

MindTree

A Voice from the Flat World

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Chairman Mr. John Makinson, Ladies and Gentlemen,

It is a great privilege to be with you all this evening as a representative voice of the Flat World. That term was coined by Thomas Friedman last year to great effect when his book by that name appeared to inform us about how, among other things, the emergence of India as a technology super power has started changing our lives.



1957: Launch of Sputnik and the flattening of the world

The flattening of the world actually began exactly fifty years ago. In October 1957, Sputnik was launched and Marshall McLuhan coined the term "the global village". I was born the same year and in some sense, I have grown to become a global villager and this evening, I want to give you some of my perspectives ? but first, let me tell you about the event of my birth.

Sputnik went up four months after I was born. In the next twelve years, the race for winning the frontier of space between the US and the USSR became central to super-power rivalry, ending with the climax of Neil Armstrong's moon landing in 1969. I look back and realize that in the intervening twelve years, I was in school for only four, because for the first eight years, I was being raised in places in India where there were no schools. Even today, for all that we have to boast of our nuclear capability, our own space programs, our software prowess, close to half of the billion people we have, do not know how to read or write.

It is interesting to see how history shapes nations. The space war between the two super powers and the fear of a holocaust in the American mind that led to the creation of the Internet actually combined to accelerate the process of the flattening of the world. The satellite and the Internet were not something India alone was to be impacted by or to benefit from. But their advent was opportune for India more than for anyone else in the developing world, because India had an English speaking pool of middle-class that loved mathematics as a subject of study. The combination of mathematical aptitude and the ability to speak English was to create a formidable opportunity for an entire nation as the twelve-year old me was to grow up to become a twenty-four old one day in 1981.

That was the year I joined the Indian Information Technology industry. A few years before that, IBM had been asked to leave India and half a dozen Indian companies had sprung up to build

microprocessor based computers to sell in the protected domestic market. None of these had imagined in their wildest dreams that one day, the India brand was going to be defined by the software prowess these people would eventually help build. At that moment in history, it looked like a rag tag bunch in comparison to Big Blue. Between the years 1981 and 1990, I worked largely with hardware companies that were focused on building microprocessor based computers with UNIX, only one company? TCS was in the software exports business. The others slowly started looking at it, not because they were in love with the idea, but because they needed foreign exchange to import components and hardware and do other things. In the closed economy, if you did not have export earnings, you could not get the license to import anything. For many progressive Indian companies, a corporate goal used to be to become a "net foreign exchange earner", a term that symbolized freedom from state regulations. Today, the foreign exchange holding of the country at \$160 billion, does not require it as part of corporate India's vocabulary any more.

In August of 1990, I was working for Wipro and its R&D at that time was designing computers for the domestic market. With the opening up of Indian economy, in which the IBMs, Dells, the Compaqs and Digitals of the world became suddenly welcome, Wipro had two choices: either close down its R&D or see if it could be repositioned to be a global "lab-on-hire". With a charter to explore the latter, I came to the Silicon Valley to see if we could design hardware and software for companies like Intel and Sun and Tandem. It was an uphill task.

I distinctly recall a meeting I had with a gentleman named Tom Best in Sun's Menlo Park office. His boss, Walt Brown, had wanted to see me. Tom Best, opened his door for our very first meeting with the admission, "I do not even know where India is." To that, I silently parked my brief case, took a felt-pen and went about drawing the world map on his white board. The man stood in silence as I meticulously drew the map and when I was on Singapore, he exclaimed, "I know where that is". Drawing a reference from Singapore, I went on to tell him, "If you know where Singapore is, relative to that, this is where India is". Tom admitted that I drew the world map "rather well" and we went on to do a lot of business together.

Today, the CIO of a Fortune 500 company would get fired if he did not know where India is.

Through the 1990s, the Indian IT brand was created by companies like TCS, Wipro and Infosys and many others. They silently built a reputation for quality and scale but the west was not fully ready for them. The common refrain was, *we do not even let our crown jewels go across the street, and how could we do development half way around the world?*

So, everyone took tentative steps, doing lower value-add, lesser-risk work with the Indian vendors. This was to undergo a huge shift in the coming years. Companies like GE, led by Jack Welch came to India. Just the same way the West had once come to discover India for spices; GE was discovering India for its synaptic space. Jack Welch created a mandate for his organization, famously called the 70:70:70 principle. This principle was later modified by GE as the 90:90:90: principle. Of all applications that GE needed to be developed, operating managers had to get

90% of them outsourced. Of these 90%, they had to get 90% done out of India. Again, of the 90% done out of India, 90% had to be done on a fixed time, fixed price basis. He also saw India's major strength as its brain power and urged his people to lock-in that talent as a source of competitive strength.

