share of the pie while it is growing. Not trickle down, but growing together. They point to the reality of cumulative causation in economies that those who already have wealth, education, or power have the means to create even more for themselves. The poor want opportunities to create wealth for themselves, through access to capital, education, and

income-generating opportunities, thereby helping to grow an even bigger pie.



'It is up to them: They should try harder'

This is a tricky one. The poor want to stand on their own feet. Therefore, it is up to them to make the effort. However, there are two assumptions in this statement that are not often questioned. The first is that the rich have obtained their wealth by hard work only. The second, that the poor are not trying hard enough. When those ahead, walking higher up the mountain, look back and see the poor behind them on the mountain's lower reaches, struggling to make progress, they may fail to see the deep moats that the poor have to cross before they can come up to the slopes the rich are on.

These moats are the structural disadvantages built into economies and societies that prevent the poor (and others disadvantaged by history or geography) to have as easy access as the rich to capital, education, etc., to improve themselves. Some of these moats are deliberately built by those ahead to protect their advantages against the hordes behind – think of the physical wall being built across the US-Mexico border, or of criteria for employment that exclude 'people not like us'. Often, these barriers develop over time as social prejudices: of whites about blacks, upper castes about lower castes, etc. Those behind have to cross these moats and it is not easy. The purpose of affirmative action is to acknowledge these moats exist and for those ahead to drop the drawbridges across them from their side so that those struggling behind can come across.



'Leave it to the private sector if you want public services to improve'

Citizens everywhere need basic services such as water, sanitation, elementary education,

An excessive reliance on selfishness to motivate change does not produce compassionate societies or even happy individuals. Because the truth is that the theory is flawed. Human beings do care for others.

public transportation, etc. Fairly widespread experience in poor countries is that the government machinery which is enjoined to do so, does not deliver the required services: It is bureaucratic, insensitive to its customers, wasteful, and corrupt.

Handing over such services to the private sector seems an attractive way out. There are many examples of improvement of services by the private sector. Very frequently, the story of telecom in India is cited as one such example of a huge success.

However, experience with privatization of public services has not been always good. Nor can it be. Because there is a conceptual problem in making private what is public. In 1989, primarily for ideological reasons, Margaret Thatcher privatized water utilities in Britain. The way it was done led to fantastic profits for the companies and huge performance-related payments for their directors. Between 1989 and 1995, customer charges jumped 106 per cent, and in 1994, water supply to 12,500 households was disconnected because they could not pay their bills. Meanwhile, profit margins for the companies increased by 692 per cent. The public was shocked because water, a public resource, had been privatized to line the shareholders' pockets. In Manila, Buenos Aires, and other cities across the world also, experience with privatization of water services has been disastrous. Very often, the poor cannot afford to pay the price the private companies ask to cover their costs and make a profit

By definition, a business enterprise is not a social service. Managers of businesses are required to run them in a way that improves profits. They have no obligation to give their products and services to those who cannot pay for them. They make money by serving those who pay more and shunning those who cannot pay enough. Unfortunately, the latter are those who may need the services the most.

While a human being can live without a telephone perhaps, she or he cannot survive long without basic necessities such as water,

sanitation, elementary education, and public transport to get to work. Therefore, the state, funded by taxes, must ensure that even the poor have access to these services to give them a chance to stand on their own feet. Even if it engages the private sector to assist in improving the efficiency of public service delivery, the state, which is accountable to its citizens, must play a strong role in regulating the delivery to temper the private profit motive with public service responsibilities.



'The business of business must be only business'

The triumph of capitalism over communism was marked by the defeat of communist government in Russia and other countries behind the Iron Curtain after the fall of the Berlin Wall in 1989. Thereafter the power of business corporations in societies everywhere, including India, has risen with the ascent of capitalism. Simultaneously, governments are being pushed back. Thus, an institutional gap is widening between the needs of societies that need to be met, such as those expressed in the MDGs, and institutions required to fulfill those needs. It may be ideologically correct to say that the business of business must be only business, but it is neither morally nor practically tenable any longer. Therefore, businesses must strengthen and support governments to fill those needs or take responsibility themselves.

