



FIREside

The House Magazine of the Thermax Group Volume 39 No. 2 April-June 2009

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Cover

Attired in colourful clothes, pots perfectly balanced, these two women in Rajasthan are performing a thankless daily chore – bringing potable water to their homes for their men, children and cattle.

In their arid surroundings water is precious. Not a drop to be spilled. Not a drop to be wasted. This conservation ethic is deeply ingrained and rain water is carefully harvested with indigenous systems, over the decades.

Water is life. Even more so for them. Despite the gravity of the subject, the picture conveys a strangely positive feeling. Taking things in their stride.

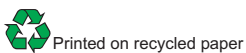
(Picture by Marie Luise Porsch)

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2008-2009
Highlights
of the Year

Comment

“ Money doesn't talk, it swears. ”

– Bob Dylan

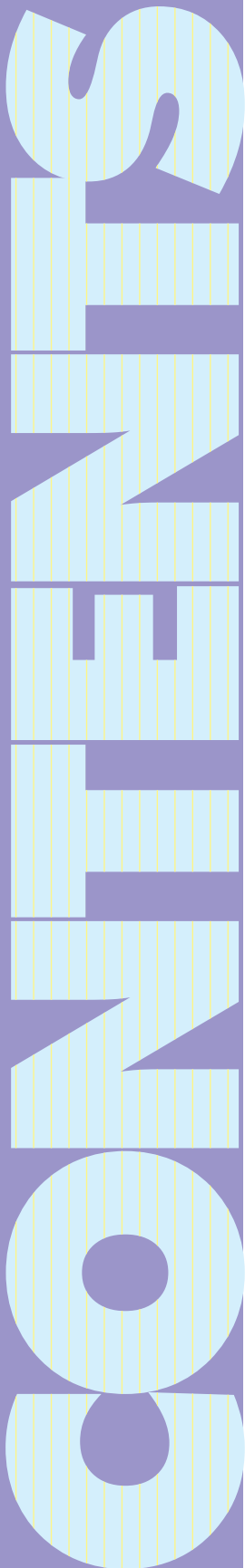


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MEMBER



Thermax signs agreements with two global majors for new-age technology in waste water treatment

■ Biggest export order for pollution control equipment for a project in Oman

■ A new manufacturing facility for paper chemicals commissioned ■ Giant heater for Shell's bitumen terminal in Dubai ■ The small power plant business comes of age

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Drawing on the examples of people who have achieved distinction in their field of activity, Malcolm Gladwell highlights the golden rule about long hours of dedicated practice. Excerpts from his best-selling book, *Outliers*

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WHAT'S
NEW ?

The approach to waste water treatment also has evolved over the years. While the earlier norm for treatment focused only on disposal, now the emphasis is on reuse of the treated water. It is here that membrane based technologies become useful.



Thermax signs technology agree leaders for waste water treatme

Thermax has recently entered into technology agreements with two global majors – Wehrle Umwelt GmbH of Germany and GE Water & Process Technologies, Canada – for superior membrane based technology in waste water treatment. The agreements will strengthen the company's offerings for the treatment of both industrial effluents and municipal sewage.

The first technology tie-up with Wehrle is for treatment of highly varied and 'loaded' effluents – high in terms of biological and chemical oxygen demand (BOD and COD) – from industries before they can be discharged or reused. Such effluent is typically generated by industries like pharma (bulk drugs), dyes and pigments, agro chemicals, paper and pulp and distilleries.

The agreement was signed by Erwin Muehle, Managing Director of Wehrle and S Ramachandran, Executive Vice President (Chemical & Water) of Thermax.

Wehrle is well known in the field of waste water treatment using membrane based systems and is a specialist in handling

difficult-to-degrade effluents. The company has over 25 years of experience and 140 reference plants where technologies like anaerobic treatment, sequencing batch reactors and membrane based filtration systems have been deployed.

The agreement, valid for five years, includes Wehrle training Thermax engineers in new areas and providing assistance in turnkey execution of effluent treatment projects.



Thermax and GE have signed a technology licensing agreement for ultra filtration and membrane bio reactor (MBR), an advanced technology for sewage treatment and recycling. The agreement was inked by H Bala, Country Manager of GE and S Ramachandran of Thermax.

Under the agreement, which is valid for two years (with a joint evaluation after 12 months), Thermax will engineer for clients membrane filtration system using GE's guidelines. GE's MBR systems– installed as membrane modules and cassettes – can be used for sewage treatment in municipal, commercial and industrial applications.



ments with world nt



Raw sewage and its proper treatment and S Ramchandran and colleagues with Wehrle and GE representatives

These include hotels, hospitals, IT parks, malls, residential complexes, SEZs, institutes, sewage treatment plants of a wide range of industrial units.

The tie-ups reflect the new opportunities emerging in the area of environment management. It is estimated that over 60 % of the sewage generated by Indian cities is dumped untreated in the canals and rivers of the country. Ironically, the flooding of sewage is matched by the growing scarcity of clean water and the resulting exploitation of

precious ground water. The discharge of poorly treated industrial effluents makes the situation doubly dangerous as it adds hazardous chemicals and toxins to the unhygienic sewage dumped in the water bodies.

Now, there are signs of change. Under the UN Millennium Development Goal, India has to make a determined effort to provide safe drinking water and improved sanitation to its masses. The government has taken several initiatives like the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) for 63 identified cities and Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT). These schemes are catalysing reforms and investments in public water and waste water treatment projects.

The approach to waste water treatment also has evolved over the years. While the earlier norm for treatment focused only on disposal, now the emphasis is on reuse of the treated water. It is here that membrane based technologies become useful. They help to treat effluents and sewage to high levels of cleanliness to meet pollution control norms and to recycle water for various purposes – for industrial process, irrigation, gardening, toilet flushing and car wash.

Treatment plants based on membrane based reactor (MBR) technology needs less space compared to conventional treatment plants and they can treat anywhere between 10,000 litres to five million litres per day. Simpler in design, they do away with secondary clarifier, filtration and disinfection units. They can be fully automated and have the flexibility to scale up for increased capacities.



Membrane basics for waste water treatment

Makes use of semi-permeable membranes for the separation of suspended and dissolved solids from water.



The membranes have millions of microscopic pores on the surface. These form a barrier to impurities while allowing pure water molecules to pass through. Water is drawn through pores using a gentle suction.



Methods include micro filtration, ultra filtration, nano filtration and reverse osmosis.



Increasingly becoming the preferred technology as it helps industry meet stringent pollution control norms in a single step treatment and allows water to be reused.



Delivers higher performance with a smaller footprint



*A view of the plant :
international
standards*

“This industry is certainly looking forward to improving the quality of their products and the Thermax-Georgia Pacific range meets their new expectations.”

It chose Thermax against established international players because of its technology partnership with Balcke Dürr and its track record in designing and executing big air pollution control projects.



New manufacturing plant for paper chemicals commissioned

At the Thermax manufacturing facility at Paudh, a new plant for paper chemicals has been commissioned. The state-of-the-art plant, with distributed control systems, has a manufacturing capacity of 12,000 tons per annum (TPA). From this plant Thermax will manufacture the new paper chemicals based on the technology tie-up with Georgia Pacific of USA.

Among the products the plant will manufacture, there is alkyl ketene dimer (AKD), an internal sizing agent. The new plant can produce 9000 TPA of AKD and is equipped with an imported homogeniser.

Dr. David Townsend from Georgia Pacific,

an expert on AKD technology was present during the first two trial batches. His expertise helped the Thermax project execution team to get both the batches ready with international specifications. Georgia Pacific also lent its marketing support through Jim Johnston, their R&D manager, who was with Bidrohi Sur, Business Development Manager for paper chemicals and his team. He and Sur visited the top 10 Indian paper manufacturers to promote the new product range.

“This industry is certainly looking forward to improving the quality of their products and the Thermax-Georgia Pacific range meets their new expectations,” says Sur.

***Big deal in Oman
Raut and
Chaudhry with
Vale's top brass***

Enviro wins its biggest export order



Thermax's Enviro division has signed a contract with Vale International, a Brazilian multinational, to supply 10 electrostatic precipitators (ESPs). In its biggest export order for air pollution control systems, Thermax will design, engineer and commission the ESPs at the 2x4.5 million tons per annum pelletisation plant that Vale is setting up in Oman.

Vale produces and sells a wide range of metals and minerals including iron ore, nickel, copper concentrate, coal, bauxite, alumina, aluminum and potassium. It chose Thermax against established

international players because of its technology partnership with Balcke Dürr and its track record in designing and executing big air pollution control projects.

Thermax has been expanding opportunities for air pollution control business through the supply of equipment – bag filters, ESPs – and by executing retrofit projects in the cement, steel and power industry in the Middle East and South East Asia. Thermax is engaging with global cement majors in these regions to position itself as a major player in clean air systems.

Giant heater : big gains



Thermax heater for Shell in the Middle East

tanks for petroleum derivatives like bitumen, lube and heavy furnace oils. VOPAK Horizon's terminal uses Thermax heaters for its requirement of eight million kilo calories of heat per hour. Sharjah Oil Refining, Fal Energy, Emirates Lube Oil Co. and British Petroleum are among the other Thermax clients.

