

I am a curious reader of *Circle of Life* for the last two years since my son, Mehshad Hamza, started working with you in 2006. I note with great happiness that each issue is better than the previous ones. The latest one (issue 10) is most colorful and very attractive. The section 'Tech Simplified' is very useful, and the write-up on blogging gave me a good idea of the concept. I suggest that you continue publishing such articles which throw light on several useful aspects.

The first impression which I gather about MindTree is that it is an employee-friendly company, and has introduced several measures in this direction. Equally important is your concern for the parents, whom I think many companies today have forgotten about.

It is with heartfelt joy that I note MindTree's growth in challenging environments, in less than a decade of existence. The MAKE award for excellence in the area of knowledge management and such other recognitions are colorful feathers in its cap.

The founders of MindTree should be appreciated for their business acumen and farsightedness, and equally important is the role played by each and every MindTree Mind under the ablest leadership of Ashok Soota.

Aztecsoft Ltd, pioneers in the OPD space in India, becoming a part of MindTree, will of course be a turning point and driver for greater growth and development, when MindTree completes its first decade of existence in 2009.

It is with immense and immeasurable pleasure that I express my gratitude to the expert management of MindTree for the honor showered on me as one of the parents of the family.

MindTree is an example for the fact that expert and farsighted management, coupled with the dedication of employees, can create wonders even within a short span.

I do foresee a bright future for MindTree, and hope that it occupies a very significant place in global IT.

Wishing you all success!

With kind regards,

M M Hamza

Jawahar Nagar
Calicut

Mailbox

Thanks a lot for such a lovely magazine, full of life, color and words of wisdom. The last three editions have been very refreshing and have given insight into the way you function and nurture young talent.

I am sure that my younger brother, Sultan, a young sapling in your garden, will grow into a strong tree, capable of withstanding all the storms that life throws at him. Thank you for being there for him and guiding him.

I wish MindTree all the very best and a lot of success in future.

Best regards,

Lieutenant Commander Neyaz Uddin

The Indian Navy
Vishakapatnam

Thank you for your *Circle of Life*. The journal occupied my leisure time and offered an interesting read on MindTree.

Though both my daughters are engineers (the elder one, Rama Prakash is with MindTree), my knowledge of computers or software even today is a big zero. Going through your magazine gave me a little knowledge about you and software in general.

Both my wife's and my minds are at rest in knowing about MindTree and its wonderful treatment to young employees.

Kindly continue the good service in the field of software and to employees.

Yours sincerely,

Dr K Nagaraj

Belur Road, Chikmagalur

I, Bijaya Naha, mother of Sudip Naha, a MindTree Mind, thank you for sending us a copy of *Circle of Life*. I and my husband are very much impressed with the work that MindTree is doing in the case of children.

I express my gratitude to you for honoring us as parents of a MindTree Mind. I do hope the prospect and prosperity of MindTree flourish each day.

I am a very lucky mother as my son is very happy being with MindTree.

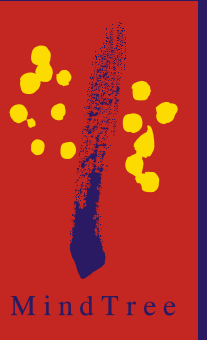
Bijaya Naha

Jamshedpur

You can read the previous issues of *Circle of Life* at: http://www.mindtree.com/careers/circle_of_life.html

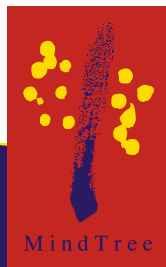
We invite all members of the MindTree Family to our Circle of Life. Do send your articles, feedback and any other contributions to circleoflife@mindtree.com or to Manoj Chandran, MindTree Limited, #42, 27th Cross Road, Banashankari Stage II, Bangalore - 560 070.

Circle of Life



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Circle of Life is a publication of MindTree Limited



Dear MindTree Parent,

It gives me great pleasure to once again reach out to you through this wonderful communication platform called *Circle of Life*. I hope you like receiving each edition of *Circle of Life* as much as we like preparing it for you. I am also happy that the community of MindTree parents is growing fast. *Circle of Life* now reaches the homes of more than 5,000 parents and other dear ones of MindTree Minds!

August 18 was MindTree's ninth anniversary. Time has flown by so fast. It seems only a few days ago when the first few among us had gathered at Taj Residency in Bangalore to announce to the world about the setting up of MindTree. The last nine years have been a journey of learning, bonding and sharing, in other words, Imagination, Action and Joy.

On our ninth anniversary, we have set up MindTree Foundation, a not-for-profit organization that will work globally in the areas of supporting primary education and differently-abled persons, including the use of assistive technologies. Through the pages of *Circle of Life*, you are already aware of the numerous socially responsible activities we are closely associated with. With the setting up of MindTree Foundation, we would like to formalize these activities and reach out to a larger section of the society.

One of the charters for us this year is to adopt ecologically-friendly initiatives in all possible functions. MindTree has been conscious about our environment and has taken several steps in the past to contribute little efforts in keeping the environment cleaner and greener. However, going forward we wish to make it a part of our culture to be environment-conscious. Be it our physical infrastructure or educating our people in being more eco-friendly, MindTree will play a responsible role. We realize that adopting a good mix of new and emerging technologies and traditional methods provides us with greener options to live. Going forward, we should be able to measure the results of our green initiatives so that we can keep you informed on what your company has achieved. This edition of *Circle of Life* is dedicated to our efforts in saving the environment and leaving behind a better world for our children.

As I write to you, the first half of our financial year comes to an end. Despite the uncertainty that still looms large over the global financial markets, MindTree has been able to perform well and continues to grow. We expect to meet our revenue and profitability guidelines we announced at the beginning of the year.

On the occasion of our ninth anniversary, I, on behalf of all MindTree Minds, seek your blessings in taking your company to newer heights and successes. We hope to have your support and blessings throughout our journey. I personally look forward to hearing from you.

Yours sincerely,
Krishnakumar Natarajan (KK)
CEO, MindTree





Plug into the Green Revolution!

Neetha Menon

Going Green... Global Warming... Biodegradable... Well, I know these words are as clichéd as they can get! In fact, they are there everywhere - on billboards, newspaper headlines... Are they just a

fashion statement, or something more? Now let me quit using complicated words and get down to something simpler.

What do we see on either side of the roads? That at one time what used to be green is turning brown? We only see trash, dumps and a lot of waste everywhere. But we are very careful to wrap our trash in neat little plastic bags and throw them out. Then, where does this trash go? Probably it ends up in government-owned wastelands, but what happens to it later?