The role of business corporations in society must evolve. Their performance must be gauged against a wider set of measures that reflect broader social needs, and not merely those of their investors. They must develop new models and install new processes to fulfill these broader societal requirements.



'Human beings act purely in their rational self-interest'

This is a bedrock principle of economics underlying most free market models. The interaction of selfish agents seeking to gain more, each for themselves, creates richer

economies. Therefore, the theory seems to work. However, an excessive reliance on selfishness to motivate change does not produce compassionate societies nor, as innumerable studies have revealed, even happy individuals. Because the truth is that the theory is flawed. Human beings do care for others. They value the qualities of equity and justice in the organizations in which they work and in society. (In fact, recent experiments with monkeys and even rats have shown that they too appreciate equity and justice!)

The only way to reconcile this basic principle of modern economics with reality is to acknowledge that human beings may include concern for others as part of their own rational self-interest. As Mahatma Gandhi retorted when someone said that he was a totally unselfish person, "That is not true. I am very selfish because I work hard to get something that matters a lot to me even if others do not seem to want it." What mattered to him was that the weak are justly treated and are helped to stand up on their own. Lyndon Johnson knew that he could not have passed civil rights legislation in the US if he presented it as something that would benefit the blacks alone. He sold it to the whites as a vision of a just society that they would be proud of—in other words, something that they would desire for themselves.



'Just do it'

The Nike slogan, 'Just do it', reflects the strong bias for action in economies that move ahead. There is a bias against reflection and against posing questions for which there are no easy answers because they waste time and time is scarce.

The problem with this is that the right actions to address the major problems the world is confronting today are not obvious. George Bush and his advisors thought they knew how to eliminate terrorism – 'We will get them wherever they are', as Donald

Rumsfeld said shortly after 9/11. Or how to democratize Iraq – eliminate Saddam Hussein and a grateful people will accept the American way of life.

Bold fixes often backfire because the systemic connections amongst the variety of interacting forces are not understood. The US Corps of Engineers drained the Everglades in Northern California by straightening the meandering natural water channels to run into the sea to make place for large farms. Man had improved nature – it was an engineering marvel. Now, decades later, changes in soil and water conditions and weather patterns have emerged that were not anticipated. And the engineers are back, trying to restore nature's circular ways to save the environment!



'Uneducated people cannot make good decisions'

No doubt, those who have more information and insights into why things work the way they do will make better decisions about how to make improvements when desired. Thus, a mechanic, who knows how a car's engine works and uses instruments to sense what is going on in it, can tune up the engine, whereas a layman will not know what to do.

The expansion of human knowledge with the Enlightenment since the 17th century has produced tremendous advances in various fields that have benefited humanity – in medicine, engineering, etc. As the amount of knowledge has increased, it has become more difficult for anyone to know everything. Therefore, science continues to split into many specializations and educated experts know more and more about less and less. Often, they do not understand how the larger system, into which their narrow discipline fits, works. Economists do not understand the minds of social and emotional human beings. That is left to sociologists, who do not understand the intricacies of economics. The 'inconvenient truth' about climate change is that it is the

The role of business corporations in society must evolve. Their performance must be gauged against a wider set of measures that reflect broader social needs, and not merely those of their investors. They must develop new models and install new processes to fulfill these broader societal requirements.

The Nike slogan, 'Just do it', reflects the strong bias for action in economies that move ahead. There is a bias against reflection and against posing questions for which there are no easy answers because they waste time and time is scarce.

result of an accumulation of decisions by educated people mostly in the developed world.

Compartmentalized thinking is hazardous. It often results in fixes that backfire. Therefore, education must be redesigned to encourage more systemic thinking and intuitive insights. This must begin right at the beginning, in primary education. And experts at the top must learn to listen to those who have other perspectives so that together, they can understand the whole system before (overconfidently) advocating solutions.



'When everyone is in charge, no one is in charge'

Whenever there is need to make things happen faster, or need to scale up good work, we think of putting someone in charge. We feel this person should have full authority to cut through any opposition and to take decisions quickly. Thus, we conceive of 'anti-poverty tsars', 'anti-terrorism tsars', and 'homeland security tsars'. Stop and consider for a moment. Tsars were considered to be tyrannical and mankind may be well rid of the idea. Must we resurrect the concept of a supreme, all-powerful authority whenever we want coordinated action on a large scale? Isn't there another way to coordinate many actors than to impose an authority over them?