Petroleum products need to be heated to make them flow easily and to reduce pumping costs. The heated product is transferred to tankers for transportation. Heat is also required for product modifications for use in various applications such as water proofing, paint and road works in case of bitumen.

Thermax has commissioned a thermal oil heater for Shell's bitumen terminal at the downstream petroleum area of Dubai's Jebel Ali Free Zone.

From concept to commissioning, the Thermax Heating (C&H) team was involved in installing the heater for Shell's storage tank, which at 8000m³ is the biggest bitumen tank in the region. Mott MacDonald was the consultants for this project.

In the Middle East, Thermax has already installed heating systems at over 100 storage

In the Middle East, Thermax has already installed heating systems at over 100 storage tanks for petroleum derivatives like bitumen, lube and heavy furnace oils.

Small power plants business gets bigger

In the last 10 months, the small power plant group of Thermax has successfully commissioned two captive plants – a cogeneration plant for a textile unit in Karnataka generating up to 4.5 MW of power and 18 TPH of steam and a 7.5 MW plant for a cement plant in Rajasthan.

With two more plants to be commissioned shortly, in textile and sponge iron, this new business of Thermax – power plants in the range of 3 MW to 12 MW – has come of age. “The slow down did affect us and we had to work together with our clients to revive projects that were being held back,” says Shekhar Kashalikar, who heads the small power plants business.

Operating in a tough environment, the business has been quick footed to move into areas where, even in times of downturn, clients can be sure of quick returns on investment. It has been focusing on plants that can generate power from waste heat and waste gases from their industrial processes. From such clients, it has bagged four orders to

generate a cumulative 30 MW of green power.

The group has made its mark by offering innovative designs to suit client requirements. For example, the textile cogeneration unit it commissioned three months ago is engineered to fit into limited space and occupies a small footprint. As they worked with clients, Shekhar's team had to revise many of their pet notions of the small power business – such as the need for standardisation. They found each power plant they worked on came up with its own unique demands for customisation in terms of space, fuel, source of heat and positioning of equipment in the process plant. The group has responded with modularisation of equipment that helps in compact deployment.

Will all those ultra mega power plants planned by the government make small and medium captive power plants unviable? No way, says an unfazed Shekhar. “Industry needs power here and now. Reliable power is the real issue,” he says.



A small power plant : real benefits

It has been focusing on plants that can generate power from waste heat and waste gases from their industrial processes.

This has been a challenging year – one that started off with great promise and ended with a lot of uncertainty and change. The total income at Rs. 3303 crore and profit after tax at Rs. 287 crore was almost the same as the previous year. With a large export order carry forward from the previous year the export income, including deemed exports, increased 35% to Rs. 912 crore.

Our compliments to the Managing Director, M. S. Unnikrishnan and his team, who have worked with alacrity and dedication, to stabilise the company's operations in these tough market conditions. I also appreciate the support and contribution of all our employees, customers, supplier partners and business associates. Our Board of Directors, as usual, have been very supportive and provided the requisite guidance in steering through these difficult times.

The economic conditions in the latter half of 2008-09 have been tough on businesses. The global economic crisis resulting from innovative financial engineering methods have revealed a sense of greed and a lacunae in corporate governance practices the world over. This unprecedented crisis will, I believe, change the fundamentals of the way business will be carried out in the future, which is perhaps what is required today. In our own company, we have declared that performance is critical but values are sacrosanct.

These are trying times for corporates the world over; but there is also the silver lining of opportunity to put our house in order.

These are trying times for corporates the world over; but there is also the silver lining of opportunity to put our house in order. First and foremost, freeing up cash from operations is vital; moreover, a great discipline for sustainable business. To manage cash flows prudently, we have started Project Ever-Lean to eliminate waste.



First and foremost, freeing up cash from operations is vital; moreover, a great discipline for sustainable business. To manage cash flows prudently, we have started Project Ever-Lean to eliminate waste, streamline processes and systems and reduce costs. Coupled with our drive for operational excellence, this programme will enable the company to increase operational efficiency and reduce the cost of poor quality.

It is these unpredictable times that force us to look at all markets with a different perspective and thereby, extend our reach to wider segments of society. New opportunities, not thought of earlier, are emerging to serve new customers and provide them with innovative solutions and services. Selective participation in the projects of municipal corporations and public sector undertakings have resulted in new and diversified opportunities for the Water and Power businesses. The service business of the company, although small at present, is addressing customers with innovative approaches like energy rental, process efficiency tracking at boiler sites, equipment life extension, operation and maintenance of power plants and is exploring other service revenue opportunities to mitigate the cyclical risks that the capital goods sector is prone to.

Over the past few years, commodity prices have been on the increase especially in the oil, steel, cement and non ferrous sectors. This threw open substantial investments; creating opportunities for your company's products. It also enabled Thermax to focus on fuel shift, converting from expensive oil to solid fuel, primarily biomass and waste to energy. With oil having lost its value in the past six months, many projects were either cancelled or delayed. However, we strongly believe that this is a temporary phenomenon and that oil prices will pick up, as has already happened. This, coupled with climate change as well as the need to harness one of the largest sources of energy that nature has to offer, has prompted your company to invest its time, money and human resources in green renewable energy, particularly solar thermal – a long term agenda for Thermax.

The company realises that innovation is the key to sustained growth. The Board of



Like everyone else, I look forward to better and more upbeat times when the full potential of the company can be actualised and we would continue to play a significant role in the energy and environment sectors. With political stability at the centre, industry looks forward to the much awaited reforms and genuine inclusive growth.



Directors of Thermax will continue to support investments in Research and Development and innovation. This includes setting up of the Research Technology and Innovation Centre (RTIC) with a time-bound programme to establish Centres of Excellence in the key technology areas critical to Thermax, which include solar, combustion and heat transfer, material science and biotechnology along with advanced computing. Focusing on collaborative research, the centre will undertake projects with premier research and scientific institutes. These initiatives are expected to improve the internal drivers of speed, scale and sustainability, delivering value over multiple time frames. To kick start the spirit of innovation and revitalise the organisation, an Innovation Council has been formed comprising of external experts, chaired by Dr. R. A. Mashelkar.

Earlier, I had highlighted three areas of focus for the company – operational excellence and innovation which we will continue to give impetus to. Selective Internationalisation is also one that will receive our attention, however, in the current economic scenario, we would need to wait and watch. Our plant in China is now operational. All efforts will be put into making this investment worth our while.

The buzz of an organisation is its people. Training and developing internal talent are areas that the company will continue to give priority to. It is only through training our human assets that we will continue to add value to our customers and the organisation. The Thermax Leadership Development Programme, launched last year, has progressed well. We are also looking at specific training needs that

include our supplier partners, channel partners and customers' operators. A unique one-year program titled the Thermax Graduate Programme, was started last year. Your company has trained 22 academically qualified B. Sc graduates from tier II towns and economically weaker sections of society. After successful completion of their Thermax-specific training, they will be employed within the company.

The Thermax Social Initiative Foundation (TSIF), the corporate social responsibility arm of our company, has entered into its third year of operation. I am happy to state that it has undertaken a number of community initiatives, with education as the prime focus. We have created various avenues through which we encourage our employees to participate in social causes as per their convenience and choice, such as the payroll giving programme and volunteering opportunities at our schools. With the strategic partnership between TSIF and Akanksha, we are currently managing two Pune Municipal Corporation schools, established and scaled up on the basis of a shared vision and commitment to a common cause. Thermax has recently partnered Teach for India – an initiative which aims to bridge the inequity in education. The company encouraged two of its young engineers to apply and one of them has been selected. He has undergone intense residential training along with 88 others. From mid June, they will be placed as teachers in municipal schools for two academic years. Being a responsible corporate, we are committed to improving the quality of education in India through which we can make a small but significant difference to the less privileged sections of society.

Like everyone else, I look forward to better and more upbeat times when the full potential of the company can be actualised and we would continue to play a significant role in the energy and environment sectors. With political stability at the centre, industry looks forward to the much awaited reforms and genuine inclusive growth.

With best wishes,

Meher Pudumjee

EXPRESSIONS

Big break in oil field chemicals

*Celebrating a win :
credentials count*

The Chemical division has received a major order for oil field chemicals from Cairn Energy. The three year contract for supply of chemicals for oil field operations at Cairn's Ravva Basin in Andhra Pradesh was won against international competition. The Rs. 34 crore order is the second largest single order that the division has bagged in the last decade.



In a rigorous selection process, Cairn did an initial laboratory screening of Thermax chemicals to determine their compatibility with the crude oil, water and other chemicals. This was followed by a detailed field trial in various oil and water injection circuits. This was done on a “no cure, no pay” basis – the cure being the

achievement of stated performance standards.

The operating parameters, during the evaluation process were monitored by Cairn's corporate technical team from Delhi and the operations team at site. Thermax's credentials and its manufacturing base in India, besides the successful field trials, persuaded Cairn to place the order.