Coming back to a term I used at the beginning of the article, biodegradable. In simple words, the more biodegradable a substance is the better. Biodegrading is the process of breaking down of the organic substance either with or without oxygen. When substances are not broken down or destroyed thus, they become harmful to life and also add to global warming. You remember those neat little plastic bags we use to wrap our trash? Plastic bags take from 10 to 20 years to degrade while plastic bottles go up to 450 years! Well, why are we talking about all these issues?

Cut to MindTree.

In the month of July, Bangalore was struck by shortage of diesel owing to frequent power cuts. A distress call was sent all over at MindTree to request for co-operation during this time. The innumerable responses that came were clearly unexpected. MindTree Minds stepped forward to provide a large number of pointers in order to save power. Some of them included allowing only one lift to function during the day, switching off corridor lights during the day, etc. The overwhelming response empowered the admin team headed by Abraham Moses, with the overall supervision of Partha, our COO, to start new initiatives in MindTree in order to save power.

"In Nature there are neither rewards nor punishments; there are consequences." - Robert Green Ingersoll

Our first initiative was to use only CFL (Compact Fluorescent Lamp) lights since they consume less power. In addition, all monitors and lights are switched off when not in use to conserve energy. Also, in association with E-Parisaraa Pvt Ltd, an eco-friendly recycling unit on the outskirts of Bangalore, MindTree helps in disposing of and recycling e-waste. Other programs such as only groundwater usage

at West Campus, sensors to optimize water usage, etc are being implemented as we speak. This is just a speck of what is being carried out here in MindTree.

The larger vision, however, is to 'go green' throughout the organization and embed it into our DNA of Imagination, Action and Joy! MindTree has just begun seeding this garden, and there is certainly a long way to go. But the good news is that we have started and don't intend to stop.

Now, why are we talking about all this? It's because the world is trying to go green!

Why? To me, the answer is simple - it's high time we learnt to treat Nature with respect. Now, it isn't just a whim or a hobby. It has become an absolute necessity. The truth is that the planet we are living in is in trouble.

Today, we, with a lot of help from our ancestors, have successfully 'trashed' (for want of a better word) our home. The bright side, however, is that we don't get to endure whatever we have done but the negative side is that our children and the subsequent generations have to. As usual, they get to experience the ill-effects of our doings. But as the old saying goes, it's never too late. We still have time to make amendments.

However, most of us would think - why bother? Why bother, indeed. It is not like losing a job or not getting to work in the right project. Or anything similar. It is, in fact, way more important than that! We save money for our future, for our family and for our children. We think ahead and are always prepared for them. Then why not for our planet? What we now need to be is a group of environmentally-conscious folks who do their best not to trash the planet with disposable plastic, gas-guzzling vehicles or feverish over-consumption.

All is not lost. There are people who try to do their little bit to save the environment. I read about a lady who uses baking soda for brushing her teeth and uses toothpaste only when she really needs it! I know it is something as simple as you not using plastic covers in super markets or switching off the lights when not in use. You may think what difference a single person would make... But it's definitely a start and we need to start somewhere. After all, "the entire ocean is affected by a pebble", as Blaise Pascal once remarked.

"The goal of life is living in agreement with Nature." - Zeno

With so much of awareness being created, what about the IT industry? An industry which boasts of 'knowledge power' needs to do its part. So what are people in IT doing? According to technology analysts, carbon dioxide emissions from the electricity we use for our computers account for two percent of all emissions worldwide! That's the same amount of harmful gas produced by the airline industry. And that in time hurts different parts of the environment through greenhouse gases and global warming.

Energy-efficient computing is the possibility of providing the same level of efficiency from computers by consuming less energy or

power. Today, the average desktop personal computer wastes nearly half of its power, and the average server, one-third. International IT giants like Intel and Google and a host of other IT companies such as Dell, HP, IBM, Lenovo and Microsoft, to name a few, have joined the World Wildlife Fund to launch Climate Savers Computing initiatives. In fact, companies have begun to build their business strategies around this novel concept. It may sound cold-hearted but the idea of reducing harmful greenhouse emissions and saving the planet need not have to conflict with making a profit. Higher energy efficient computers may evidently increase in value in the market, but this is marginally a very low price to pay if it will ultimately save our planet.

"At MindTree, we evaluate computers for energy ratings along with other performance parameters. Apart from procuring desktops/laptops that have intelligent features for low power consumption, we are also working actively on Virtualization, Blade Servers and Energy Efficient Printing. 'Green computing' makes business sense as well by lowering our operation costs," says Sudhir Kumar Reddy, our Chief Information Officer (CIO).

Virtualization is the process by which the number of physical servers/computers can be reduced by replacing with virtual servers. As the name suggests, these virtual servers do not actually exist in any fact or form but are implicit. A blade server is a special type of server which can be used for power consumption.

The prospect of reduced printing needs to be embedded in each one of us. Today while printing a document we may not think about avoiding or reducing it. This may actually help our environment and the world around us. So, please think twice before printing a 300-page document...

Green buildings are also very much in vogue. Today's modern buildings have led to an adverse impact on our environment. The new age buildings roughly account for 12 percent of water usage, 30 percent of greenhouse gas (GHG) emissions, 65 percent of waste output and 70 percent of electrical consumption. In contrast, green buildings make use of renewable resources such as using sunlight through solar techniques, using plant materials like bamboo or straw, recyclable materials, etc. These buildings often include several measures to reduce energy use. For example, it is possible to position windows in a building effectively so that more of natural light can be used and less of electric lighting will be needed, especially during the day. Solar water heating also further reduces the energy loads.

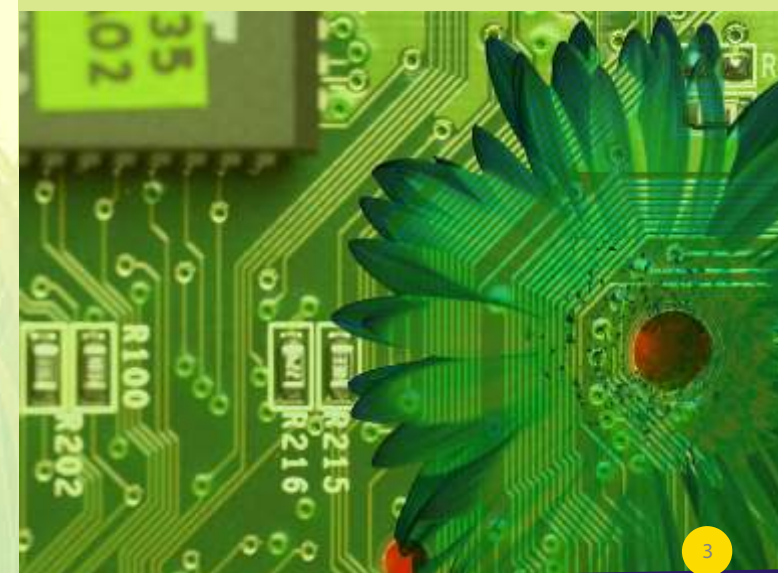
Debates on such issues and possible solutions can be continued to no end. However, all said, we are at crossroads today. It's a fork in front of us. We can either close our eyes to the obvious and continue with our lives, or we can do something about it. Helping the environment does not come from just shouting a few slogans or taking part in well-publicized rallies or conferences. It comes from a genuine feeling to save our home, our planet.