Closely on the heels of the GE, came the Y2K scare and millions of lines of code were shipped to Indian companies for cleaning up. This created an enormous demand. Business boomed. Yet, a fear arose that armies of engineers would be jobless after the clean up was done. What the fearful did not realize was that on one hand, customers became comfortable with remote working beyond just the Y2K thing. On the Indian side, the Y2K phenomena gave the industry a tremendous self-confidence to take on deeper, domain intensive work and suddenly, India was everywhere. Except that, in all this, people did not quite think that Indians could go up the value chain to do the customer-facing kind of work, build products from ground up or take on anything that was mission critical.

That was about to change as the world moved beyond the Y2K phenomena. On one hand, attracted by the Indian cost advantage and the progressive opening up of the economy, an increasing number of overseas companies set up their own development centers in India. On the other hand, the recession in the US along with events like 9/11 permanently changed the way corporations looked at cost. The refrain about crown jewels was drowned in the clamor for efficiency. On top of that, new generation companies like MindTree came up to claim their own place ? we started the company in 1999 with the avowed purpose of not going up the value chain, but perching ourselves high up to build unusual new value. We had no choice; we were the 400th company out of India by that time and Y2K work allocation was already over.



Look closer, the model is wearing a 1.5 mm chip on her bindi designed at MindTree

So, building new applications became our mainstay in the start-up years. Over the next six years, we have, and India has, built some really spectacular applications, technologies and innovative processes that have helped India become mainstream in the global scheme of things. We helped build an on-line car reservation system for Avis that does a billion dollars worth of reservations a year ? that is one-fourth of all the business Avis did last year. We helped create an IT vision at Burger King in Florida that its IT department is living by today. We did similar work for the International Air Travel Authority in Geneva. We also built complex micro-yard planning systems

for Singapore Port where ships turn in so that they can gain time. This was not all; we were busy doing ahead of time R&D in areas like wireless and storage technology. By 2007, 60% of all headsets shipped in the world with Bluetooth technology, will carry MindTree's Intellectual Property (IP). Our embedded systems go into aircraft and automobiles for applications that span surveillance to collision avoidance.

In all this, the Indian industry has arrived. And it is not just MindTree. Last year, more than half of Symantec's global innovation took place in India in its Pune center. The base band controller chip in Motorola's latest razor thin phones got done at Freescale Technology's Indian chip design center in NOIDA. GE's Jack Welch Research Center is undertaking basic research with more than a thousand scientists in dozens of fields for its parent company out of its Whitefield, Bangalore location. It is resulting in a boom that even we had not anticipated when we started the industry.

Thomas Friedman went on to once argue that it was India's IT industry that even averted a nuclear stand-off between India and Pakistan with timely US intervention! There was a time when India did not matter to Washington, D.C.. Not anymore. If India is hurt, leading international companies will bleed.

In the last forty years, since TCS was born, India has created a million IT jobs.

The prediction is that in the next five years, it needs to create a million more to fulfill the burgeoning demand from the world market. While the world coined the term "Bangalored" to mean that your job has just gone to Bangalore, the city itself, unable to cope with huge demands on its infrastructure is today being Bangalored by other Indian cities. We have, for instance, gone to Chennai and now we are building our next campus in a place called Bhubaneswar with a population of just 1.5 million people. Today, Bangalore is no longer the only address in town. Third-tier cities are springing up to cater to the global demand for Indian talent.

And that conversation leads me to the demographic changes the world is experiencing. Peter Drucker made a prophetic statement in the beginning of the century when he said that the changing demographic profile of the world is one of the most impactful phenomena for us all, something that has not been fully understood. The facts come out stark in a revealing study by NASSCOM McKinsey. According to this study, the world is headed towards an unprecedented labor shortage by 2020, thanks to the downward trend of population in countries like the US, UK, Germany and even China. Going by this report that looks at school enrolment, retiree data and workforce requirement of the future, the US will be short by 17 million people, UK will need 2 million, Germany would need 1 million and even China would need additional hands to the tune of 10 million. From where will the hands and brains necessary for that work come?