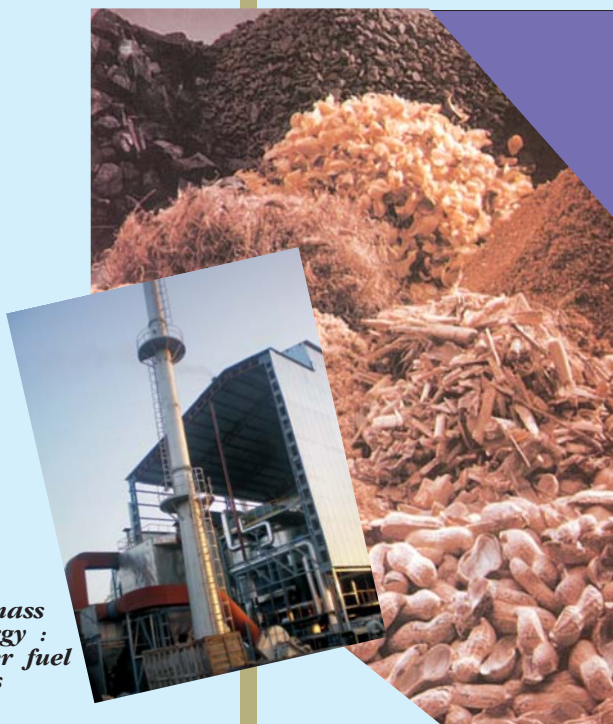
ROUND UP

Still betting on biomass

Oil prices may have crashed, but this is not stopping industries with long term perspectives from shifting their operations to biomass based heating systems. Recently, Ester Industries in Uttarakhand has installed a husk-fired thermal oil heater at its polyester film plant. The high temperature fluidised bed heater with a capacity of 7 million kilocalories, which was commissioned by C&H (northern region), is the first husk fired system supplied to a polyester unit by Thermax.

Despite the falling prices of furnace oil, the client is able to derive benefits in terms of fuel costs. Satisfied with the execution of the project, Ester Industries invited the Thermax team to their plant to celebrate this achievement. For their support, Thermax presented a memento to the Ester Team.

*Biomass
energy :
lower fuel
costs*



On 11th May, Thermax celebrated the National Technology Day to express its solidarity to the national cause. The day marked a series of discussions across the various business units on the theme of building a partnership between academic research and industry to accelerate technology development within the company. Later, at a valedictory function held at EERC, a panel discussion took up the major threads of the sessions. Participants, in the presence of Meher Pudumjee and Unnikrishnan listened to two eminent speakers representing industry and academia –Pramod Chaudhary, CMD of Praj Industries and Dr. Devang Khakhar, Director of IIT, Mumbai.

On the same day, there was also an exhibition showcasing innovative projects nominated for Technology Day presentations. Awards for the best projects chosen from both energy and environment areas had been declared at the Innovation Council meeting held a few days earlier. Award winning teams were felicitated and presented with certificates and cash prizes by



Chaudhary of Praj and other distinguished invitees at the T-Day deliberations : panel discussion and prizes

Dr. Mashelkar, member of the Thermax Board and chairman of the Innovation Council. In the energy category, the top prize went to the team that designed the solid fuel fired thermal oil heater. Combustion and zero discharge of spent wash from distilleries won the first prize in the environment category. Runners up prizes were also handed out for each category and prizes were also given away for innovative process projects.

Samir Raje to head paper chemicals

Samir B Raje has joined Thermax to head the Paper & Pulp business of Chemical division.

Samir has around 20 years of rich experience in companies like Asian Paints (I) Ltd. and Clariant Chemicals (I) Ltd. Before joining Thermax he was General Manager - Paper Business with Clariant Chemicals (I) Ltd - Mumbai.

Samir has a Masters in physical chemistry and a Masters in administrative management from Mumbai University.

Fireside welcomes Samir and wishes him success in a mutually rewarding career with Thermax.



Raje : rich experience

Thermax bids adieu to Govind Lal



Govind Lal in an expansive mood at the farewell function (left); and his successor is all smiles

After 34 years of distinguished service with Thermax, Govind Lal retired as the CRM of northern region.

On March 31, 2009, in an internal mail to Thermax employees, Unny remembered how, “with his soft touch and timely action, Govind Lal epitomised customer service.”

Delhi office organised a farewell party for Govind on 4th April 2009. The party, attended by his colleagues and families, was held in the open air lawns of India Habitat

Centre. K Chakravarthy SBU Head of WWS, who was in Delhi, also attended the farewell function. Govind recalled the early days when he joined Thermax and shared many pleasant memories of his long career with Thermax – from service engineer to corporate regional manager.

Another farewell function for Govind was also organised by the Thermax channel partners of northern region at Hotel Forte Grand.

Hemant Joshi takes over as northern region chief



Hemant Joshi took over as the Corporate Regional Manager (CRM) of northern region on April 1, 2009.

Hemant has been with Thermax since 1989. After completing his chemical engineering from LIT, Nagpur and an MBA in marketing, he joined the Mumbai office in 1989. After moving to Delhi, he worked as Business Manager for both Heating and Cooling SBUs.

In his after hours, Hemant likes to catch up with light reading and old melodies. He also likes to watch National Geographic and Discovery programmes on television.

Fireside welcomes Hemant and wishes him a successful innings in his new role.



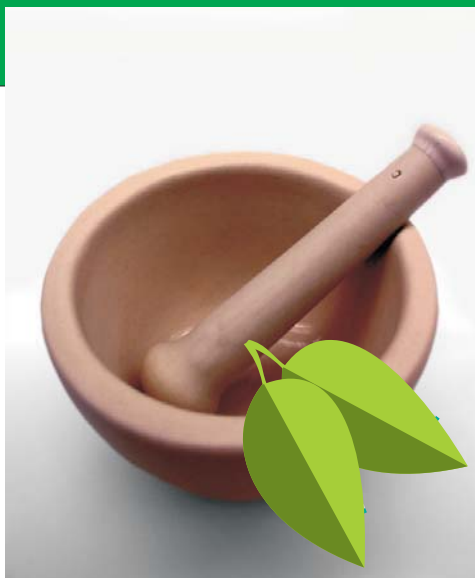
Thermax has bagged several orders from Delhi Metro Rail Corporation (DMRC) to provide water and waste water solutions to its seven depots and 10 stations. It has supplied sewage treatment plant based on FAB technology and also the compact Eco Cell for treating and recycling wagon wash effluent. For DMRC's second phase of the metro project, Thermax has also supplied filters and softeners for its Sarita Vihar depot. The Delhi channel management team of Sunil Arora worked in tandem with Gary Marketing, the channel partner, to bag the orders.

Delhi Metro : water and waste water solutions

Patanjali Ayurved sources **Thermax** expertise

Thermax has received a major order for water treatment products from Patanjali Ayurved of the Baba Ramdev group. The order, won against stiff competition, is for supplying filters, softeners, demineralisers and reverse osmosis plants for their food park in Uttar Pradesh. Thermax will also be supplying a prefabricated sewage treatment plant of 60,000 litres per day capacity.

Supported by WWS and CMG, the order was bagged due to the tenacious efforts of the Thermax channel partner, Maxotherm Engineers.



Food park : Thermax expertise

Managers exchange notes on operation and maintenance



*O&M managers
in Pune : sharing
insights*

The station managers of the O&M (power plants) group came together for their annual meeting in March this year, held during the same month every year. This is a special programme for the managers at the various power plants where Thermax is in charge of operation and maintenance.

At this annual meet in Pune, station managers share their experiences and achievements and learn from one another. For a young group that in four years has bagged business in power plants built by Thermax and others, there is much to learn from one another. This time, too, the annual meeting provided the right setting for such learning to take place.

Safety Award for manufacturing plants

The manufacturing plants (1, 2 and 3) of Boiler & Heater business of Thermax have won the national level Gold Award in the manufacturing sector category for outstanding safety performance during 2008. The award is instituted by Greentech Foundation, New Delhi, an international non-profit organisation.

On behalf of Thermax, Mohan Patil, B&H Manufacturing Head and Shailendra Dafe, Assistant Manager Safety received the award at an international conference on safety and



*Patil and Dafe
receiving the award : safe*

fire held at Goa on 4th May.

BK Mathur, who heads the Thermax initiatives in safe work practices, says that the award will help us to stay on course to reach the “goal of a zero accident work

Thermax chemicals for Navy's ship boilers



The Indian Navy has placed orders for Thermax chemicals for use in its ships' boilers. Water treatment chemical Maxtreat and fuel additive Thermosol will be used on a pilot basis for six months on two ships. The treatment is to be replicated for Western Naval Command fleet to enhance the performance of the ships' boilers.

Thermax chemicals were chosen after the Navy's central boiler inspection unit conducted extensive trials. Says Mahendra Ponde from the performance chemicals group, "This order follows the successful work that we did, together with B&H Services, for a study on the life extension of one of the Naval ship boilers."

*Maxtreat and
Thermosol :
Navy's choice
on the high seas*



*A fire drill in
progress :
no time to lose*

Fire prevention at Thermax offices

When a fire breaks out, employees may be left with as little as two minutes to escape. So, it is important everyone knows clearly what needs to be done and that too immediately. Are we prepared for such an eventuality?