So, which way do you choose? ■

"Let us permit Nature to have her way. She understands her business better than we do." - Michel de Montaigne

Facts you must know

- The average US home of today contains more chemicals than an early 20th-century chemistry laboratory.
- Running a garden sprinkler will waste as much water in half an hour as a family of four uses in one day.
- Large, flat screen TVs and the new 3G mobile phones contain nitrogen trifluoride (NF3), which is more potent and harmful than carbon dioxide.
- The energy saved by recycling just one plastic bottle would power a 60W bulb for six hours.
- If every American replaced one incandescent light bulb with a fluorescent, it would be like taking one million cars off the road for one year.
- Each tonne of paper recycled saves 15 average-sized trees, as well as their surrounding habitat and wildlife.
- Banana peels take the least amount of time to biodegrade - 10 days! So the next time you slip over one, be happy that the environment is actually safe!
- Green buildings or sustainable buildings (as they were earlier called) were pioneered as early as the 1850s by a Scottish architect Alexander Thomson.
- Bamboo is the world's most sustainable resource. It is the fastest growing grass, pulls in sunlight and greenhouse gases and converts them to new green growth.
- Using cold water in your washing machine saves energy than when using hot water.



AIG

Our Customers

American International General, Inc (AIG) is a Fortune 20 company headquartered in New York City, New York with \$110.06 billion (2007) in revenues and over \$1 trillion in assets.

AIG's history dates back to 1919 when its founder Cornelius Vander Starr established an insurance agency in Shanghai, China. Starr was the first Westerner in Shanghai to sell insurance to the Chinese. After his business became successful in Asia, he expanded to other markets, including Latin America, Europe, the Middle East and the US.

Today, AIG is a world leader in insurance and financial services, the leading international insurance organization with operations in more than 130 countries and jurisdictions. AIG companies serve commercial, institutional and individual customers through the most extensive worldwide property-casualty and life insurance networks of any insurer. In addition, AIG companies are leading providers of retirement services, financial services and asset management around the world. AIG's common stock is listed on the New York Stock Exchange, as well as the stock exchanges in Ireland and Tokyo.

AIG has four principal business segments:

- General Insurance - The largest US underwriter of commercial and industrial insurance and the most extensive international

MindTree's AccessAIG Team, one of the several teams working on AIG projects



“ With MindTree I feel as if I am partnered with an onshore, 'higher end' consulting company who takes service seriously rather than the stereotype of offshore vendors who live on the other side of the wall and throw work back and forth. MindTree works to understand the companies' goals and objectives rather than just focusing entirely on SLAs and matters of covering their own concerns.”

Michael Woodward

Senior Information Officer, Commercial Insurance Group, AIG

property-casualty network, including personal lines business and mortgage guaranty insurance.

- Life Insurance and Retirement services - The most extensive global network of any life insurer, a leading US life insurance organization and premier retirement services franchise with a leadership position in the US fixed annuities market. In India, AIG has a joint venture with the Tata group for its life insurance products.
- Financial services - AIG has a major presence in aircraft finance, capital markets, consumer finance and insurance premium finance. AIG owns International Lease Finance Corporation (ILFC), the world's largest aircraft leasing company with a fleet of more than 900 planes. ILFC is the largest single customer to date for the new Boeing 787 Dreamliner.
- Asset management - Institutional and individual assets, retail funds and private banking through a growing global network.

MindTree's relationship with AIG started in 2004. After a rigorous evaluation extending over a period of six months, AIG chose MindTree as a preferred vendor.

MindTree has a dedicated and secured Offshore Development Center (ODC) with over 300 MindTree Minds working for its largest customer. The areas of work involve software design and development, production support, maintenance and system enhancements for AIG's Commercial Insurance Group, American International Underwriters (AIU) and Private Client Group (PCG).

MindTree Minds provide 24x7 production support to many of AIG's key Commercial Insurance applications that include business critical Corporate reporting and Reinsurance portfolios, critical and sensitive Commercial underwriting and loss processing systems. ■



MindTree Coromandel



As MindTree steps into the road to becoming a billion-dollar company, MindTree Coromandel, its very own development center in Chennai, will be playing a critical role in the quest. Ramachandran Narayanaswamy, who heads this center, outlines the strategy.

It was in October 2006 when we opened our development center at Olympia Technology Park in Chennai with less than 20 people. People moved in as the interior work was still in progress, the desktops had not yet arrived, and projects were still being envisaged. Since then, we have grown to 400 MindTree Minds and moved to our own facility at MindTree Coromandel from December 2007.

The primary drivers for choosing Chennai as our second development center in India were the depth of the talent pool, the culture and work ethic of the city, the metropolitan nature and the corresponding infrastructure, and the connectivity to the rest of India and the world. Two years hence, we are very happy that we were justified in our confidence on all counts.

MindTree Coromandel (named after the famous Coromandel coastline of eastern India) started operations on December 10, 2007. This 2,80,000-sq-ft facility based inside the Special Economic Zone (SEZ) of Mahindra World City has a capacity to seat close to 3,000 MindTree Minds. The interior work on the ground floor has been completed with an imposing lobby area, two training halls, three board rooms, an Arboretum, a cafeteria, four labs and 570 seat work area. Baby's Day Out - a facility for parents with young children - has been set up with work areas and a pantry.

The Chennai center has delivered several successful projects to clients around the world. Some of the major clients we work for in

the IT Services (ITS) space include eBay, a leading US-based travel booking engine, CoStar, Clearone Communications, NFUM, Global IQX, Unilever, AllOptions, Evantix, Singapore Airlines, IATA, Kalido and Visual I/O.

On the R&D Services (RDS) side, key clients include Coca-Cola, NXP, UTC, BDT and Data Domain.

The Chennai center's growth has been fueled primarily by three Practices - Internet and Emerging Technologies, Microsoft and Testing. In addition, the seed team is in place for DataWarehousing and Mainframe Practices. Also, the specialist communities of Business Analysts (BA) and User Experience Lead (UEL) are ramping up at Chennai over the last few months.