We need a new model of governance that is built upon the participation of many and not based on the need for one to dominate many. Inclusive growth requires that all can take charge of their own lives, and every nation of itself, while also taking responsibility for the consequences of their actions on the world around. The model of the tsar or the monarch with divine rights in its many variants, some more benign than others, like the all powerful chief executive officer and the commander-in-chief, are not solutions for an interdependent world in which none should (nor can perhaps) dominate others.

However, the theory-in-use continues, past its sell by date, affirming that the only way to get big results is to hand over authority to one powerful person. Hence, 'tsars' rule even in the US! And institutions of international governance like the UN and the World Bank are dominated by powerful nations.

It is a human right, enshrined in the concept of democracy, that those who are affected by any decision must be included equitably in the process by which the decision is taken. They must be satisfied that their interests will be fairly considered even if they do not participate in every step of the process. This is a fundamental requirement for inclusive growth.



'Either you are with us or you are against us'

This is an overly simplistic view of the world, in which the opposite of a wrong is presumed to be right. It is the world in black and white – a world of good guys and bad guys, a world of Left versus Right – whereas the real world is composed of many colours.

None of the theories-in-use mentioned above is always wrong. Nor are any of them always right. If 'Just do it' is not always right, neither is 'Don't just do it.' It is neither this nor that. Even opposites can co-exist. Therefore, one must respect other perspectives. This is the eternal truth of inclusion handed down by the sages over the ages.

*Excerpted from
Transforming Capitalism,
by Arun Maira*



A phone call and a reality check

A few weeks later, doctors opened up my husband's chest and re-routed the arteries around his heart through a bypass surgery.

Is friendship really thicker than blood? Does it outshine all other relationships?

Though everything seems to change, sometimes something happens that reminds you once again that friendship can still be so valuable and indispensable.

A year ago in June 2009, on a busy day at work in Pune, I received a call from my husband, Jagannath, who works with the special products' group of Thermax's WWS. As he was returning from an inspection, he felt a sudden choking sensation in his throat. He needed to see a doctor and asked me to meet him. I had hardly reached the place we were scheduled to meet, when I received a call from my husband's cell phone. But it wasn't his voice. It was a Nilesh Patil on the line.

When he couldn't bear the pain any more, my husband had wisely decided to disregard his "do-it-myself" response. He contacted Nilesh from PK Industries, a Thermax vendor, located close-by.

Taking charge, Nilesh dropped what he was doing, took him to a hospital close by and got an ECG done. When the doctors diagnosed a major heart attack, Nilesh accompanied my husband to the emergency room of a larger hospital. It was from there, Nilesh called Jagannath's colleagues to inform them, and that was when I also spoke to my husband's good Samaritan for the very first time.

"Madam," he had said, "we are taking Mr. Pillai to a nearby hospital and will get him checked. Nothing to worry. Please wait for my call."

I admit I was overwhelmed. The heart attack scare arrived out of nowhere. It left me in an unfamiliar territory conscious of life's fragility.

They say that how you respond during the first hour of a heart attack can decide the chances of recovery. This 'golden hour' was a gift from Nilesh to my family, a gift I will always be grateful for. Nilesh is no longer Mr. Patil to us anymore but a 27 year old helpful youngster who took a brave decision and displayed a rare presence of mind.

If trust is crucial in buyer-supplier relationships in Thermax, this was a real example of that trust in action.

I have been touched by the heart warming messages my anxious colleagues sent. Even that one line message gave me hope in those quiet and uncertain times as I waited in the hospital recovery room looking over my resting husband. I've thanked my colleagues a hundred times in my heart for their generous act of donating blood. I have the deepest gratitude to Thermax, and especially to the WWS team, for their support in our time of need.

Life is really short, as we do not know what's going to happen tomorrow. It sometimes takes a hard slap in the face in the form of a serious illness or emotional trauma to help us reconsider our lifestyle. This scare was my wake up call.