Thermax Administration and Safety groups are jointly taking this challenge head on. They are getting the Pune and Mumbai offices prepared and ready. An audit to plug the loopholes in the existing fire protection system was followed by an elaborate exercise

on exit routes and emergency action plans. Employees have been trained to assemble calmly at specially demarcated assembly points when a fire alarm is sounded. 'Fire marshals' from different parts of the building have been identified and trained to extinguish fires and to help the injured.

Finally a 'mock drill' for emergency evacuation was conducted at all Thermax offices in the two cities with the help of outside experts.

Your presence can be precious for these **HIV children**

Abhijeet Joshi, a trainee with Corporate HR, devotes time to be with HIV positive children looked after by Sweekar, an NGO. He met them the first time on Republic Day, when he visited their place with some friends. That visit was a turning point. Seeing how much the presence of outsiders meant for these children, abandoned by their own parents, Abhijeet and friends, decided to go there again.

Today, they set aside a day in a month to spend with the children – playing, singing and dancing with them. Abhijeet, who loves to dance and even gives dancing lessons at home, says some of them are quite good on



*Abhijeet at Sweekar :
make their day*

their feet. All of them go to government schools and three are toppers in their class.

Besides the earmarked day, they visit the children on their birthdays with cakes. Every time they go there, something required for their hygiene and something to eat are always carried along. “But it the time we spend with them that the children treasure most, as hardly anyone takes the trouble to visit them,” says Abhijeet.

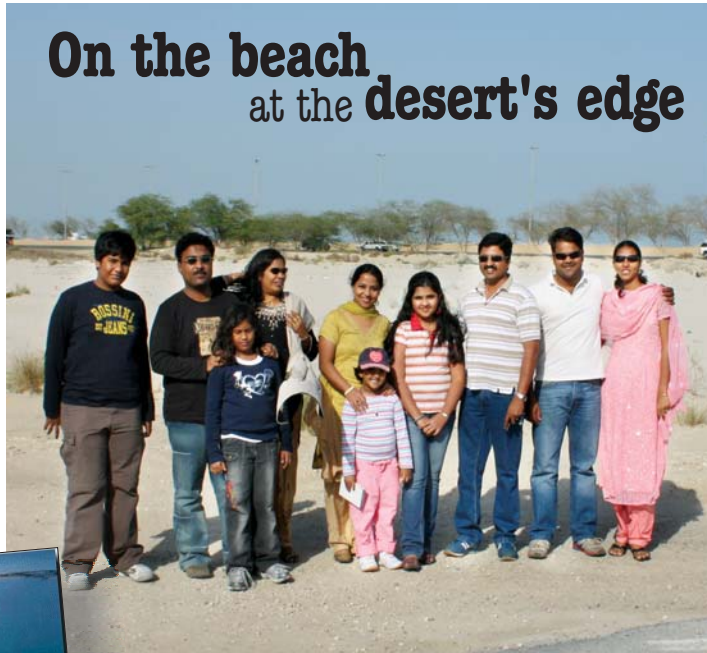
Sweekar is being kept alive by the dedicated efforts of its founder, Suparn Shinde, a retired principal. She runs it with the help of a few trustees. The NGO welcomes support and those of you who want to reach out to help can contact them at 98603 50878.

Photo News

This high-capacity boiler being unloaded at Jubail, Saudi Arabia, is the biggest ever boiler assembled at the Thermax port facility in Mundra. Weighing 585 metric tons it has a capacity of 150 tons of steam per hour at a temperature of 520 degrees Celsius and pressure of 110 bar. Big league.



On the beach at the desert's edge



The Thermax team in Saudi Arabia took time off for an outing to the Half moon bay. Heading for the popular tourist destination on the edge of the eastern province's desert, they had an interesting drive through the sand dunes. "After the desert, it feels good to arrive on the beach curving around the bay in a half circle. We all had a relaxing time," says Shafi Ahamed, Country Manager.

Abamed with his colleagues and family members at the picnic : good time



Marathe awarded BEE certificate

Meet Asmita Kshirsagar Marathe, certified energy auditor. She cleared the annual exam conducted by the Bureau of Energy Efficiency (BEE), Delhi and was awarded the Energy Auditor certificate this year.

A gold medalist M.Tech from Pune University, Asmita is already a certified lead auditor for ISO 14001: 2004 Environmental Management system. She works at RTIC after a stint with B&H proposals.



AWS Certification for Kanade

Ajay Kanade has successfully completed American Welding Society's Welding Inspector Certification in January 2009. The certification is useful for Ajay who handles marketing and execution of life extension services of boilers in the Services SBU of B&H. International certification is counted in turnkey jobs.

Sinha represents Thermax at NY panel discussion



Sinha at the discussion : economic synergy

Rajesh Sinha of Thermax Inc, USA, was a member of an eminent panel discussion on US-India Economic Synergy at the India Business Conference. The discussion was held at Columbia Business School in New York and was moderated by Ranjana Khanna, Asst Gen Secretary, FICCI.

Besides the Deputy Consul General of India in New York, speakers on the panel included Dr. Ajay Gondane, Deputy Consul General of India in New York; David P. Good, Chief Representative, North America, Tata Sons; Madhu Vuppuluri, President, Essar America.



Ganesh Kumar in the India colours

Star cricketer from Chennai office

Thermax Chennai's cricket team captain, V. Ganesh Kumar played for the Indian team against Queensland Cricket Team (Australia) in a twenty-twenty match on 16th April.

The Indian team won scoring 164 runs in 16.3 overs with five wickets to spare against the Queensland score of 163 for six in 20 overs. As opening batsman, Ganesh scored 30 runs in 26 balls.



Vipin receiving the certificate

Vipin makes his mark

Vipin Nair, student of J.N. Petit Technical High School, Pune, received a Certificate of Honour for general proficiency in English, Hindi, Science and Social Sciences.

Vipin, an 8th standard student, is the son of A.Ravindran, caretaker of Thermax's Aquarius Transit House in Pune.

Sheerin wins gold medal



*Sheerin
receiving the
award from
the Vice
Chancellor*

Sheerin Sarma of CMG, Pune, won a gold medal for being the university topper among all the post graduate programmes across all the National Institute of Construction Management and Research (NICMAR) campuses. She received the medal for the PGDM course she did in Marketing and Finance from NICMAR in 2005-07.

Sheerin received the award from Dr. John A Hood, Vice Chancellor, Oxford University

AWS Certification for three QAC personnel



*From left :
Shaikh, Arulkar
and Bavane*

Three of our people – M N A Shaikh, R C Arulkar and H V Bavane – have received the American Welding Society (AWS) Certification. They have complied with the requirements of AWS QC1 Standard for welding inspectors.

Shaikh, Arulkar and Bavane are working with the Quality Assurance and Control department of the Heating SBU. The certification will help them to ensure quality improvement at Thermax shops and in vendor development.



Science Olympian, Navani

Navani Niharika Jha is an accomplished science Olympian. She stood 3rd in Maharashtra and 28th in India for the National Science Olympiad. She is also among the top five hundred in the international math olympiad and national science talent search examination.

A Class IV student of Podar International School in Pimpri, Navani is the daughter of R S Jha of C&H Heating Innovation.

“Safety is more than just we

B K Mathur, Corporate Head – Health, Safety & Environment, talks about a systems approach to safety and cautions against short cuts and the temptation to do things in a hurry, over a tasty Chinese meal with Ahmed Bunglowala

As we head towards East Street, Brijesh Kumar Mathur tells me why he has given up driving a car himself in Pune and has got himself a driver. On his second day in Pune, after arriving from Oman, someone banged into his brand new car when he'd stopped at a red light at a traffic signal. It was a rude shock for him after the discipline and order of Oman, where he worked for four years as the corporate head of safety and compliance for the Oman Airports Management Company. “I knew I was moving from a cosy environment to a hostile one,” he says philosophically.

We reach Chinese Room, which is one of the oldest Chinese restaurants in Pune, before the mushrooming of dozens of restaurants boasting “authentic” Chinese cuisine from different provinces of China. I have recommended the place as Mathur is fond of Chinese food and I think he wouldn't be disappointed. “In Oman we ate a lot of Chinese food but with a Malayalee touch,” he quips.

As we settle down with our soups and starters – a superbly grilled pomfret in red garlic sauce – Mathur offers me a glimpse into his stressful first few months in Pune when his younger son just refused to go to school as he was traumatised by the change of lifestyle from Oman to Pune. Also, the pressures of his new job as the corporate head of safety and health added to the stress. Fortunately, things have settled down in the 18 months since he joined Thermax and Mathur is his usual amiable self, eager to deliver on what he calls “a systems approach to safety in Thermax.” With the top management's commitment to the value of human life and well-being, Mathur is aware of the serious responsibility this entails. “Safety is more than just wearing a helmet and shoes,” he says.