The focus areas for MindTree Coromandel for this financial year are Hi Tech Industry Group (IG), Insurance IG, build on our expertise in the Travel IG, Storage IG (of RDS), Automotive IG (of RDS), and one large account (UTC).

MindTree Minds at Chennai live by the credo of Imagination, Action and Joy. In addition to achieving a high quality of deliverables, there is always time for fun and play. After the Rainbow series of events and the Crescendo extravaganza, we are now into Exhilaration '08 which promises to showcase the 'other set' of talents. These events have also accelerated the bonding process and at the same time provided an outlet to the trials and tribulations of daily life.

As MindTree steps into the road to becoming a billion-dollar company, MindTree Coromandel will be playing a critical role in the quest. With the basic plumbing in place - in terms of physical, emotional and organizational infrastructure - the next phase in our journey shall be a period of rapid growth. ■

My Memories of MindTree (before it became MindTree)



Rostow Ravanan
CFO, MindTree

It was somewhere around July 1998, when Subroto and I were working at Lucent's India development center. We were visiting Hyderabad to meet people at one of Lucent's partner development centers. After our meeting, we drove over to see the hi-tech city which was at that time under construction and was generating a lot of 'buzz'.

On the way, Subroto asked me if I would be interested in joining a company he was planning on, a software services company, but a particular twist in this tale was that the company would have a strong social consciousness and would give back a portion of its profits to the society. I said 'yes' in less than a minute. The reasons behind my immediate acceptance were many - my admiration for Subroto was probably the most important reason, the others included the fact that I was getting restless at Lucent and the idea of working for an organization that had a definite and deep-rooted social consciousness was very appealing.

I strongly believe that I got to where I was because of nudges and pushes that society gave me, so if I could help create the same opportunities for others, we would make the world richer. All of us support some causes outside work, but if our work itself could make a social contribution, then it would be that much easier.

When I broke this news to my parents, they were taken aback. My dad had retired a few months ago, and while they were by no means conservative in their outlook, this was still a big leap for them. After all I was only 27 and not even married by that time. However, since I appeared convinced that this idea would work, they went along with it. I guess what turned them around and made them enthusiastic supporters was their meetings with Subroto, KK and the others, because like everybody else they too were convinced that we had a winning team here.

The preparation for MindTree was meticulous. The story of our trip to Vizag is known, the week that we spent there in December 1998 created the skeleton for what later became MindTree. The one striking memory that still continues from that day is how KK would climb on chairs when we got into passionate debates on what the

company would look like. The more intense the debate became, he would climb on the table. It was a sight to behold.

The work continued even after we returned to Bangalore. We all had a full day's job, but we would get together around 7 pm or so, by turns in Subroto's home, KK's home, etc and work on the business plan. We had drawn up the table of contents while we were at Vizag, and now each chapter had to be written, owners were assigned for each chapter, and some had joint owners. We had to research our topics before we could write our part and it involved a lot of heavy



Founders

reading, discussions, etc. Once we had a draft of our chapter, it would get circulated to others and they would send their comments, which would further refine our thoughts.

Another recollection of those days is that whenever we worked at KK's home, we would have to time-share KK's home PC with Abhi - KK's younger son. Abhi was an avid computer games enthusiast and when he played games, his hands would sort of fly over the keyboard - he was really adept at computer games and he was still in junior school! It made me realize that the use of technology would become all-pervasive over time and the generation that was growing up would be very comfortable with it, as well as access to technology would be so high that a lot of new opportunities would open up.

Ashok's arrival on this scene was a huge surprise. While we were definitely a bunch of seasoned professionals, Ashok's presence was a game-changer. I felt that this was a lottery ticket which we won. I remember meeting him at his house. He wanted to know me better and of all things, he asked me to bring copies of my previous

appraisals. I hadn't gone through an appraisal cycle at Lucent yet, so gave him copies of my appraisals from KPMG. Ashok knew my previous boss at KPMG and I had done well at KPMG. I guess I must have done OK in that meeting, because I am still around!

Ashok being who he is immediately dived into the numbers section of the business plan. We had detailed Profit and Loss (P&L), assumptions, balance sheet, cash flow statements, *et al.* Ashok's arrival increased the scale of our ambitions. We were in discussions with a few VCs at that time, but some of the first meetings were not leading anywhere. Though the reputation that Subroto and KK had built for themselves always made sure that the VCs were willing to put money on the table, we were not on the same wavelength with them. Some of them offered us small money at small valuations and we realized that it would not take us anywhere. Some of the people whom we met gave us the impression that they were not the team you wanted to hitch a long-term ride with. The best value match came from Siddhartha and Walden.

The negotiations with the VCs were an interesting mating dance. Walden being the larger firm took the lead; they had hired a lawyer and sent us a draft of the term sheet. Multiple rounds of discussions were held. Remember, we still had a regular day job that had its own commitments. Plus, people like Ashok and KK had to be extremely careful not to allow even a whisper of our plans to leak because it



July 15, 1999 - Signing the Memorandum of Understanding between the founders, Sivan Securities and Walden International

would have serious repercussions. Though we tried our best to keep 'Planet One', as we had named the company at that time, a sort of extracurricular activity that was only pursued after office hours, by the time we had reached the second or third round of discussions with the VCs, some day-time interrupts were impossible to avoid. Subroto and I evolved code words, KK was named 'Uncle' and Ashok was 'Grandpa'. So, if we had to talk to each other while we were at work, say to fix up a meeting that evening, we would say, "Uncle called, he wants to know if we can meet him today". If I had to

call Ashok at his office, Viji would answer the phone and say, "Ashok Soota's office"; and I would tell her, "Rostow here, can I speak to him please?"; i.e., without mentioning him by name, so my neighbors in Lucent wouldn't know who I was calling. Since Wipro was also a Lucent partner, I probably had genuine reasons to want to speak to him, but there was no way my colleagues at Lucent would have believed that I needed to speak to Ashok four to five times in a day.

Internal discussions on the name were also happening in parallel and as we all know, the name MindTree Consulting was chosen. I used a lawyer friend of my dad to incorporate the company, and the company was set up on August 5, 1999. Amongst other things which conveyed the feeling that the stars were aligned in our favor was that the company set-up process was very smooth; we got the approval for the name 'MindTree' easily and the company was actually set up in just two-three days.

The Term Sheet with the VCs was signed late one evening in June 1999, at the Gateway Hotel on Residency Road. We had a small celebration.

