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MOVING QUICKLY AND LIGHTLY

- Jemima Kiss

(Hindu Business Line, 20th June 2009)

It was Rupert Murdoch who summed up success in the digital age when he said: “Big will not beat small any more - it will be the fast beating the slow.” That might be inspiring for startups, but in the process-laden, corporate environment, how can big companies keep their edge by moving quickly and lightly? This has become something of an obsession for Google watchers, who have seen the college research project develop into a multi-billion-dollar phenomenon, stretching from mobile software and blogging to social networking and the ubiquitous search. How does a company with 20,000 staff manage to keep innovating?

Sergey Brin, Google’s co-founder, thinks size should help. “It’s important for people to realise that you should benefit from the scale - if you’re not benefiting then you’re doing something wrong, and might as well break up into lots of little things. Instead of having our employees in large buildings, we could have several thousand houses each with a garage - there’s nothing stopping us from doing that. But the fact is that as we scale, we should be able to take advantage of that. Look at how many colleagues can you talk about a specific issue with, and how can you take advantage of a piece of infrastructure that the company already has.”

Google’s infrastructure - and those enviable facilities - are much reported, from the lavish, free canteen and commuter shuttles to the infinity pool at the Mountain View headquarters. The Sydney office has equally fine trimmings, with lava lamps and great views, which may or may not have contributed to the birth of its most recent tech toy, the communications tool Wave, tapping several sweet spots in web development, Wave aggregates real-time Twitter-esque instant messaging with email, wiki-based collaboration features and social networking.

Wave of confidence

Brin doesn’t get his hands dirty with quite as many of Google’s

tech projects as he'd like; so he says he's "trying to take time to do more of that". But when Lars and Jens Rasmussen came to him with the idea for Wave, it was their track record that gave him confidence in the project. The pair joined Google with the acquisition of their mapping startup Where 2 Technologies in October 2004; that grew into the first incarnation of Google Maps.

"We have been gradually embracing the idea that once you're successful, we give you much more latitude," says Brin. "Somebody who has a success under their belt has really demonstrated accomplishment and in that case we will give them generally more liberty. When they came and proposed this idea they said, 'We want to do something new and revolutionary, but we're not even going to tell you what it is. And we want to go back to Australia, hire a bunch of people and just work on it.' That was a crazy proposal," Brin says, and not one many businesses would have supported. "But, having seen their success with Maps, I felt that it actually was pretty reasonable." It was two years ago that Brin agreed to support the project, and the full version of Wave will be released later this year.

Google was one firm rumoured to be looking at acquiring Twitter, and the two are known to be talking about a possible real-time search collaboration. But despite the real-time elements of Wave, the project was conceived before Twitter had achieved momentum. Brin says the team wasn't aware of Twitter at the beginning, but wanted to create something timeless. "The very first demo that they showed me had, for example, character-by-character typing, which actually made me nostalgic because the old Linux systems all did that with Talk."

Mainstream manifesto

As well as organisational structure and the track record of engineers, Brin talks about intuition around projects that might translate to something more mainstream. "That essentially takes taste, I would call it, and a certain kind of intuition. People may or may not have that kind of intuition - that's why for something like Wave the prior success on a mass consumer scale is what gave me confidence that these guys can do that again in another field."

With that $131bn market value, Google is in an unusually powerful financial and strategic position to give its engineers this kind of latitude. The downturn has barely dented Google's research and development budget, which was reduced to $641m (£392m) for the first quarter of this year from $673m in 2008. Around 36% of its staff work in R&D in total, and the entire 2008 R&D budget was a staggering $2.79bn.

Despite appearing to suffer mildly from the economic climate, Brin has previously said that tough times bring out the best of the Valley because when there's too much money around, "you get a lot of noise mixed in with the real innovation and entrepreneurship".

Companies can traditionally buy in innovative products, as happened with Where 2, or develop in-house. The most well-known Google initiative for encouraging innovation in-house is its "20% time" strategy, which has almost become an innovation cliché. The idea that 80% of an engineer's time is spent on the day job and 20% pursuing a personal project is a mathematician's solution to innovation, Brin says. Some staff secretly admit their 20% time is spent catching up with the day job, but the firm insists the strategy has led to Google News, Gmail and the mighty AdSense system, among other things.