Safety, according to him, is a behavioural issue and you have to do the “right things” at all times. He cautions against short cuts and the temptation to do things in a hurry. “A lot of safety procedures are purely

common sense,” he says. He gives the example of manholes. It is common sense to keep them securely covered otherwise they are a clear and present danger. He pulls out a sheet from his papers and shows it to me. “ERIC Saves Lives” reads the heading of the slide. In the acronym, E = eliminate the hazard, R = reduce the hazard, I = isolate the hazard and C = control exposure or contact with the hazard. “Lack of management control is the root cause of accidents in companies at any site or plant location,” he says. Once management control is in place – through strict systems and procedures – accidents and fatalities are a thing of the past. “All accidents are caused, they do not happen,” he elaborates. Like the manhole that is left without a cover, inviting trouble.

The waiter clears the soup bowls and is waiting for us to place the order for the main course. Mathur is not too keen on more seafood so he orders a chicken dakchin and I settle for prawns in oyster sauce. We decide to share a vegetable fried rice to go with the saucy chicken and prawns. The food is served quickly on the table and we dig in. The prawn sauce is good with a subtle garnishing of herbs and Mathur seems to be enjoying what's on his plate.

He gives me a quick update on all that's being done on the safety front which includes a lot of training, safety audits, safety passports, tool box talks, reporting and investigation guidelines, and safety reviews by business heads and top management. “Things are stabilising now and this has to be sustained,” he says in his low-key manner. “Not learning from our mistakes is a crime,” he adds. The important thing, he points out, is to encourage reporting of unsafe practices across the organisation so that immediate remedial action can be taken – in safety jargon referred to as “near misses.” In the true sense, people have to integrate safety with their work. “Safety is not an add-on; it has to be built into the operations and it is all about continuous improvement,” he states.

LUNCH
WITH FS



Wearing a helmet and shoes."

Total involvement of employees is crucial, says Mathur, to reach international benchmarks of safety. The most effective way to do this is to encourage a "no blame culture" in the company so that people take responsibility of safety issues without any fear of a backlash.

The food has gone down well and it is time to wind up. I ask Mathur if the Indian fatalistic attitude about karma is a problem in implementing safety norms in company premises and at sites. "That's a hindrance," he admits. He gives the example of a company, he worked for earlier, where the managing director made an announcement that "it was an act of fate" after a serious accident in one of the plants. "It's not right to blame fate or the dead person," he says.

A B.Tech in mechanical engineering from IIT-Bombay and an M. Tech in environmental science and engineering from the same institute, Mathur has more than two decades' experience in safety and environment related disciplines with companies like BHEL, ACC, British Gas and Oman Airports Management Company. He was well settled in his job in Oman when Thermax made him an offer he couldn't refuse. "I saw Thermax as an opportunity to do a bigger job; to design and implement some of the things I had learnt," he says.

In the training programmes he conducts, Mathur usually screens a video recording of the famous Piper-Alpha oil platform in the North Sea, UK, which caught fire in 1987, resulting in many casualties. Investigations revealed that all safety norms were disregarded – from design to procedures to permits. The sole preoccupation there was oil production. Safety was the casualty. "People come before production and profits," Mathur emphasises, in these training programmes.

We order caramel custard for dessert and I ask Mathur if he has any "closing comments" on safety. He quickly pulls out another sheet of paper. The title of this slide is "The Evolution of Safety" where you move from the pathological state ("who cares as long as we are not caught") to the reactive stage ("we do a lot every time we have an accident") to the calculative stage ("we have systems in place to manage all hazards") to the proactive stage ("we work on the problems that we still find") to the ultimate generative stage ("safety is how we do business around here"). He points out that Thermax, today, is close to the calculative stage moving towards the proactive stage and all indications are positive. "The discipline of following procedures is the key," he adds.

On that note we decide to leave. He drops me off at Thermax House and heads for Chinchwad, comfortable in the thought that he doesn't have to drive on Pune's chaotic roads – where the last thing most drivers have on their minds is safety.

The discipline of following procedures is the key.





The 10,000-Hour Rule

Mozart, the Beatles and Bill Gates

SIGNPOSTS

In his provocative and best-selling book *Outliers*, Malcolm Gladwell examines everyone from business giants to scientific geniuses, sports stars to musicians, and reveals what they have in common. He looks behind the spectacular results, the myths and legends to show what really explains exceptionally successful people. This excerpt from the book highlights the golden rule about long hours of dedicated practice to achieve distinction in any field.

Far almost a generation, psychologists around the world have been engaged in a spirited debate over a question that most of us would consider to have been settled years ago. The question is this: is there such a thing as innate talent? The obvious answer is yes. Not every hockey player ends up playing at the professional level. Only some do – the innately talented ones. Achievement is talent plus preparation. The problem with this view is that the closer psychologists look at the careers of the gifted, the smaller the role innate talent seems to play and the bigger the role preparation seems to play.

Exhibit A in the talent argument is a study done in the early 1990s by the psychologist K. Anders Ericsson and two colleagues at Berlin's elite Academy of Music. With the help of the Academy's professors, they divided the school's violinists into three groups. In the first group were the stars, the students with the potential to become world-class soloists. In the second were those judged to be merely "good." In the third were students who were unlikely to ever play professionally and who intended to be music teachers in the public school system. All of the violinists were then asked the same question: over the course of your entire career, ever since you first picked up the violin, how many hours have you practiced?

Everyone from all three groups started playing at roughly the same age, around five years old. In those first few years, everyone practiced roughly the same amount, about two or three hours a week. But when the students were around the age of eight, real differences started to emerge. The students who would end up the best in their class began to practice more than everyone else: six hours a week by age nine, eight hours a week by age twelve, sixteen hours a week by age fourteen, and up and up, until by the age of twenty they were practicing – that is, purposefully and single-mindedly playing their instruments with the intent to get better – well over thirty hours a week. In fact, by the age of twenty, the elite performers had each totaled ten thousand hours of practice. By contrast, the merely good students had totaled eight thousand hours, and the future music teachers had totaled just over four thousand hours.

Ericsson and his colleagues then compared amateur pianists with professional pianists. The same pattern emerged. The amateurs never practiced more than about three hours a week over the course of their childhood, and by the age of twenty they had totaled two thousand hours of practice. The professionals, on the other hand, steadily increased their practice time every year, until by the age of twenty they, like the violinists, had reached ten thousand hours.

The striking thing about Ericsson's study is that he and his colleagues couldn't find any "naturals," musicians who floated effortlessly to the top while practicing a fraction of the time their peers did. Nor could they find any "grinds," people who worked harder than everyone

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else, yet just didn't have what it takes to break the top ranks. Their research suggests that once a musician has enough ability to get into a top music school, the thing that distinguishes one performer from another is how hard he or she works. That's it. And what's more, the people at the very top don't work just harder or even much harder than everyone else. They work much, much harder.

The idea that excellence at performing a complex task requires a critical minimum level of practice surfaces again and again in studies of expertise. In fact, researchers have settled on what they believe is the magic number for true expertise: *ten thousand hours*.

"The emerging picture from such studies is that ten thousand hours of practice is required to achieve the level of mastery associated with being a world-class expert – in anything," writes the neurologist Daniel Levitin. "In study after study, of composers, basketball players, fiction writers, ice skaters, concert pianists, chess players, master criminals, and what have you, this number comes up again and again. Of course, this doesn't address why some people get more out of their practice sessions than others do. But no one has yet found a case in which true world class expertise was accomplished in less time. It seems that it takes the brain this long to assimilate all that it needs to know to achieve true mastery."

This is true even of people we think of as prodigies. Mozart, for example, famously started writing music at six. But, writes the psychologist Michael Howe in his book *Genius Explained*, by the standards of mature composers, Mozart's early works are not outstanding. The earliest pieces were all probably written down by his father, and perhaps improved in the process.

Many of Wolfgang's childhood compositions, such as the first seven of his concertos for piano and orchestra, are largely arrangements of works by other composers. Of those concertos that only contain music original to Mozart, the earliest that is now regarded as a masterwork (No. 9, K. 271) was not composed until he was twenty-one: by that time Mozart had already been composing concertos for ten years.

The music critic Harold Schonberg goes further: Mozart, he argues, actually

"developed late," since he didn't produce his greatest work until he had been composing for more than twenty years.

To become a chess grandmaster also seems to take about ten years. (Only the legendary Bobby Fischer got to that elite level in less than that amount of time: it took him nine years.) And what's ten years? Well, it's roughly how long it takes to put in ten thousand hours of hard practice. Ten thousand hours is the magic number of greatness.

Practice isn't the thing you do once you're good. It's the thing you do that makes you good.

The other interesting thing about that ten thousand hours, of course, is that ten thousand hours is an enormous amount of time. It's all but impossible to reach that number all by yourself by the time you're a young adult. You have to have parents who encourage and support you. You can't be poor, because if you have to hold down a part-time job on the side to help make ends meet, there won't be time left in the day to practice enough. In fact, most people can reach that number only if they get into some kind of special program – like a hockey all-star squad – or if they get some kind of extraordinary opportunity that gives them a chance to put in those hours.



Is the ten-thousand-hour rule a general rule of success?

Let's test the idea with two examples, and for the sake of simplicity, let's make them as familiar as possible: the Beatles, one of the most famous rock bands ever; and Bill Gates, one of the world's richest men.