Through all of this, our team slowly grew. But what was special was that strong bonds were formed. Not just amongst ourselves, but our families, too. It would not be overly melodramatic to say that we felt as close to each other, as we felt with our closest family members. We knew that we thought differently on different issues, but we could predict what another would say on any issue. Even if we didn't always agree with each other, we knew we could count on each other and respected each other deeply. We also evolved a 'situational leadership' pattern very well amongst us. On different issues, a different person took the lead and the team backed that person fully. Come to think of it, in the close-to-10 years (nine years of MindTree and say one year of preparation before that) that we have been together, none of us have had a serious disagreement. We have seen what Subroto described as "high highs and low lows". As Scott says, with all these experiences, "we have traded height for hair" - though we have all lost hair we have grown as individuals.

Our families have given us unstinting support during all these struggles and have celebrated every success we have had. I got married after MindTree was formed. Anjan, Kamran and I had kids. Our families know each other very well and share a very close bond. That support network was critical for us to give our best efforts to nurture MindTree in its early years. More learnings were packed into these years at MindTree than anything the best schools in the world would have taught us even if we had spent a decade in those schools. We learnt to win and retain tough customers, attract and retain very talented and committed people, do a series of acquisitions, take the company public, etc. The extended leadership team brought great ideas and passion to the table, which helped lay the foundations of MindTree.

As we say, this business is built for the long term, patiently, day by day, customer by customer, and MindTree Mind by MindTree Mind. ■

MindTree's Singapore Operations

In the previous issue, we spoke about our operations in Continental Europe. This time it's Singapore and the rest of the ASEAN. **Sagar Paul**, MindTree's General Manager and Geo Head - ASEAN, takes us through a glimpse of this ever-booming region.

Dear Parents and Friends,

It gives me great pride and pleasure to write to people who are behind our success. This letter of mine is expected to give you a backdrop of the business we do in the ASEAN region and the people who make it successful.

When I joined in May 2000, MindTree was just about 200 people and we operated from our Basavanagudi offices in Bangalore. We are today close to 8,000 people in 19 locations. I can certainly say that I have grown with MindTree (and my family has grown, too!) in the last eight-odd years. I worked with PricewaterhouseCoopers and Tata Steel prior to MindTree. Sharmistha, my better half, has supported me actively - moving with me without a whine wherever I went. In summary, we lived in nine cities after marriage. I cannot beat the Army kids who put up with their parents' transfers but can certainly give them a good fight! I am a proud father of two boys aged 4.5 and 1.5 years. I have had experience working in India, the US, Europe and am currently leading our business development in the ASEAN region. You can probably picture my work-life by now.

MindTree started in two geographies simultaneously, India and the US. Singapore was the next geography we entered. Singapore is of strategic relevance for us. It is a city-state with a buzzing economy. While being strongly connected to the western world, it is balanced extremely well with the booming Asian economies of China and the ASEAN nations. It is geographically juxtaposed as a regional hub for large global corporations. In addition, it is a great innovation hub with world-class companies setting the standards for the world.

Singapore is also the hub for all the ASEAN nations - with all of them a single hop away from the airport.

Being a four-five hour flight from most Indian cities, flying to Singapore is inexpensive and we have consultants and senior folks traveling



Ashok Soota with MindTree Minds in Singapore

to Singapore very often for our projects, customer meetings and to develop local relationships. We enjoy playing host to all of them. Locally, we have about 40 people stationed here while a lot many support our projects from Bangalore and Chennai.

Our customers and the work we do for them define our existence. We work with some of the best known names in business like Unilever (makers of Lux, Lifebuoy, Lipton, Knorr, etc - soaps to soups!), Singapore Airlines, Port Authority (PSA), Standard Chartered Bank and Sony.

All the work we do for our customers help them in being more efficient - be it reducing costs of production and distribution, develop and rollout effective marketing campaigns, reveal actionable insights from a lot of data generated by business, helping ships and shipyards be cost-effective and safe, or working through the maze of dealings in the world of complex financial markets. The work that we do touches our customers deeply in their success. And, we pride ourselves in that.

When you come to this country, the local culture may shock you - in a good way, though! The vibrant local culture is actually a harmonious melting pot of several cultures that come together on this island. The Asian culture of strong family ties, hard work,

spirituality, integrity and respect combined with a very professional, disciplined, innovative and meritocratic society of the west, creates a very strong work ethic. This in turn creates an environment that is very innovative and fosters growth. Our customers are, hence, very demanding and the work place fiercely competitive, forcing all of us to perform better. In fact, some of our best managers at MindTree are ones who have been groomed in Singapore.

As many of you know, Singapore is a model state. Other nations come to Singapore to learn how to manage their own countries. In fact, Kee Thiam, CIO of PSA, even calls it the 'proof of concept' (POC) country. If a technology does not work in Singapore, it is unlikely to work anywhere else. Having said that, you can see the adoption of technology everywhere, from finding out when (in reality) the next bus will arrive at your bus stop to being water self-sufficient (and that is hard being an island) via rainwater harvesting and complete recycling. Being innovative and early adopters of good technology has kept this region in the forefront. Technology spending by the government therefore beats the private corporations hands-down. However, it is not easy to work with the government. Our focus is to begin working with the local government, and we believe that will be our biggest engine for growth. This is Strategy Number One.

Given the current financial crisis and rising oil prices which have had a big impact on businesses worldwide, Singapore has fared much better, largely due to the strong demand in the Asian markets. In fact, we are increasingly seeing Asia driving oil and commodity prices up across the world. We wish to ride the growth cycle and hence our imperative this year is to gain entry into Malaysia and Hong Kong. This is Strategy Number Two. (We have already started working with a bank in Malaysia.)

An essential aspect of business is trust. If our customers like us, they will trust us with more business. We have had a great working relationship with a few customers for a long time. We need to see this strong relationship translate to business. We wish to do more business with these strategic customers, by deepening our relationships and increasing trust. The right investments are being made right now. This is Strategy Number Three.

I have the strong support of all the MindTree Minds who work for our clients in this region. The MindTree senior leadership supports me in every possible way, and I know I have your love and affection. I am proud of that.