New priorities

What could established media companies learn from Google's approach to innovation? Given the perfect storm of economic meltdown and once-in-a-generation collapse of their business model, innovation may well have slipped off the priority list for old media. Perhaps it is time to rephrase the challenge, says Brin. "Any conversation I have about innovation starts with the ultimate goal - in this case what the reader is trying to accomplish, and what would make that better. Somebody reading up on the news wants to be kept up to date, and quickly." News sites offer some useful content, but there's a lot of duplication. "I don't have a solution for you - I'm just saying that I think posing the problem correctly is perhaps more important than defining the solution. People want to have good, engaging, high-quality information about things going on right now in the world."

In-house, Google uses a project database and an ideas mailing list to manage new projects. While noting ideas on the mailing list is important, it is less significant than the project database, says Brin, which lists weekly updates on who is working on what, their goals, progress and links to documentation. That distinction has to be instilled in the company culture.

"It's important not to overstate the benefits of ideas," he says. "Quite frankly, I know it's kind of a romantic notion that you're just going to have this one brilliant idea and then everything is going to be great. But the fact is that coming up with an idea is the least important part of creating something great. It has to be the right idea and have good taste, but the execution and delivery are what's key."

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INTERNET - THE DANGEROUS

M.Rajendran
m.rajendran@abp.in
Business World, 13 April 2009

Attacks on the Internet and security measures:

The Internet has become as hazardous a place for work as it is so useful and indispensable for work. Just as public places are subject to many anti-social attacks like hold ups, pickpockets, abductions and so on, communicators and communication on the Internet are becoming victims of evil doers. Here are some facts and precautions.

Hacking was the most common form of cyber intrusion in Inia in February 2009

Website compromise & malware propagation	70%
Spam	1%
Scanning	3%
Malicious Code	21%
Pishing	4%
Others	1%

Over the Years....

The past two decades have seen many virtual attacks to breach security and steal confidential information

1986: THE CUCKOO'S EGG

Soviet-backed hacker in Germany tried to hack into the US's Lawrence Berkeley Labs to steal missiledefence secrets.

1988: MORRIS WORM

It was the first worm that gained significant media attention. It led to the first conviction under the 1986 Computer Fraud and Abuse Act in the US.

1998-99: MOONLIGHT MAZE

The US traces a series of computer break-ins at the Pentagon, Nasa and elsewhere to a computer in Russia. Moscow denies involvement.

1999: MELISSA

It shut down mail systems that got clogged with infected emails. The virus overflowed servers and caused unplanned problems.

2000: ILOVEYOU

Also known as Love Bug worm, it infected millions of computers worldwide within a few hours. Considered to be one of the most damaging worms ever

2006: SNEAKY WORD DOC

An accidental opening of an email by a US department employee secretly opened a backdoor in the computer system, allowing the theft of data.

2007: NETWARCOM

China is accused of sponsoring hundreds of suspicious hacking incidents against military and private-sector computer systems by officials at the US Naval Network Warfare Command.

2009

China-based hackers break into websites in over 103 countries, affecting over 1,295 websites worldwide.

HOW TO BE ON GUARD

Authentication And Online Trust Alliance recommends measures

that brands must adopt

Ensure all privacy policies are discoverable, transparent, and written to ensure consumer comprehension, accessible from every page of a site and email sent.

1. Contact users, inform them about any programme changes in the company's privacy policy.
2. Establish and publish procedures for data collection, transfer and retention, and commit to third-party or self-audits for compliance.
3. Support global efforts to increase consumer awareness and education as well as the adoption of fair information practices.
4. Support self-regulatory efforts to adopt standard data retention/use policies.
5. Set and publish standards of privacy, security, and data retention policies with clear accountability between first party sites and third party content providers and advertisers.
6. Create response plans for accidental disclosure of personal information and data breaches including notification to consumers and government agencies.
7. Commit to authenticating all outbound email with Domain Keys Identified Mail (DKIM) and/or Sender ID Framework (SIDF) to combat forged email and potential privacy exploits.
8. Transactional sites should adopt Extended Validation Secure Sockets Layer (EV SSL) Certificates for more security.
9. All consumer facing sites obtain privacy certification and seals from a third-party provider.