The Beatles – John Lennon, Paul McCartney, George Harrison, and Ringo Starr – came to the United States in February of 1964, starting the so-called

THE amateurs never practiced more than about three hours a week over the course of their childhood, and by the age of twenty they had totaled two thousand hours of practice. The professionals, on the other hand, steadily increased their practice time every year, until by the age of twenty they, like the violinists, had reached ten thousand hours.



British Invasion of the American music scene and putting out a string of hit records that transformed the face of popular music.

The first interesting thing about the Beatles for our purposes is how long they had already been together by the time they reached the United States. Lennon and McCartney first started playing together in 1957, seven years prior to landing in America. (Incidentally, the time that elapsed between their founding and their arguably greatest artistic achievements – *Sgt. Pepper's Lonely Hearts Club Band* and *The Beatles* [White Album] – is ten years.) And if you look even more closely at those long years of preparation, you'll find an experience that, in the context of chess grandmasters and world-class violinists, sounds awfully familiar. In 1960, while they were still just a struggling high school rock band, they were invited to play in Hamburg, Germany.

"Hamburg in those days did not have rock-

and-roll music clubs. It had strip clubs," says Philip Norman, who wrote the Beatles biography *Shout!*

"There was one particular club owner called Bruno, who was originally a fairground showman. He had the idea of bringing in rock groups to play in various clubs. They had this formula. It was a huge nonstop show, hour after hour, with a lot of people lurching in and the other lot lurching out. And the bands would play all the time to catch the passing traffic. In an American redlight district, they would call it nonstop striptease.

"Many of the bands that played in Hamburg were from

Liverpool," Norman went on. "It was an accident. Bruno went to London to look for bands. But he happened to meet an entrepreneur from Liverpool in Soho who was down in London by pure chance. And he arranged to send some bands over. That's how the connection was established. And eventually the Beatles made a connection not just with Bruno but with other club owners as well. They kept going back

because they got a lot of alcohol and a lot of sex."

And what was so special about Hamburg? It wasn't that it paid well. It didn't. Or that the acoustics were fantastic. They weren't. Or that, the audiences were savvy and appreciative. They were anything but. It was the sheer amount of time the band was forced to play.

Here is John Lennon, in an interview after the Beatles disbanded, talking about the band's performances at a Hamburg strip club called the Indra:

We got better and got more confidence. We couldn't help it with all the experience playing all night long. It was handy them being foreign. We had to try even harder, put our heart and soul into it, to get ourselves over. In Liverpool, we'd only ever done one-hour sessions, and we just used to do our best numbers, the same ones, at everyone. In Hamburg, we had to play for eight hours, so we really had to find a new way of playing.

Eight hours?

Here is Pete Best, the Beatles' drummer at the time: "Once the news got out about that we were making a show, the club started packing them in. We played seven nights a week. At first we played almost nonstop till twelve-thirty, when it closed, but as we got better the crowds stayed till two most mornings.

Seven days a week?

The Beatles ended up traveling to Hamburg five times between 1960 and the end of 1962. On the first trip, they played 106 nights, five or more hours a night. On their second trip, they played 92 times. On their third trip, they played 48 times, for a total of 172 hours on stage. The last two Hamburg gigs, in November and December of 1962, involved another 90 hours of performing. All told, they performed for 270 nights in just over a year and a half. By the time they had their first burst of success in 1964, in fact, they had performed live an estimated twelve hundred times. Do you know how extraordinary that is? Most bands today don't perform twelve hundred times in their entire careers. The Hamburg crucible is one of the things that set the Beatles apart.

"They were no good onstage when they went there and they were very good when they came back," Norman went on. "They

THEIR

research suggests that once a musician has enough ability to get into a top music school, the thing that distinguishes one performer from another is how hard he or she works. That's it. And what's more, the people at the very top don't work just harder or even much harder than everyone else. They work much, much harder.

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learned not only stamina. They had to learn an enormous amount of numbers – cover versions of everything you can think of not just rock and roll, a bit of jazz too. They weren't disciplined onstage at all before that. But when they came back, they sounded like no one else. It was the making of them."



Let's now turn to the history of Bill Gates. His story is almost as well known as the Beatles'. Brilliant, young math whiz discovers computer programming. Drops out of Harvard. Starts a little computer company called Microsoft with his friends. Through sheer brilliance and ambition and guts builds it into the giant of the software world. That's the broad outline. Let's dig a little bit deeper.

Gates's father was a wealthy lawyer in Seattle, and his mother was the daughter of a well-to-do banker. As a child Bill was precocious and easily bored by his studies. So his parents took him out of public school and, at the beginning of seventh grade, sent him to Lakeside, a private school that catered to Seattle's elite families. Midway through Gates's second year at Lakeside, the school started a computer club.

"The Mothers' Club at school did a rummage sale every year, and there was always the question of what the money would go to," Gates remembers. "Some went to the summer program, where inner-city kids would come up to the campus. Some of it would go for teachers. That year, they put three thousand dollars into a computer terminal down in this funny little room that we subsequently took control of. It was kind of an amazing thing."

It was an "amazing thing," of course, because this was 1968. Most colleges didn't have computer clubs in the 1960s. Even more remarkable was the kind of computer Lakeside bought. The school didn't have its students learn programming by the laborious computer-card system, like virtually everyone else was doing in the 1960s. Instead, Lakeside installed what was called an ASR-33 Teletype, which was a time-sharing terminal with a direct link to a mainframe computer in downtown Seattle. "The whole idea of time-sharing only got invented in nineteen sixty-five," Gates continued, "Someone was pretty forward looking." Bill

Gates got to do real-time programming as an eighth grader in 1968.

From that moment forward, Gates lived in the computer room. He and a number of others began to teach themselves how to use this strange new device. Buying time on the mainframe computer the ASR was hooked up to was, of course, expensive – even for a wealthy institution like Lakeside – and it wasn't long before the \$3,000 put up by the Mothers' Club ran out. The parents raised more money. The students spent it. Then, a group of programmers at the University of Washington formed an outfit called Computer Center Corporation (or C-Cubed), which leased computer time to local companies. As luck would have it, one of the founders of the firm – Monique Rona – had a son at Lakeside, a year ahead of Gates. Would the Lakeside computer club, Rona wondered, like to test out the company's software programs on the weekends in exchange for free programming time? Absolutely! After school, Gates took the bus to the C-Cubed offices and programmed long into the evening.

C-Cubed eventually went bankrupt, so Gates and his friends began hanging around the computer center at the University of Washington.

Before long they latched onto an outfit called ISI (Information Sciences Inc.), which agreed to let them have free computer time in exchange for working on a piece of software that could be used to automate company payrolls. In one seven-month period in 1971, Gates and his cohorts ran up 1,575 hours of computer time on the ISI mainframe; which averages out to eight hours a day, seven days a week.

"It was my obsession," Gates says of his early high school years. "I skipped athletics. I went up there at night. We were programming on weekends. It would be a rare week that we wouldn't get twenty or thirty hours in. There was a period where Paul Allen and I got in trouble for stealing a bunch of passwords and

TO
become a chess grand-
master also seems to
take about ten years.
(Only the legendary Bobby
Fischer got to that elite
level in less than that
amount of time: it took
him nine years.) And
what's ten years? Well,
it's roughly how long it
takes to put in ten
thousand hours of hard
practice. Ten thousand
hours is the magic
number of greatness.



crashing the system. We got kicked out. I didn't get to use the computer the whole summer. This is when I was fifteen and sixteen. Then I found out Paul had found a computer that was free at the University of Washington. They had these machines in the medical center and the physics department. They were on a twenty-four-hour schedule, but with this big slack period, so that between three and six in the morning they never scheduled anything," Gates laughed. "I'd leave at night, after my bedtime. I could walk up to the University of Washington from my house. Or I'd take the bus. That's why I'm always so generous to the University of Washington, because they let me steal so much computer time." (Years later, Gates's mother said, "We always wondered why it was so hard for him to get up in the morning.")

One of the founders of ISI, Bud Pembroke, then got a call from the technology company

TRW, which had just signed a contract to set up a computer system at the huge Bonneville Power station in southern Washington State. TRW desperately needed programmers familiar with the particular software the power station used. In these early days of the computer revolution, programmers with that kind of specialized experience were hard to find. But Pembroke knew exactly whom to call: those high school kids from Lakeside who had been running up thousands of hours of computer time on the ISI mainframe. Gates was now in his senior year, and some how he managed to convince his teachers to let him decamp for Bonneville under the guise of an independent study project.

There he spent the spring writing code, supervised by a man named John Norton, who Gates says taught him as much about programming as almost anyone he'd ever met.

Those five years, from eighth grade through the end of high school, were Bill Gates's Hamburg, and by any measure, he was

presented with an extraordinary series of opportunities.