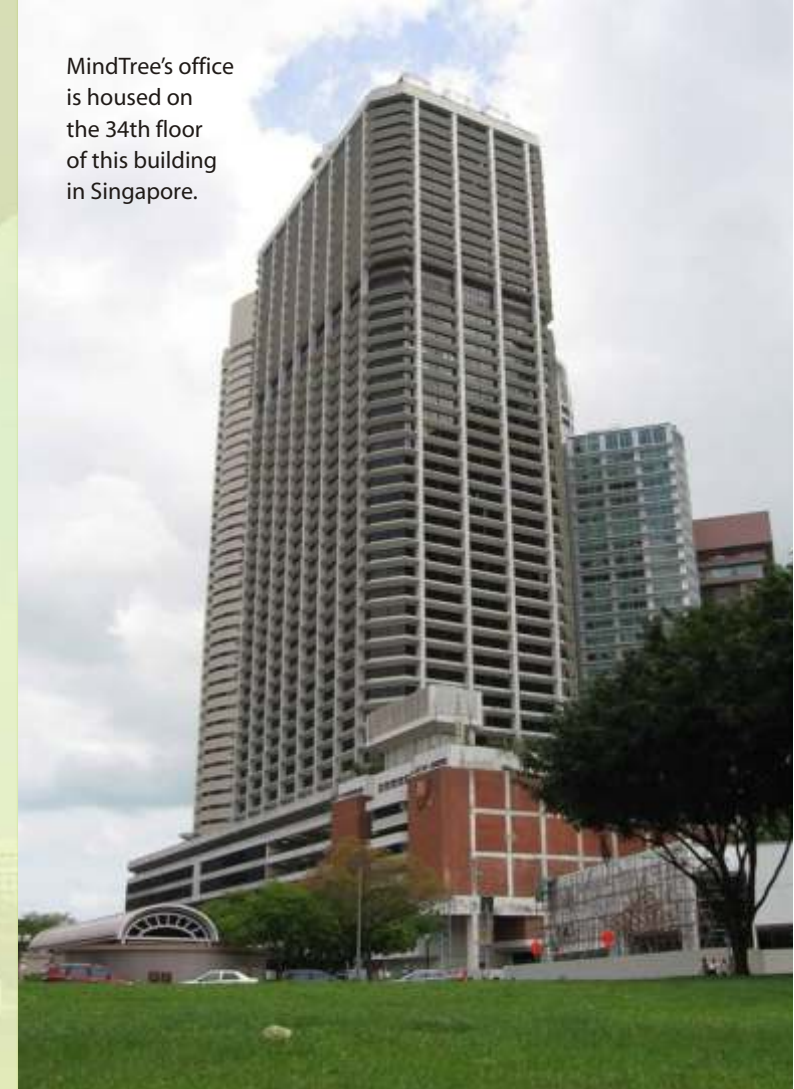
Many of you have come to Singapore to shop and visit. I am sure you have liked the place. If you haven't, I urge you to visit right away. Two very large resorts are coming up in the next couple of years, which is expected to rejuvenate Singapore's position as a top

tourist destination. Please do come and visit. MindTree Minds from Singapore look forward to meeting you.

With greetings for the festive season,
Sagar Paul



MindTree's office is housed on the 34th floor of this building in Singapore.



Tech Simplified

Wi-Fi

These days most restaurants, coffee bars, and even colleges and homes have Wi-Fi connections... Wondering what we are talking about? Read this article by Anupam Kumar Tandon, which explains the technology for you, in detail!

In the recent past, serial blasts rocked India. It was when we clearly saw the negative side of technology, when media flashed news that terrorists had used Wi-Fi network to send terror emails.

One email was sent from an unsecured Wi-Fi network belonging to American citizen Kenneth Haywood on July 26, 2008, barely five minutes before the blasts in Ahmedabad. The other was sent on August 23, again from a Wi-Fi network of Matunga's Khalsa College of Arts, Science and Commerce. In both the cases, terrorists took advantage of Wi-Fi network to mask their identity.

Now, what exactly do we mean by Wi-Fi? There is, surely, a lot of buzz around it. There are colleges, restaurants and even coffee bars that boast of having Wi-Fi connections. The technology-literate and information-thirsty public of today is scurrying towards Wi-Fi-enabled hotspots to get access to the vast resources on the Internet. People are enabling their homes with Wi-Fi. Kids are running around with Wi-Fi-enabled gaming consoles. So, what is Wi-Fi?

What?

Imagine walking into a coffee bar with your laptop and magically getting connected to the Internet. This would mean complete freedom from the tyranny of wires. Wi-Fi has made it possible! In fact, it has made Internet truly mobile.

Wi-Fi is the name given to a technology used in wireless local area networks [WLAN]. It stands for 'Wireless Fidelity'.

Local Area Network [LAN] is a type of network which covers less than one kilometer. It provides connectivity within a building or a campus. For example, if you have LAN set up in your home, you can access the data present in a computer located in the living room through a computer located in the bedroom. If you have a single printer but multiple computers, you can connect all the computers to the printer and access it via any computer in your home. So essentially, LAN helps in data/resource sharing between computers which are within the range of one km from each other. If your LAN is connected to the Internet, you can access it from any computer within the LAN network.

Other networks such as MAN [Metropolitan Area Network] and WAN [Wide Area Network] are bigger and span across the city and country, respectively. The Internet, which is a network of networks, spans across the globe. On the other hand, LAN is a much smaller network as compared to all of these.

LAN can be of two types:

1. Wired - Makes use of wires or cables to establish a connection between computers or digital devices.
2. Wireless - Computers or digital devices are connected wirelessly. This type of LAN is also known as WLAN.

Wi-Fi is the second type of LAN (WLAN) in which radio waves (instead of wires or cables) are used to connect computers in the network. The data or information in the remote computer is converted to electrical signals and transferred along radio waves through air to the computer which has requested for it.

WLAN (Wi-Fi) follows the IEEE- 802.11 standard. An organization called Wi-Fi Alliance gave the name 'Wi-Fi' for the WLAN which followed this standard along with some of the standards set by itself.



Wi-Fi logo

If you see any digital equipment which bears the Wi-Fi logo, it means the equipment has passed the interoperability test set by Wi-Fi Alliance and has been certified. Coffee shops, libraries, restaurants, hotels, colleges, etc which are covered by Wi-Fi are known as hotspots. People can enter these areas and surf the Internet while having food or reading their favorite book.

How?

The way Wi-Fi works is simple. In a typical Wi-Fi-enabled facility, there would be one or more access points (APs), also known as base stations. These stations and the Wi-Fi-enabled digital devices (laptops, iPhones, Blackberries, etc) can be seen as short-range radio transmitters and receivers respectively. Each base station broadcasts packets (also known as beacons) at the interval of 100 milliseconds. These packets contain an identifier which can detect the digital device. When the device enters the Wi-Fi zone, the following happens:

1. It is detected, authenticated and becomes part of the network.
2. Once the relationship between the base station and the digital device is established, there can be data transmission or sharing of the resource.
3. This relationship is broken if the digital device moves outside the range of radio coverage of the base station or one of the two (digital device or the base station) shuts down.

The user of the digital device may freely roam around the facility and still remain connected to the Internet.