Today I know the importance of treating ourselves with respect and the need to care as much about health as we care about our work. No matter how crazy our work life gets to be, it is up to us to make it work in our favour.

I have also come to realize that we ought to appreciate the people in our lives that include our family as well as our colleagues. And it is for us to look around once in a while so that we don't miss out on the simple joys of life.

May you have a healthy day, everyday.

□ **Lalitha Pillai, WWS**

VOICES



The Sounds of My Past

I woke-up to the mild drone of the airplane in preparation for landing and felt the familiar surge of excitement and unease. Lazily gazing out of the window, I could see the sky was clear, the sun was up. Nothing very different. I peered down to see the turquoise ocean shimmer, huge ships and tankers looking like tiny specks. Though by now, all these sights were familiar from my numerous sojourns in South East Asia, this time I could clearly sense a difference.

On the next seats my two sons were cuddled up and then my wife, still half asleep. Here we were, moving in to Kuala Lumpur, Malaysia, bag-n-baggage, without return tickets. My office had sent me here to work in this alien land, to live among people who did not look like us or speak like us, did not eat or even smell like us! Suddenly I could experience the umbilical cord of 'Amche Pune' being cut. This was a critical moment, 'my' moment of truth.

The whole of the next week was spent in arranging the new house and slowly I began the process of tuning in to 'be at home' in the new surroundings, to beat 'home-

sickness'. Naturally, getting back into routine was an option, though I have always wondered why, so desperate to break out of routine, we still feel the need to get into it again...So be it.

Long morning walks and jogs have always helped me to spring back to life. Being an outdoor freak, that was the first thing I started in order to 'get into a routine'. It was still dark as I strapped my jogging shoes and stepped out into the cool morning air. My watch showed 05.15 AM. Sunrise in Malaysia is at 06.30 AM throughout the year.

I took a deep breath and paced up my stride, glancing at the silhouettes of trees and buildings as far as the eye could see. I felt that unease once again. Even the silhouettes appeared different than those I was 'used to' seeing while jogging on Pune roads.

Then it happened. Initially, a distant resonance and as I trained my ears I could clearly hear 'Allah-u-Akbar ... Assh ha du Allah e llaha ill lalla.....'. It was the muezzin's call to the faithful for the morning prayers.

It was magic. In an instant that call took me 15 years back to the sounds of my past – on every single dawn, as I grew up from a child to a boy, and then to a man in Bhusawal, a small, sleepy old town in northern Maharashtra. Now, thousands of miles away from home, listening to that familiar call, suddenly I felt 'at home'.

As I jogged along the footpath, those early years came flooding in. Every morning I would be woken up and readied for school. The sky used to be dark and the roads quiet, just as they were now. Though I have never understood the muezzin's verse, the melody that I heard now on this morning in Malaysia was as enchanting as it used to be then. These are some of the ways of the Lord.

This has nothing to do with religious influences and it is not about beliefs and faiths. This is just how, over the years, a daily experience and a natural ambience became an integral part of one's being.

The house I grew up in was an ancient bungalow built by the British. It had a big garden in the front with guava, mango and mulberry trees, and flowers – roses, jasmine, mogra, raat-rani, jai-jui and hibiscus. The

garden attracted birds of all shapes, sizes, colors and sounds. A larger backyard with more trees also doubled up as a cricket field. There was no dearth of open spaces. Our neighbourhood had other bungalows and gardens, similar to ours. And the people there, our neighbours, were truly cosmopolitan. My childhood buddies came from all castes and creed. In those times or perhaps at that age, who saw them that way? From dawn until dusk, we played, ate and lived like one joint family. Zamir, Mehernosh, Daryl, Nitin, Tanvir were just plain 'sounds' that we used to call out to our pals.

Today the mind is more 'developed'. At the drop of a name, we instantly begin the process of replacing the person with our perceptions about what his or her name stands for. Our lives were different then, compared to what they are now, and where they could be going. It was that early part of my life that responded to the muezzin's call and found comfort in something familiar in a new land.