Opportunity number one was that Gates got sent to Lakeside. How many high schools in the world had access to time-sharing terminal in 1968? Opportunity number two was that the mothers of Lakeside had enough money to pay for the school's computer fees. Number three was that, when that money ran out, one of the parents happened to work at C-Cubed, which happened to need someone to check its code on the weekends, and which also happened not to care if weekends turned into weeknights. Number four was that Gates just happened to find out about ISI, and ISI just happened to need someone to work on its payroll software. Number five was that Gates happened to live within walking distance of the University of Washington. Number six was that the university happened to have free computer time between three and six in the morning. Number seven was that TRW happened to call Bud Pembroke. Number eight was that the best programmers Pembroke knew for that particular problem happened to be two high school kids. And number nine was that Lakeside was willing to let those kids spend their spring term miles away, writing code.

And what did virtually all of those opportunities have in common? They gave Bill Gates extra time to practice. By the time Gates dropped out of Harvard after his sophomore year to try his hand at his own software company, he'd been programming practically nonstop for seven consecutive years. He was way past ten thousand hours. How many teenagers in the world had the kind of experience Gates had? "If there were fifty in the world, I'd be stunned," he says. "There was C-Cubed and the payroll stuff we did, then TRW – all those things came together. I had a better exposure to software development at a young age than I think anyone did in that period of time, and all because of an incredibly lucky series of events."

*(Excerpted from Outliers
by Malcolm Gladwell)*

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Pickles Are Us

It was a lovely afternoon in July of 1999 when I disembarked at the Atlanta international airport. I was on my way to join the Master's programme at Florida International University in Miami. Standing in the queue at customs, I happened to notice the officials single out Indians for special attention. I wondered why and was worried at the same time, till I remembered my friends' advice, "Don't mention the pickles and other food items that you are carrying – they might confiscate it". Here I was with a bag-full of pickles to last me till I got back home again after the course. The official checked my bags, looked at me and asked, "You joining school here?" and I said, "Yes, sir" still anxious about my precious pickles. But he smiled and to my utter surprise said, "Welcome to America". He seemed to know, pretty well, what pickles meant to Indians.

This incident was 10 years ago. Now though I work and live here, whenever I go home to Hyderabad, my mom makes sure that she packs enough pickles to last me for a year. Just to make sure that others don't finish mine, she packs some for my friends and colleagues too!

What's an Indian meal without a dash of spicy pickle? North, south, east or west, people in this land just can't do without it. Call them by any name, *lonche*, *achaar*, *uppinakayi*, *uppillittuth*, *pachchadi* or *oorugai*, the pickles of India have always found a place in our hearts and possibly in every meal. They cut across boundaries of wealth, caste, creed, gender and aim to serve the tingling taste buds of one and all. Whatever your preference, there's a pickle for every occasion and what's more, people have also mastered the art of making pickles out of almost anything.

Ranging from sweet to salty to fiery, the king of fruits, mango, is the hot favourite for pickle-making. My grandmother's kitchen shelves used to be lined with an array of cylindrical ceramic jars containing different varieties of pickles. Of course, the famous 'avakaya' always stood majestically occupying the largest jar in the row while the lesser known, yet delectable pickles, were stored in smaller jars.

The art of making pickle dates back many centuries. It takes the genius of Indians to preserve food for years without the use of chemicals and make it taste great at the same time. Indian pickles consist of a large variety of pickled fruits and vegetables which are marinated in oil or lemon juice and different Indian spices and salt. Pickles go with

everything – rice, breads, snacks, meats and even ... just pickle. The

common vegetarian pickles are mango, tomato, ginger, lemon, garlic, green or red chillies and amla among others and the non vegetarian specials include the Parsi pomfret (fish), the Goan balchao (shrimp), the Malayali kallumekakai (oysters) and the Andhra kodi (chicken) pickle.

The Indian pickle market was worth Rs. 1000 crore in 2007. It is growing at 8% per annum consistently (faster than our GDP) and out of this, non-veg pickles account for one-third of the entire quantity in kilos. No wonder there are so many branded and unbranded players in the market.

The difference between the north and south Indian pickles is mainly in the oil base, souring agent and choice of spices – mustard oil is the popular pickling medium as opposed to gingelly or sesame seed oil in the south. The souring agents used in the south, apart from the pickled vegetable itself, are tamarind or curd or lime juice or a combination of them, as opposed to vinegar in the north. In the north cumin seeds, ajwain and fennel are used and in the south mustard seeds, tamarind and curry leaves are preferred.

Pickles are best stored in glass or porcelain containers. The lid should be secured tightly and they should be stored in a cool, dark place to increase shelf life. Always use a clean, dry spoon to serve the pickle. Remember to make sure that the pickle is fully submerged under the oil, brine or vinegar, as this acts as a preservative. For convenience, pickles may also be refrigerated.

I cannot imagine a day go by without eating pickle. My favourite combinations are mango pickle mixed with rice and a little ghee; red chilli pickle spread on bread and sugar sprinkled over it; and gongura or lime pickle with curd-rice which has a generous dose of tadka. The non veg trio of chicken, mutton and prawn pickle gives me an excellent reason to eat a pickle and non vegetarian food at the same time! Right now, as I write this, all those sharp memorable flavours from so many varieties of pickles awaken my taste buds. Hope you too have your favourite pickles to take you on a spice-of-life journey.

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VOICES



□ Gopal V Kavalireddi

In Solicitation of Your Presence

It's the wedding season in summer! And an important item in the wedding planner's guide is the wedding invitation. Traditionally meant to be a form of communication on the *what-who-when-where* of a wedding, this humble card has now come into its own.

Irrespective of the culture or region, class or religion that the couple hails from, the invitation card is supposed to make a statement. It marks the starting point of the Great Indian Wedding. On careful scrutiny of the many cards you receive "soliciting the pleasure of your company;" you'll find that apart from all these factors, individual tastes and budgets play a significant role too.

The quintessentially Indian wedding invitation offers interesting insights into our varied psyches. Beginning from the chosen texture of paper (standard or hand made) to colours (pastel or glitter), from formats (readymade blanks vs. customized novelty) to design (traditional vs. contemporary motifs) to printing (screen vs. fancy embossing), there's something for everyone.

The traditional haldi-edged cards have a lingering timelessness about them but the avant-garde cards find their own novel niches as keepsakes. While some prefer a holy salutation like 'Glory to Lord Ganesha, Revered God of our Well-Being, Destroyer of Obstacles, Giver of Auspiciousness and Bliss', others take the filmy route with, "Come, witness the binding of love in paradise." Photogenic couples can afford to pose smiling in the background to the text. An artistically inclined cousin of mine painted a little picture of herself and her groom (including his shaved head), set against the church in Goa they were getting married in. Some, like me, included a short personalised poem. Then there are theme cards with motifs relating to summer, doves, Christmas or seashells, which also form the leitmotif for the wedding reception décor. I recall seeing an image of a modern-day card based on the social networking site, Orkut and another on the Cadbury's Celebration chocolate wrapper. The net savvy have websites dedicated to their approaching D-Day with links to gift registries, blogs on wedding preparations, updates and pictures.

Indian weddings are as much about families marrying into each other as they are about the couple starting anew. In keeping with our regard for the elders in the family, it's not

always the couple inviting the guests, but their parents, relations or grandparents, which then becomes a lesson in the family ancestry. Which is also probably why, sometimes, the family surname gets bigger and bolder prominence in the card over the names of the bride and groom. Add to that the names of the who's who in the village – government officials, relations, pet names, children and everyone in the village is pleased to share in the limelight!

Then again, I've wondered if any wedding card protocol decides whether the groom weds the bride or vice versa? Perhaps it's wiser (and safer) to wait to be legally wed before announcing that the Mrs. is the boss! And in the true Indian hospitality tradition, you don't just invite your guests; you solicit their Gracious, Esteemed and sometimes Prayerful presence.

The delivery of cards is another distinct feature of Indian weddings. The first card is respectfully presented to the "kuldev", literally, the family deity. The ideal manner of invitation to mortal guests is personal hand delivery. If your guest list runs into a couple of hundreds, the cards are posted or couriered. But they do also expect a phone call to lend that personal touch. In more lavish weddings the little gifts accompanying the invitation – like betel nut and silver coins in delicate tissue purses or a box of premium pistachios – are loud enough indicators of the degree of extravagance to be expected at the wedding. These days, an email to friends and colleagues in the cc is intimation enough to "Be there, people, as I bid adieu to my single status."

Finally, as a chosen guest, when the card has journeyed into your hands and you're reading it, you're swept with the aura of anticipation and celebration. You could almost conjure up images of the bride in all her finery, the dapper groom looking his best, the proud and beaming parents, guests carting their gifts, the loud decoration, breathe in the aroma of a sumptuous buffet, the fireworks, the rose attar... society partaking in this momentous social occasion.

For me, I say a silent prayer for the lucky couple and hope all goes well because the wedding might be over in a couple of days, but their journey together would have just begun.

I say a silent prayer for the lucky couple and hope all goes well because the wedding might be over in a couple of days, but their journey together would have just begun.

□ **Natasha Rodricks-Naidu (HR)**

Unusual and intriguing titles grab your attention and can prod you to buy a ticket for the movie or pick up a book in the library or bookstore. The hunt for unusual titles is a favourite sport of many people, including sub-editors in newspapers and periodicals who give catchy headlines to the news stories and features. Here is one from a business daily: “Bulls in a tight bear hug.” It says it all about the unfathomable goings on in the stock market.