MANAGING THE RISK

These security assessment tools can provide protection against hacking attacks

Microsoft Security Assessment Tool (Windows)

The Microsoft Security Assessment Tool (MSAT) is a risk-assessment application designed to provide information and recommendations about best practices for security within an IT infrastructure.

Nessus (Linux,Windows)

The Nessus scanner is the world leader in active scanners, featuring high-speed discovery, configuration auditing, asset profiling, sensitive data discovery and vulnerability analysis of your security posture.

IBM Internet Scanner

Internet Scanner can identify more than 1,300 types of networked devices on your network, including desktops and servers. It then analyses the configurations, patch levels, operating systems and installed applications to find vulnerabilities that could be exploited by hackers.

Qualys Guard (Linux, windows)

FreeScan allows you to quickly and accurately scan your server for thousands of vulnerabilities that could be exploited by an attacker. If vulnerabilities exist on the IP address provided, FreeScan will find them and provide detailed information on each risk.

Websites dealing with security and privacy issues:

www.privacy.org; www.privacy.net; www.nasscom.in

www.all-nettools.com; www.spychecker.com; www.scanwith.com

www.codeode.com; www.privacyrights.org; www.onguardonline.gov

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THE CHINESE FLU

Kajal Basu

(Business world : 06-13 April 2009)

A computer virus that ostensibly originated in China has infected, over the past two years, a whole line of Indian embassies abroad and institutions in India, including the National Informatics Centre (NIC) of the department of information technology under the ministry of communications and information technology. The malware (malicious software) named gh0st RAT, which eventually infected 1,295 computers in 103 countries, first struck and compromised computers at the office of the Tibetan Government-in-Exile (TGIE) and the Office of His Holiness the Dalai Lama (OHHDL), both based in Dharamsala, Himachal Pradesh. The Ministry of External Affairs (MEA) is said to have begun a software sweep of its computers on grounds that they might have been infected by the malware rerouted from the OHHDL and the TGIE. There is regular communication between both these offices and the MEA, which handles highly sensitive Indo-Tibetan and TGIE-China issues. None of the Indian institutions knew that they had been infiltrated till the end of March.

The infection fanned out via email and executable Doc, JPEG and PDF files. A report, *Tracking GhostNet: Investigating a Cyber Espionage Network,* released three days ago on 29 March 2009 by Canada-based Information Warfare Monitor (IWM) after a 10-month research, says that the infected computers include those of diplomats, military attachés, secretaries to prime ministers and journalists. The maximum infections were reported from Taiwan, followed by the US, Vietnam and India.

A remote access tool designed to enslave infected computers, gh0st RAT, created a global map called GhostNet, of interrelated, compromised computers, of which about 30 per cent are considered topline diplomatic, political, economic and military targets. The GhostNet system directs infected computers to download the gh0st RAT Trojan that enables attackers to gain secret control, which means anytime document removal, logging of keystrokes, and activation of web cameras and audio inputs.

The gh0st RAT malware, developed by Chinese experts, is an open source Trojan available online. Using the Trojan, GhostNet managed to penetrate organisations central to China-TGIE negotiations, including the International Campaign for Tibet (ICT). Also infected were computers at Drewla, an online outreach project, set up in 2005, which uses Tibetan youth who know Chinese to communicate with mainland Chinese people and the global Tibetan diaspora.

The global attack started on 22 May 2007, and IWM stresses that it is continuing even after the agency ceased investigations on 12 March 2009. Among the hosts infected, the Indian embassies in Belgium, Serbia, Germany, Italy, Kuwait and Zimbabwe were hit by one infection each, while the one in the Us received seven. The Indian high commissions in Cyprus and the UK got one infection each; the NIC had 12 infections; the Software Technology Parks of India two; the OHHDL two; and the TGIE four.

Many of the targets are linked to Chinese foreign and defence policy in South Asia and South-east Asia. “Like radar sweeping around the southern border of China, there is an arc of infected nodes from India, Bhutan, Bangladesh and Vietnam, through Laos, Brunei, Philippines, Hong Kong and Taiwan. Many of the high-profile targets reflect some of China’s most vexing foreign and security policy issues, including Tibet and Taiwan,” the IWM report states.