India can change the high cost of healthcare for the West

- We can deliver an open heart surgery with 95% success rate in hospitals comparable to the best in the world for \$2500
- We read 5638 dailies, 18582 weeklies, 6881 fortnightlies, 14634 monthlies and all others included, 51960 publications
- As if that is not enough to put you to sleep already, we watch 104 TV channels at \$3 a month, of which 50% are in regional languages

The danger of telling you all this is that it makes me sound boastful. It is as though a giant is waking up and it is the divine duty of the world to applaud. India is awakening because the world is taking notice. For the first time in living history, the common man in the west is going to a movie theatre and laughing out loud at the antics of Mira Nair's marigold chewing event manager in the film *Monsoon Wedding* and Jhumpa Lahiri is coming to book signing at literary clubs at Rutgers University and it is okay to have a difficult name like Manoj Night Shyamalan and be accepted as a Hollywood film-maker. And the Bhangra beat is considered cool by teens who still do not know where India is.

I would be failing in my duty, as a voice from the Flat World, if I did not show you the darker side. There, as you may well know, all is not well.

Fifty years ago, most Indians were not delivered in a hospital. Neither was I. I was born at home, without electricity and running water in a place called Patnagarh, in the state of Orissa in India. When my mother delivered me, she was assisted by mid-wife named Dandor Ma, literally meaning Mother of Dando. In most parts of India, even today, women are referred to as someone's daughter, wife or mother even though they have a name. Dandor Ma was armed with some gauge, a bottle of disinfectant, a new razor blade and hot water? that is still pretty much the surgical aid many in the world have, and sometimes less, for bringing a new born to the world. Ladies and Gentlemen, despite the rapid progress India is making, there is an undeniable, unimaginable gap between the urban rich and the rural poor. It is a travesty of economic justice that one third of a billion people in India make do with under a \$1 a day. Their children are born the same way that I was, a good fifty years back.

Last year, I was taking a walk about an hour away from Bangalore on a vast tract of cattle graze. There I met a man who was carrying a smoking urn in one hand and in the other, he had neatly strung, a dozen dead rats. When I asked him what he intended to do with it, he told me that he would stuff them with spices and roast them for his meal. That day I realized that less than fifty miles from Bangalore, the word "mouse" has a different connotation.

We remain woefully behind in creating an acceptable level of infrastructure and continue to think of issues like roads, sanitation, water supply and public health with the same minimalist attitude that foreign rulers had for us for the thousands of years of domination on this land.

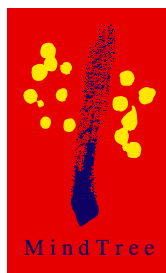
The foreign rulers have been replaced with our kinsmen who have very little sense of history and a far less desire to create a legacy in any worthwhile sense. There is an uncomfortable nexus between politics and business that raises corruption to a level that it is beginning to be accepted as a way of life.

For the first time in its own history, India has to deal with the enemy within. As history would tell us, for any nation, *that* is the longer, the more difficult struggle because it requires the coming together of great shared vision and self-less action by every citizen spanning over a complete generation. Sustainable change is inherently generational.

The hope that I live with is that India will get there. The reason it may, is because the world is flat. We are a democracy and most Indians are intelligent people. In a flat world, the chance of dialogue and discovery is significantly higher. Through the process of dialogue and discovery, my country men may find that inclusion, fairness and good governance and a 'contemplative democracy' ultimately make better business sense. And for our leaders, only in a flat world, there is lesser place to hide.

In 1990, when I first started traveling overseas, every time I got down at an international destination, I felt the uncomfortable gaze of the immigration officials who invariably took longer, looking at me and my passport when compared to the person before me. It was a time when, if Indian, you were assumed to be a taxi driver and potentially, an illegal immigrant. Today, even if you are a taxi driver and an illegal immigrant, the assumption is that, if Indian, you are a software engineer. I am proud that I have been a part of the industry that has shifted the paradigm.

Ladies and gentlemen, thank you for inviting me today and I wish you good luck and God speed in your quest for success in India and with India.



Subroto Bagchi is co-founder and chief operating officer at MindTree Ltd.
This address was delivered to Penguin's top management team visiting India, in Sept '06.
His first book "The High Performance Entrepreneur" is available in Penguin. His other
writings can be accessed at www.mindtree.com/subrotobagchi
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