Installing Wi-Fi

Installing Wi-Fi does not demand much effort or time. In less than an hour, your home can be Wi-Fi-enabled. It also depends on your desirable coverage and the number of devices you want to connect.

Let us suppose that you have a Wi-Fi-enabled laptop and desktop which you want to connect by Wi-Fi. Assume that your desktop already has Internet connection and you want it to be available to the laptop, too. You can complete the Wi-Fi set up for all your computers through the following easy steps:

1. Get a wireless router.
2. Plug out the modem output line from the desktop and connect it to the Internet line of the router.
3. Connect router to the laptop and do the required configuration. You should also type the ESSID (Extended Service Set Identifier) and WPA (Wi-Fi Protected Access) keys. This helps in keeping your network secure.
4. Turn on the DHCP (Dynamic Host Configuration Protocol) server on the router. By now the laptop should have the Internet connection from the router.
5. Lo, your home is now Wi-Fi enabled! All your Wi-Fi-enabled devices can get connected to the router and get access to the Internet.

If you want a wider coverage of your network, you can set up access points in suitable locations in your home.

Advantages

There are several advantages of Wi-Fi.

1. It makes the Internet mobile. And with this comes the huge benefits that Internet brings - educational, business, research, interpersonal or personal.
2. No need of cluttered cables or wires dangling around the premises.
3. Cost of hardware and cables is saved.
4. Digital devices can be moved within the Wi-Fi zone without losing connectivity.
5. Wi-Fi uses unlicensed radio spectrum [it operates in 2.4 GHz radio band]. The regulatory approvals are not required. It can be installed anywhere - home, airports, libraries, schools or even coffee bars, hospitals and restaurants.
6. Installation is quick, simple and not very expensive.
7. Numerous attractive Wi-Fi-enabled products have come in the market. Wi-Fi-compatible gaming consoles (for example, Nintendo Revolution) have been developed, which can be

connected to Wi-Fi hotspots with a single click. These gaming consoles can access the Internet through Wi-Fi.

Disadvantages

Though Wi-Fi is revolutionizing communication, it has its own set of strings attached.

1. Cell phones or competitive waves (microwaves, for instance) can interfere with the Wi-Fi network.
2. Radio waves in the Wi-Fi network which are essential for connectivity can easily be blocked by a building or a wall (unlike a wired network which need not face such issues).
3. Wi-Fi gives an easy access to the Internet. This makes all the evils of the Internet also the evils of Wi-Fi. For example, people can easily access violent and obscene materials. This would put the mental well-being of modern youth and kids, who are increasingly getting addicted to the Internet, into serious jeopardy.
4. Security threat: If the Wi-Fi network is unsecured (Kenneth Haywood's network was unsecured), it can be used by anyone anonymously. Serious computer crimes can be perpetuated using such networks with very little risk of being caught. In the case of Kenneth Haywood's Wi-Fi network in his Navi Mumbai residence, which had its security features disabled at the time of sending the terror email, the police could not ascertain who the real sender was. All they could make out was that an email was sent from Haywood's network. In the second case where the terror email was sent from Khalsa College, the senders had hacked into the Wi-Fi network of the college. And even in this case, all that the police could ascertain was that the email was sent from the Wi-Fi network belonging to the college. This cover which Wi-Fi gives to its users can be misused by antisocial elements.

Wi-Fi has indeed given birth to a new breed of disruptive elements called 'wardrivers' (a term derived from the word 'wardialing' from the movie *WarGames*). A wardriver is one who drives around the city looking for Wi-Fi networks - usually the open or unsecured ones. He carries digital devices that can detect the network. Once an open network is found, the wardriver and his gang use it for various antisocial activities which include (but not limited to) sending terror emails. Before misusing the Wi-Fi network of Kenneth Haywood or Khalsa college, wardriver(s) could have detected it and then planned accordingly.

Though there are reasons to worry, overall Wi-Fi is a real boon to the modern civilization. Measures are being taken to tackle some of the challenges mentioned above. The public is increasingly becoming aware of the risks associated with unsecured networks and slowly moving towards secured ones. Wi-Fi is also yet to see radical technological improvements, which are in progress in the labs across the globe. Indeed, Wi-Fi has true potential to change the world and make it a better and flatter place to live in. ■

MindTree charts plan to enter \$1 bn revenue club

IT company will finalise strategy in three months

Rabin Ghosh, Mumbai

MindTree, a mid-sized information technology company, will set itself a definitive target date for joining the billion-dollar revenue club in the next three months.

The company posted revenues of \$186 million in FY08 and, assuming it maintains the upper end of its 24%-26% revenue growth guidance, it would take about seven years for MindTree to become a billion dollar organisation.

An acquisition, like its recent one with Aztecsoft, will of course bring the target closer.

V. Krishnakumar, CEO, MindTree, said the company has set a \$1 billion goal for itself. "We are in the process of collating from 8,000 MindTree and Aztecsoft mindsets what we can achieve and other elements of purpose and vision. The India part of the process will get over in three weeks. It will then move to US and then in 8-12 weeks we would have articulated our aspirations and then we would set a fixed timeline," he added.

MindTree kicked off its billion dollar dreams in December 2007 with a major organisation restructuring. Ashok Scota, who was chairman and managing director, assumed the role of executive chairman.

Satish Godika assumed the new role of chief strategy officer. Subroto Bhagchi, earlier the chief operating officer became the "gardener" to assume a mentoring role. N. Krishnakumar, earlier the president and CEO of MindTree's IT Services business, became the chief executive officer and

managing director, overseeing both IT Services and R&D services businesses.

While the timeline to the join the club is yet to be finalised, the company has identified growth areas.

"One of our key focus areas is outsourced product development (OPD). It is a \$8 billion opportunity, growing at over 50% annually. With Aztecsoft, we are now in the entire product development value chain. Testing is another key area and we have over 2,000 people in the practice. Remote infrastructure management, where we entered two years back, is another fast growing segment. In 4-5 years, it could be a \$150 billion opportunity. Our aim is to be within the top two or three players in each of these segments in the next four-five years," Krishnakumar said.

MindTree has two revenue streams - R&D services and IT services in one-fourth and three-fourth ratio, respectively, and Krishnakumar doesn't see the balance altering.

The company focuses on select verticals like manufacturing, banking, financial services and insurance, travel and tourism in IT services, storage and servers, consumer appliances, communication systems and automotive & industrial systems in R&D services.

It is incubating a few high potential industries with plans to grow them as independent verticals over the next two years. "In IT services, we are incubating media and entertainment and retail and in R&D services, we are incubating medical electronics and aeronautics. The first set of customers has been acquired," he said.