Also infected were the foreign affairs ministries of Iran, Bangladesh, Latvia, Indonesia, Philippines, Brunei, Barbados and Bhutan; embassies of South Korea, Indonesia, Romania, Cyprus, Malta, Thailand, Taiwan, Portugal, Germany and Pakistan; the Asean (Association of Southeast Asian Nations) secretariat, Saarc (South Asian Association for Regional Cooperation), the Asian Development Bank; and an unclassified computer at NATO headquarters.

Authors of a technical report published in March by the University of Cambridge Computer Laboratory, *The snooping dragon: social-malware surveillance of the Tibetan movement*, Shishir Nagaraja and Ross Anderson, write that agents of the Chinese government “used social phishing to install rootkits on a number of machines and then

downloaded sensitive data".

"The web-hosting and email services used by the OHHDL are provided by a California company," the report says. "A look at the email server logs revealed a number of logins from a range of IP addresses that belonged to Chinese and Hong Kong ISPs, with which none of the OHHDL users were associated. Given that there are fewer than 50 email accounts, the possibility of error or accident seemed low, especially so as many of the suspicious source IP addresses belonged (according to APNIC, the Regional Internet Registry that allocates IP numbers in the Asia-Pacific region) to ISPs operating not just in the Chinese mainland, but in China's Xinjiang province, where police and intelligence units dealing with Tibetan campaigners are based."

The data collected from Dharamsala and Tibetan missions abroad unearthed four control servers and six command servers. Three of the four control servers are located in three different locations in China: Hainan (Hainan-TELECOM), Guangdong (Chinanet-GD) and Sichuan Chinanet-SC). The fourth control server is located at a web-hosting company in California. Five of the six command servers are located in mainland China (Hainan, Guangdong, Sichuan and Jiangsu [Chinanet-JS]) and one in Hong Kong (Cuhknet-HK). One of these control servers was the fulcrum of the well-documented phishing-malware blitz against Tibetan targets during the 2008 Beijing Olympics.

The IP addresses of the malware attackers were mostly traced back to Hainan Island, which is home to the Lingshui Signals Intelligence (SIGINT) Facility that has more than 1,000 intelligence analysts of the People's Liberation Army monitoring US naval activity in the region.

The gh0st RAT attack has put governments in a tizzy. As for others, "At the time of writing," the IWM reports states, "…organisations are almost certainly oblivious to the compromised situation in which they find themselves."

Secret Invasion
List of virus attacks in March 2009

Name	Type
Backdoor, Ghostnet	Trojan
Malware Defender 2009	Misleading Application
W32-Xanib-A	Virus
W32.SillyFDC.BBM	Worm
W32.Fidameg.A	Virus
Suspicious.Swizzor	Trojan,Virus,Worm
W32.SilyFDC.BBL	Worm
W32.SillyFDC.BBK	Worm
Bloodhound.PDF.9	Trojan,Virus,Worm
Linus.Psybot	Worm

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3G SERVICES- WHO IS RESPONSIBLE FOR DELAY

(Business World: 24-30 March 2009)

In his three-year tenure as the fourth chairman of the Telecom Regulatory Authority of India (Trai), ***Nripendra Misra*** *often seemed like a hapless regulator who was rarely being listened to. The 1967-batch IAS officer was constantly under the scanner for he presided over one of the most essential services to the increasingly telecom-hungry Indians. Apart from the brickbats for his inability to contain the telemarketing menace or manage the quality of service (QoS) of cellcos, Misra also got bouquets for introducing the conditional access system (CAS) and his unwavering stand on an early 3G rollout. Days before he lays down office on 22 March, Misra met with* BW*'s* ***M. Rajendran*** *for some straight-talking. Excerpts:*

Who should take the blame for India's inability to roll out 3G and broadband wireless? Shouldn't you?

It could have been resolved in 50 days. It got complicated as it got delayed. The recommendations were made on 8 September 2006 for 3G. For two years nothing happened. The first time we got an inkling of the government doing anything on 3G was in August-September 2008. So, I do not see how Trai can be blamed. The only blame that we would take is, we could not convince the government to announce the 3G rollout.

Did the large private operators block it? After all, it required investment that they were keener on making in the voice business.

In the first two years after we released the recommendations, the market was flush with funds. New operators might have delayed for paucity of funds. But I do not think the delay was due to any pressure from any quarter. The delay was due to inherent contradictions in the 3G policy. There would be legal bottlenecks unless a holistic policy decision with broadband wireless access is taken. I am hoping that this would be the top-most priority of the government after elections.