□ Piyush Ghelani
B&H Service

AN HOUR IN THE SHUTTLE

An innocent ear infection triggered it all. After three days of leave and medication I rejoined office. When a colleague from HR pointed out that I had to get the fitness certificate from my family doctor ratified by the company doctor, I couldn't think of a possible silver lining. Trust me, the factory where the doctor is stationed, is no hop skip and jump from my habitat – the corporate office. Hesitantly, I decided to go the next day directly to the factory and then get back to work.

For a small town girl like me, any distance

over five to eight kilometres is a cross country expedition. The mental preparation, troubles of getting out, the travel.... uuff! The distance between my residence and the 'suspected' destination was definitely more than 15 kilometres. Suspected, because there are more than three offices of Thermax in and around Chinchwad and for all practical purposes, I could very well be a tourist that side of town. To add to my woes, I suffer from selective motion sickness. I'll spare the viscous details.

But, what could I do? The ratification bit was

AN HOUR IN THE SHUTTLE



non-negotiable and my ear had to be re-examined by the company doc. So shall it be!

The fateful day dawned and I coerced my better half to live up to that phrase by taking me on a romantic drive to the Thermax factory at Chinchwad. Half my problem was taken care of... but what about the rest? Perhaps, some lucky mortal can bask in my company on the way back to the corporate office. So before I proceeded to the medical inspection room, I raced to the receptionist to check whether there was anyone heading back to the corporate office. Not even Lady Luck seemed keen on leaving PCMC area. However, the receptionist gave me the assurance that if I could wait for an hour I could go by the shuttle.

A what? A Shuttle?!

Having grown up seeing the colourful pages of the now extinct Russian magazine, Sputnik, the prospects of a spin (supersonic flight?) in a shuttle suddenly awakened my dormant dreams.

In about three minutes flat, got the doctor business through and then I was left to myself, fantasising : aluminium exterior, tinted glass, lots of wires and gadgets, more gadgets, a cup and a pencil floating by in anti-gravity... a slide show had already begun in my brain.

About an hour later, starry eyed I walked towards the launch pad...to find a rickety mini bus! It promptly blew my astronomical trance to smithereens. My space ship seems to have hit the Bay of Bengal even before it took off!

However, I was determined to get something out of this much anticipated ride.

I started tuning my ears to the blaring radio to hear some robotic sound...like the sound emitting from the wireless handsets that cops

carry around. The astronaut who would be maneuvering us did not wear the mandatory space gear, but his goggles would put any astronaut to shame.

Inside the shuttle, sans AC, it felt like I was already orbiting the sun. The flight charter braced us for the proposed space route which included stop-overs at different planets before arriving at the final destination.

It was now time for take-off. 9.8.7...2.1. Our shuttle launched into the Pimpri Chinchwad interplanetary space!

The expedition team comprised two more amateur astronauts. The p(f)lying astronaut was a veteran in astrodynamics. He maneuvered effortlessly though the hurtling cosmic bodies avoiding many collisions. The crater-studded by-route from the Bhosari bay gave me the much anticipated antigravity experience. This state of suspension lasted for less than two worthwhile seconds. The other celestial bodies on our route exceeded their potential maximum velocity and didn't seem to follow the ground rules for sticking to their orbits. For a split second I could empathise with the crew of the fateful Columbian Shuttle.

After 61.09 minutes, I reached the final destination. Alive! Probably, the third woman who managed to survive a space expedition.

My gastric juices didn't embarrass me. After all, how can it happen...have you ever heard of a pukey astronaut?

Thanks HR people, thanks company doctor, thanks factory people, thanks astro-n(a)ut, for this virtual experience.

□ **Ashwathy Zachariah**
Legal

Like most others, I too was preoccupied with the daily grind. Life was a series of hectic activity – tensions of chasing steep targets, disappointments of losing orders, the stress of managing relationships at office. Beyond my job at office, I had no time to think about myself or my family or others.

About a year ago, a close friend told me about a personal training program which promised to transform my life. This programme called Art of Living (AOL), he said, can change my life and help me to live with enthusiasm and fulfillment.

I never thought that there can be an art in living. After all, I have been living for more than 35 years and wondered what art form my life can take! Honestly, I thought that this is one of those new age mumbo jumbos and felt that my friend's claims about this training were highly exaggerated. I kept postponing this program under the pretext of my busy schedule. However, my friend persisted and eventually I landed up for a six day AOL course. I was not too sure and had lots of apprehensions.