To bring more predictability of revenues, Krishnakumar is trying to increase the share of annual revenues to 40-45% in two-three years from



Way ahead

MindTree is incubating high potential verticals like IT services and R&D services to make them independent over the next two years. To bring more predictability to revenues, the company is trying to increase the share of annual revenues to 40-45% in two-three years.

35-38% now. Hence contribution of projects revenue, which is difficult to predict, would fall.

To have an alternate growth geography, MindTree is investing in Europe, which currently accounts for a little under a fifth of its revenues. It has grown to a CAGR of 70% over the last three years.

On the near-term outlook, Krishnakumar said although there have been no cutbacks on IT spends, clients have become more cautious and are increasingly questioning each spend. In spite of sluggishness in the international market, MindTree is confident of meeting its dollar revenue growth guidance of 34-39% and net profit growth of 23-29% for FY09. After two quarters of double digit sequential growth, it expects third and fourth quarter sequential growth to be modest. Krishnakumar sees R&D services growth to be slower this year as clients cut back non-core spending. Hence a bulk of this year's expected growth would come from IT services.

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Aztecsoft buy to strengthen MindTree's testing capabilities

BISHU RANJAN MISHRA
Bangalore, 16 September

IT and R&D services provider MindTree, which derives close to 12 per cent of its revenues from testing practices, is ramping up capabilities in this space following its acquisition of Aztecsoft, a major player in this arena.

Together with software testing tools provider HP, the Bangalore-headquartered company has announced setting up a centre of excellence (CoE) which will help it in developing testing frameworks for various verticals and address the joint customers of both the companies.

The centre will have a team of 300-350 test engineers by the end of the current financial year, which will be gradually raised to about 1,000, according to Ananda Rao Ladi, vice-president and head of testing practice, MindTree.

HP will provide its software tools including HP Quality Centres, QTP and Load Runner, and will also provide training.

The CoE will benefit both MindTree and HP. While this will help MindTree in developing testing frameworks for different industry verticals and train resources on HP tools, HP will also benefit by selling more software licences to both the companies' joint customers worldwide," said Kamal Datta, country manager, HP Software.

HP is a leader in the automated software quality tools market globally with about 60

per cent market share, according to research firm IDC. Internally, MindTree uses HP's testing tools for more than 50 per cent of its testing projects. Following the acquisition of Aztecsoft, MindTree's Independent Testing Practice is the largest group within the company with over 2,000 members. The company's testing practices have been growing by more than 60 per cent annually for the last two years.

MindTree also has a testing academy which works as an R&D centre within the company for testing practices.

The market for software testing, according to different research firms, stands at \$13 billion, of which about \$6 billion is being outsourced to offshore locations including India. The market is expected to reach \$20 billion by 2011, of which the addressable market for Indian testing services providers would be close to \$10 million.

KRISHNAKUMAR NATARAJAN/MINDTREE

Aztecsoft buy will help in cross-selling services

BY DEEPAK RAJGOPAL & K. RAJRU

BANGALORE

In May, MindTree Ltd, a mid-size information technology (IT) services firm, acquired a majority stake in local rival Aztecsoft Ltd. The acquisition, the company's fourth in as many years, will help the Bangalore-headquartered IT services firm offer product development work for global customers such as Microsoft Corp. In an interview, MindTree's chief executive Krishnakumar Natarajan spoke on the company's plans.

Edited excerpts:

How has Aztecsoft's acquisition helped MindTree?

Normally, companies want to keep the core intellectual property (IP) themselves and because they want to have more features, functionalities and bring their products into the market faster, they will work with specialist companies who are in the product engineering business.

We clearly envision this business as fast growing, partly because of these clients (and) we were present in one part of the business—mainly R&D (research and development) services—with the capability to design hardware, design a chip, make a board. With Aztecsoft, we are in the enterprise product design space—in the whole value chain.

MINT INTERVIEW

The outsourced product development (OPD) market is promising, particularly for specialist companies. It also gives us the ability to cross-sell services—the same customers (of Aztecsoft) would look at IT services. Aztecsoft has around 89 customers that we can cross-sell services and all of them are target customers for MindTree.

Are you saying that with this integration you are changing the DNA of the company, from an IT services firm to an OPD company?

We get a foothold in the OPD segment—we become a much larger player in the independent testing market. In some way, we look at ourselves providing IT services, but in segments of markets we will be specialists, than being just generalists.

Have you already started cross-selling services?

We have already started working with three customers and 12 opportunities. The integration (with Aztecsoft) is less than 12 weeks old, and we are already addressing opportunities that were not being seen by either companies.

Will your profit margins improve because you are cross-selling services?

The margins will improve by three major elements—pricing power, expanding reach and the brand you will build. I

Even if rupee appreciates, it will not impact our bottom line, because 56% of the receivables is not hedged.



Betting big: Natarajan sees India as a high potential market and expects revenue from the home market to grow to 7-8% in two years.

measure utilization tightly, not on number of people billed at the end of every month, but on billed hours divided by annual available hours.

And, are you happy with the utilization rate?

At 66%, it is still not as good. We are a growing company and we are adding projects and customers. For new projects, it is 43-45% and for projects that have matured it is 74%. We still feel that we can improve utilization by 4 percentage points and it will take two-three quarters because some of the practices would have matured. Every percentage (point) of (improvement in) utilization contributes to half of percentage (point) on

gross margins. **Would the current fluctuations in the (Indian) currency have an impact on your profit margins?**

Obviously, it is challenging. What we have done is hedged only 44% of our receivables. Even if the rupee appreciates, it will not impact our bottom line, because 56% of the receivables is not hedged. We have not changed our guidance.

Your revenue from R&D services has come down (in the first quarter), is there a shift in MindTree's strategy?

It is very secular. Last quarter, one large customer in R&D services reduced spending, while in the IT services space, we had two (new) large customers. I grew 10-12% in first quarter over the previous quarter. This year, revenue from R&D services would be 25-26% (of total revenue). We do see a steady growth. But on the other hand, we are driving non-linear business, doing licensing deals for companies in the short-stage wireless segment. It is the ability to help other product vendors to bring (to market) products faster. It drives service revenue—licensing is just 1%—it leverages 20-25% of our service revenue.

Have you increased your focus on the domestic market?

I see the domestic market as a high potential market. We will start addressing the defence and government in a much bigger way. We are building jointly with CSIR (the government's Council for Scientific and Industrial Research)—IP jointly owned—video surveillance equipment, which can be used for defence, and also commercially exploited.

Now the revenue is less than 5% from India, do you see it growing to 7-8% in two years?

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MindTree in the Media

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