What about QoS? Hasn't Trai failed in its duty to regulate the operators?

There are structural and legal problems. Regulating 225 licencees all over the country, 60,000 cable operators, 6,000 MSOs, 400 broadcasting channels is not an easy task. We may be blamed for not succeeding in creating competition issues on QoS parameter; on tariff we cannot be since we managed to do that. We would require more power since Trai would not be able to function effectively without them. We need power to impose penalty, reconciliation and interconnection. All the three are important for Trai to manage and regulate QoS both in broadcasting and telecom.

You have claimed forbearance (to allow operators to fix rates, where regulator does not put a slab or ceiling on rates) has brought down call rates but the industry does not agree.

It has succeeded beyond limits. It is the competition that must determine the price. The success story is before us, average outgoing

tariff per minute call for GSM has come down from Rs 1.77 per minute in 2006 to 0.78 paise in 2008. In CDMA, it has come down from Rs 1.09 in 2006 to 0.61 paise in 2008. Roaming charges have come down from a range of Rs 2.89-Rs 3.09 in 2006 to Rs 1 per minute in 2009. STD call charges during 2006, which were in the range of Rs 3.09-Rs 3.99, are down to Rs 1.50 in 2009. If these results do not speak for themselves, only then should we question it.

In SMS, forbearance allows operators to loot consumers. Your warnings to operators have not made any difference yet.

I am still trying to persuade them to bring it down. Once the new incumbent comes and if the operators do not bring down the SMS rates in roaming, then they may have to sacrifice the privilege of forbearance that has been given to them as a matter of trust.

Do open house sessions yield any results for Trai? Operators manipulate sessions by creating a ruckus when it is against their interests.

It has to be seen as a democratic process. The success of the regulator is in not taking sides but in bringing them together. Open house gives us an opportunity to gauge the mood of the stakeholders. The results that come out of it is what I would call 'optimum compromise'. Open house sessions must continue, but the format should change — more interaction than monologues.

When would Trai start de-regulating and allow market forces free play? How far or near are we from that situation?

Trai must and will deregulate. But it should happen only after there is stability and consolidation in the market. It has yet not happened in India. For example, the three-year lock-in period was necessitated to ensure that the companies that come in are serious players. This is also the answer for the broadcasting sector on freeing up pricing policy of channels and CAS. Now there is demand from the industry for fixation of price, excluding the broadcasters. The demands are changing and the deregulation should happen. But in India — not before 2012-13, when we may be able to afford to look into it.

There are many Trai recommendations pending with the DoT and I&B Ministry. Should they be called achievements or file-pushing?

It is a cause of concern. Recommendations are no achievements unless they are implemented; I see them as unfinished tasks. For example, by not taking a decision on VoIP, we have lost out on technology and lower tariff that could not be passed on to the consumer.

When you took charge in 2006, you said, "I would need the cooperation of all stakeholders." Did you get it?

When you test and analyse this critically, what gets highlighted is the need for introspection by stakeholders. I did not see them get to the depth of sensitivity on issues that needed immediate attention, like roaming and SMS charges. Competition and market forces were just not happening and the regulator was forced to intervene.

Can Trai function without a bureaucrat as its chairman?

Anyone who is qualified should occupy this post. But then he should know that government undertakings work in a particular environment. He should be aware and manage undefined cross currents apart from what is seen and known. The pressures are many and the authority has to come up to those.

Fast Facts:

Telecom Regulatory Authority of India

Founded: 1995

Business: Regulating telecom and broadcasting market and players.

Monitoring tariff and quality of service

Headquarters: New Delhi

Employees: 183

Key pending cases: (in TDSAT against Trai)

cable tariff; interconnect charges; and access deficit charges

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THE AICTE AND THE GROWTH OF KNOWLEDGE TALENT

- Dr T.H.Chowdary

It has been in the making. There was need for the AICTE when it was created in the 1980s. But with hundreds of engineering, MBA & MCA colleges being started as business ventures by even smugglers and real estate sellers turned politicians, any permit-license-quota system is bound to generate corruption and destroy ethics and standards. AICTE approvals were facilitated by wheeler-dealers who abound in Delhi. Applications increased, the AICTE created regional offices. They increased the corruption costs. Site inspections degenerated to stay in star hotels and signing the "Inspection reports" prepared by the promoter-applicants for ever-increasing gratification payments.