As we were about to begin, my skepticism grew because of two reasons. I had to sit down on the floor and in front of us, there was a photograph of a bearded man. I thought, "Man, I have been conned." I had no wish to become a disciple of some Swami or get involved with any religious programme. Why should I sit here and listen to any Swami talk philosophy and spirituality? In any case, I thought I was too young to get involved with spirituality.

The course began. I was surprised to see that our facilitator was an engineer and a working professional like me. He started talking about some concepts like three types of listening, three types of questions, seven levels of existence and sources of our life energy. I could quickly relate all these to my own life. We practiced yoga nidra and this was followed by an interesting discussion on the connection between our breath and the state of our mind. I felt my skepticism change to curiosity. I started seeing some logic in what was being discussed and the various pranayam practices being taught. As day one ended, I left the class, far more optimistic than when I had checked in that morning.

On the second day, we were taught the Sudarshan Kriya. I will never forget that first experience during the session when I felt a great current passing through my whole body. I felt as if I was receiving a surge of energy from within me and from the environment.

My facilitator told me that I had made contact with 'prana shakti'. The experience was exhilarating and enigmatic, full of wonderful feelings. This experience completely changed my outlook towards the course. From being a skeptic, I became a firm follower. Gone were all my apprehensions.

I completed the whole course of six days and gained useful sights into the nature of my mind, intellect, memory, and ego. I also gained practical wisdom that has helped me manage myself as well as my relationships, for my own peace of mind! Spirituality is no longer "too early" for me. It is not something kept aside for "after retirement" but it is about my life, now!

The world around me has not changed, it is the same. Yet, I am able to keep stress away from my life as my way of looking at the world has changed!

On the first day, we were told that for one week, we were not supposed to touch tea, coffee, alcohol or cigarettes. For the last five years I had vainly struggled to give up smoking. The course made such a positive impact on me that I gave up smoking from the day I did my first Sudarshan Kriya.

There have been other benefits too. My left knee's ligament had torn off and the knee used to get locked quite often. One of the best orthopaedists of Delhi had advised surgery. Today, that knee doesn't trouble me any more. It is quite healthy without any treatment. This is a personal miracle that I experienced through this course and have suddenly become peaceful and happy. And more enthusiastic too. Encouraged by the change in me, my wife and children also took part in the training. So, it has been a case where the entire family gained from this experience.

I also went for the advanced meditation course that has taken me further, on my new course of life.

From the silence and peace that I experience, a message wells up for my friend who pushed me onto this new way of life. A message thanking him from the core of my being.

A year has gone by since I set out on this journey. I have only one regret, "Why did I postpone joining this course, why didn't I begin earlier?"

□ **Vijay Chaudhry**
Enviro



days that
transformed
my life



Changing landscape of professions in India

The action is in the new exciting professions. There has been an explosion of options. Every skill is monetizable. Every eccentricity has a buyer. Every activity is a potential profession, and every talent has a reality show. Here's a sample guide that may help parents spot their offspring's future vocation:

Your child...

ignores you when asked to do something – Flight Crew
 keeps interrupting when adults are talking – News Anchor
 stays up late and goes to school bleary eyed – IPL Player
 insists on lighting the candles during a power cut – Social Activist
 beats up all the kids in the neighbourhood – Collection Agent
 wakes you up at night with inane requests – Call Centre Executive