The Latin American writer Gabriel Garcia Marquez has a knack for tell-tale titles. Two of his novels are titled, *One Hundred Years of Solitude* and *Love in the Time of Cholera* and a short story called, *The Handsomest Drowned Man in the World*. The story is about a handsome drowned man, who's washed ashore, and all the women of the village falling in love with him! Some more interesting book titles: *Death on the Installment Plan*, *Chicken Soup for the Soul*, *To Kill a Mockingbird*, *Who's Afraid of Virginia Wolfe?* *Karma Cola*, *Freedom at Midnight*...

Hollywood and Bollywood and others are not far behind in their quest for unusual titles. Try these: *The Discreet Charm of the Bourgeoisie*; *The Cars That Ate Paris*; *Honey, I Shrunk the Kids*; *The Sisterhood of the Traveling Pants*; *Last Tango in Paris*; *River of No Return*; *Reap the Whirlwind*; *Cool Hand Luke*; *Glengarry Glen Ross*, *A Fish Called Wanda*; *Four Weddings and a Funeral*; *The Good, the Bad, the Ugly*; *The Silence of the Lambs*; *Even Dwarfs Started Small*; *Sophie's Choice*, *Claire's Knee*. And these two samples from Bollywood: *Rectangular Love Story* and *Do Paise ki Dhoop*, *Chaar Aane ki Baarish*.

I love to dabble in writing catchy titles. When I was breaking into copywriting as a young man I wrote this headline for a shaving cream: *Shaving is Believing*. Of course, it never saw the light of day but I had great fun churning up catchy ad lines. Here are some all-time great taglines from the world of advertising and brand promotion. *Impossible is Nothing* (Adidas); *A Diamond is Forever* (DeBeers); *The Ultimate Driving Machine* (BMW); *We Try Harder* (Avis); *Don't Leave Home Without It* (American Express); *We Make Money the Old-fashioned Way – We Earn It* (Smith Barney); *We Drink All We Can. The Rest We Sell* (Utica Club Brewery); *The Mind is a Terrible Thing to Waste* (United Negro College Fund).

Some years ago three friends of mine were planning to start a freelance writing service in Pune and they were searching for a catchy name for their outfit. In conversation, I suggested they call their fledgeling company, “Three Writers and a Dog”. Prospective clients were bound to ask, “What does the dog do?” And they would answer, “The dog does the spell check!” A great way to break the ice and get noticed. Here are a couple more name options for anyone who wants to start a writing or editing service business: *Clean Copy, No Chaff*. And this one which is my recent favourite coinage: *Polished Prose, No Problem*.

The above names are likely to give you much more mileage than run-of-the-mill names like *Word Smith*, *Write Stuff* and *Word Wise*.

So, what's in a name? A rose by any other name would smell as sweet. Wrong. I don't think *Fabindia* would have done so well with a different name like *Fabrics of India*. Besides the quality of their stuff, the name gives them a great competitive advantage, globally.

A catchy name, title or slogan gets instant recall and recognition. All of you know to whom this one belongs: “Improving Your Business is Our Business.” If you're not sure here are a few hints. The company is based in Pune, is Parsi-owned and is not in the IT business.



Eternal Sunshine of the Spotless Mind

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□ Ahmed Bunglowala

A FOOT IN THE DOOR

Job-seekers in the U. S. are using unusual gimmicks to grab the attention of potential employers, such as in one case sending a shoe along with a resume to get a “foot in the door” according to a recent survey conducted by CareerBuilder.com, an online jobs site.

Faced with the highest unemployment in 25 years, candidates are trying a variety of tricks, including:

- handing out resumes at stoplights
- washing cars in a company parking lot
- staging a sit-in in a company lobby to demand a meeting with a director
- sending a cake designed as a business card with the candidate's picture
- handing out personalised coffee cups
- going to the same barber as the company chairman to have the barber speak on his behalf

“The search for employment is taking longer and is more competitive than it has been in the past years,” said Jason Ferrara, senior career adviser at CareerBuilder. But he cautioned: “While unusual job search antics may attract the attention of hiring managers, they need to done with care and professionalism so that candidates are remembered for the right reasons.”

(Source: Reuters)

In praise of dullness at the top

Should CEOs read novels? The question seems to answer itself. After all, CEOs work with people all day. Novel-reading should give them greater psychological insight, a feel for human relationships, a greater sensitivity toward their own emotional chords.

Sadly, though, most of the recent research suggests that these are not the most important talents for a person who is trying to run a company. Steven Kaplan, Mark Klebanov and Morten Sorensen recently completed a study called “Which CEO Characteristics and Abilities Matter?”

They relied on detailed personality assessments of 316 CEOs and measured their companies' performances. They found that strong people skills correlate loosely or not at all with being a good CEO. Traits like being a good listener, a good team builder, an enthusiastic colleague, a great communicator do not seem to be very important when it comes to leading successful companies.

What mattered, it turned out, were execution and organisational skills. The traits that correlated most powerfully with success were attention to details, persistence, efficiency, analytic thoroughness and the ability to work long hours.

In other words, warm, flexible, team-oriented and empathetic people are less likely to thrive as CEOs. Organised, dogged and slightly boring people are more likely to thrive.

These results are consistent with a lot of work that's been done over the past few decades.

In 2001, Jim Collins published a best-selling study called *Good to Great*. He found that the best CEOs were not the flamboyant visionaries. They were humble self-effacing, diligent and resolute souls who found one thing they were really good at and did it over and over again.

(Courtesy: *The Asian Age*)

SLICE OF LIFE

And this poster

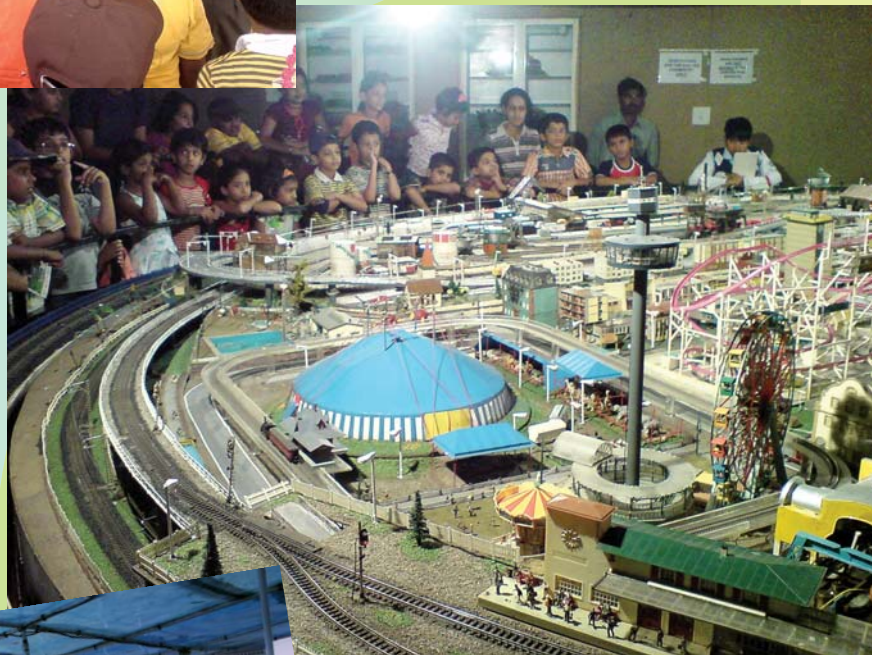
The closest people come to
PERFECTION
is in their resumes

(Contributed by Natasha Rodricks-Naidu, HR)

GIVE US MORE



The A S Bhatena summer camps were a sell-out, as every year. With education and fun mixed to give Thermax employees' children a memorable time. A camp at Mulshi, a know-your-city tour, a visit to a science museum and fort, a film appreciation course and theatre workshop and more. The pictures capture some of the excitement.



HIGHLIGHTS OF THE FINANCIAL YEAR 2008-2009

Thermax shows stable performance in a tough market. Posts a total income of Rs. 3303 crore and a profit after tax of Rs.287 crore.



Export income, including deemed exports, increases by 35 % to Rs.912 crore.

Business Standard honours Meher Pudumjee, Chairperson, with the CEO of the Year (2007-08) Award, in recognition of the sustained growth of Thermax and the value return to shareholders, without compromising on ethics.



The company creates diversified opportunities in water and power businesses by selective participation in the projects of municipal corporations and public sector undertakings.



Service business explores revenue opportunities to offset the cyclical risks of the capital goods sector by venturing into innovative areas of energy rentals, facility upgrades, equipment life extension, and operation and maintenance.



The Board approves investments to set up a Research, Technology and Innovation Centre (RTIC) with a time-bound programme to establish centres of excellence in the key technology areas critical to Thermax.

Rolls out Project Ever-Lean to eliminate waste, streamline processes and systems, and reduce costs.



The Thermax Social Initiative Foundation (TSIF) continues with more community initiatives in the third year.