2. Most of the colleges approved in recent times have only some buildings in different stages of construction; hardly any worthwhile faculty; they have an abundance of computers and some standard kits as laboratory equipments for the ECE department. There are no hostels; buses ferry students over distances of 40 to 50 km to and fro. There is absolutely no academic atmosphere in the "colleges". Students gaining entrance are examination-qualified; not knowledge qualified. Many have scored 95% to 98% marks trained to choose answers (a, b, c or d) in corporate tutorial shops, run on eh lines of poultry-farms (birds in cages, live machines converting feed into eggs).

3. Obviously the products of these"colleges" called XYZ Institutes of Engineering and Technology (difference not known) factory. Produce graduates labeled engineers. No wonder less than 10% are employable. The non-employability has generated another class of shops- Finishing Schools (F.Ss) where at unemployable but certificate-holding persons are instructed in that art of "getting seluted". Communication, presentation and behavioral skills are "imparted". These F.Ss have contacts with businesses. They mange to place some of the "finished", "ready-for-work" graduates in companies. There are of course costs of processing the result.

4. Andhra Pradesh has beaten all the States of India in regard to number of engineering colleges and admission capacity with 531 colleges (150 more are in the pipeline) and 171,000 seats; 150 more "colleges" (with about 40,000 more seats) are in the pipe-line! Just about a score have post-graduate courses. None have doctoral programs. Since post-graduates get a stipend, the unemployable join the PG classes. Since P.G is desirable for a lecturer, the colleges will have an "under-class" category of lecturers, adding to the specter of thousands of certificate engineers, under-instructed.

5. These thoughts are disturbing enough. What is more worrying is, if we don't produce knowledge i.e intellectual property, we would remain as intellectual labourers for the developed world - USA, EU and OECD countries. In the past India's laborers were taken to Malaysia, South and East Africa, Mauritius, West Indies, Fiji, Guyana, Suriname to work in sugar and rubber farms. Since 1970s, skilled labourers; carpenters, drivers, cooks, electricians, mechanics, masons, welders have been going to the Gulf countries. Because of telecoms and I.T, our educated professionals need not physically go to the West but work for them from India as IT & Software, BPO, KPO and call center workers. Work from India is preferred because of lower wages/ remuneration here than in the West. This advantage won't last long -we will have competition for this work form Indonesia, Philippines, China and not very later from Vietnam. So we must move up in the intellectual capability. We must produce doctorates, do original R&D and come up with new products, processes and inventions. It is in this regard that national awareness and effort are lacking. Just one observation from Swami Vivekananda to Jamshedji Tata that in addition to buying technology from the West, we should develop that technology in India spurred Jamshedji to set up the Indian Institute of Science in Bengaluru in 1909. From the House of Tata's came that Institute of Fundamental Research and Tata Institute of Sociology etc. The academicians from these great institutions set up the BARC, ISRO, ECIL, NRSA etc. If one House of Tatas could do so much, how much more the governments of India and the States could and ought to have done? After Independence we seem to have lost nationalism and

patriotism. We started with a better universities, industries and R&D base than Korea and China. But both of them are out doing us in R&D, industry and education. I just cite the area of telecoms. We set up the ITI in 1948, the Telecom Research Center and the Bharat Electronics in early 1950s. Korea picked up telecoms and electronics for development in the late 1970s and China did the same in 1980s. Alas! Our ITI is as good as dead; our TRC is dead; our C-DOT (set up to catchup with the West in mid 198s0) is a lame and tame lack-lustre affair with no product developed for Indian manufacture. China's ZTE and HUAWi ICT companies are dictating standards to the world; Korean companies are kings in consumer electronics. The reason for the rise of these two countries is assimilation of technology from the west with concurrent mission of developing I at home so those countries can sustain prosperity and power. We in India have failed to develop political leaders with vision, with faith in our ability to be a Jagatguru which we were once for centuries. Result: we, like the ITI and C-DOT, are buying technologies from China, Korea, Finland, France besides Germany and the USA. The department of Telecoms (DOT) has collected tens of thousands of crores of rupees from telecom companies by sale of licenses, revenue shares, spectrum charges and Universal Service Fund (part of which was meant for R&D). Not even 5% of these collections are used for R&D and capacity building for manufacture. Everywhere in the world, national governments invest heavily in R&D, a little directly (mostly through Defence departments) and much more through select privater companies and Universities.