– from an article by Ramesh Srivats
 in Outlook

Humor is a key tool for survival

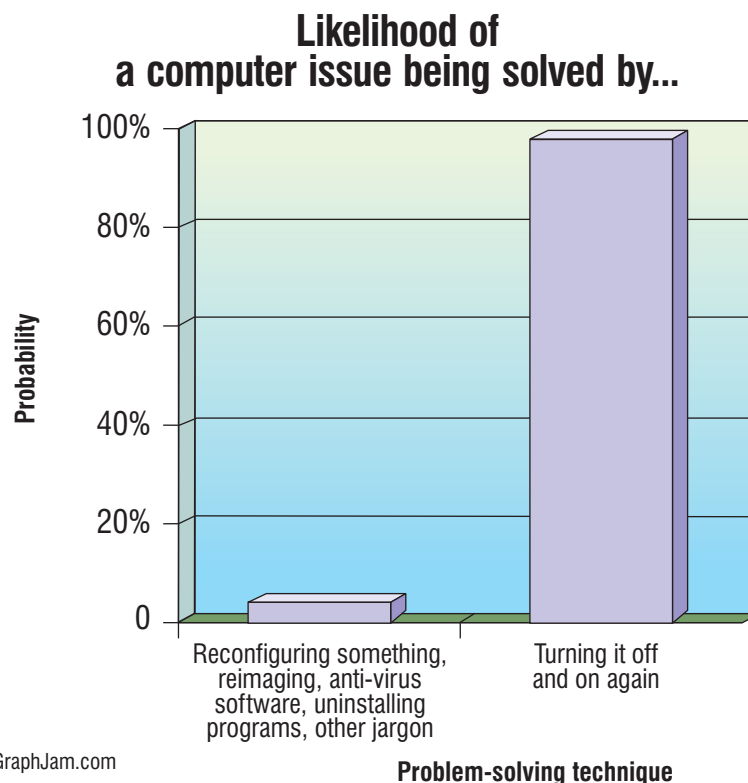
Living in freezing isolation in Antarctica is test of endurance for even the toughest of adventurers, with veterans to the South Pole convinced that a sense of humor is a key tool for survival. In addition to psychological assessments and technical competence there is a strong emphasis on mental and physical prowess when vetting candidates to work on the ice.

With over 20 years experience working on various Australian Antarctic stations, Rob Easter tends to rely on gut instinct when selecting candidates for the annual six week working programme, the Mawson's Huts Foundation Expedition. "I put a lot of store into people's personal qualities as against their technical abilities. If I had two people of equal technical ability, I'd go for the personal quality." He says people need a sense of humor, self-motivation, and can't take themselves too seriously. "It's a simple thing, but it's not always there...I tend to steer away from people who are too egotistical, I think a certain level of humility is good."

– from a Reuters article

SLICE OF LIFE

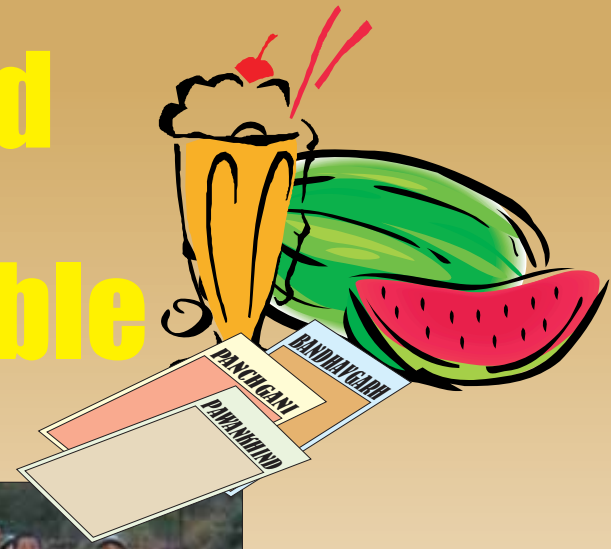
And some revealing statistics on trouble shooting :



Courtesy: GraphJam.com

Problem-solving technique

Retrieved from a memorable summer



This year's Bhathena summer camp for Thermax families offered adventure sports and skill development workshops. So while some children enjoyed the outdoors at Panchgani and tiger spotting at the Bandhavgarh Reserve, others were engrossed in water colour painting, handwriting analysis and voice modulation exercises. And the spouses, away from husbands and children, let their hair down on a trip to Pawankhind.





Technology Day celebrations on May 11, 2010 saw unprecedented participation from over 1200 Thermax employees across divisions and regional offices. 110 innovative and implemented ideas for work simplification were captured. Brain storming sessions and technology games, essay writing and on-line quiz contests celebrated the power of ideas. At EERC's Harmony hall, the mood was zestful as notable ideas were presented and the winning teams applauded. This final session brought the curtains down on a vibrant fortnight that promises to spill over into the coming years.

THE POWER OF IDEAS