6. Bill Gates gave us wise counsel while speaking at the NAASCOM organized seminar in Delhi in July 2009. He warned us that unless we develop products by investing in R&D and move up in the knowledge chain,our envious position as a peerless source of Software and IT enabled services will be eroded. IT is not enough if we have a few thousand engineering colleges and produce a few lac (7600,000 "engineers"). What counts is quality, intellectual ability, inventiveness and entrepreneurship. Engineering education in India is now of a very poor quality save in about four score colleges (out of nearly 2000) in the entire country. It must be saved from the AICTE

and political manipulators.

The Yash Pal Committee report must be taken seriously for immediate reforms.

NOTES & NEWS:

LETTER FROM Dr T. H. CHOWDARY TO THE EDITOR: 3G SPECTRUM AUCTION

The Finance Minister plans to raise Rs. 35,000 cr by auction of 3G spectrum by the DOT. The interim budget aimed at raising Rs. 20,000 cr . Since the revenue and fiscal deficits are higher than expected, part of those are to be made up by realizing the huge amount of Rs. 35,000 by auction of spectrum. The amount paid for the spectrum is cost for the companies and therefore it will be factored into the price for 3G services. Affordability by many and quick roll out of the greatly beneficial 3G services ought to be the aim of any people -oriented government . Unfortunately, in the greed to collect money for the populist, temporarily poverty- relieving schemes is making the government anti-people in the long run.

2. Like Bourbons of yore the government seems to forget nothing and learn nothing. In pursuit of the National Telecom Policy -1994, 2G licenses were put to tender. Huge amounts were offered and licenced companies were about to collapse. They were bailed out by the NTP of 1999 which migrated them from huge upfront licence fee payments to revenue sharing. In the European Union, 3G licenses were auctioned in the Y 2001. $ 100 bln went into government coffers. The telcos found that no banker, no investor was willing to fund the capital required for the 3G services. The roll- out was delayed and government had to bail out the senseless companies by allowing sharing of many network elements by rivals. The government of Hong Kong took a lesson from the EU fiasco and very wisely made revenue- sharing the criterion for spectrum allocation and service provision. That is why HongKong has one of the highest broadband and 3G services penetration in the world.

3. Populist welfare which is only a temporary relief to the poor and a vote -catcher will destroy our long term interests. The monies raised from telecom services (Revenue Share, spectrum fees, Universal Service Fund, service tax, ...) are not utilized for promotion of R&D and building capacity for manufacture of IT & telecom equipments in this country. The C-DOT is under -funded and has nothing to its credit these days. ITI is for the second time to be bailed out by infusing Rs. 2,800 cr of public money to bring it out of its sickness - not a total cure. Government would do well for the nation only if a) instead of upfront huge spectrum fees gained through auctions, spectrum is given on a Revenue Share basis, (who quotes the highest share to be given the license and (b) if amounts so realised are used for development of telecoms & IT by putting that amount in a special account to create Intellectual Property and equipment production capacity within the country.

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Enough money for feed and breed programs, little for IP creation (R&D)

A table shows how the UPA government is spending its tax monies for subsidies – within 5 years it increased the subsidy by more than 15 times. The prescription for elimination of corruption namely, government funding of elections has degenerated into government (ruling party) spending money for buying the votes.

Government is paying over Rs. 2,25,000 cr by way of interest on its borrowings this is way above our first biggest item of spending namely defense with Rs.1,80,000 cr.

Trends in deficit of Central government

Year	Fiscal Deficit (% to GDOP)	Revenue deficit (% to GDP)	Gross tax Revenues (Rs. cr)	Fiscal Deficit (Rs. cr)	Revenue Deficit (Rs.cr)	Total subsidy-food, fertilizer and fuel (Rs. cr)
2004-05	4.0	2.5	3,06,021	1,25,202	78,338	15,662
2005-06	4.1	2.6	3,66,151	1,46,435	92,299	40,453
2006-07	3.5	1.9	4,67,848	1,42,573	80,222	22,452
2007-08	2.7	1.1	5,931,147	1,26,912	52,569	62,047
2008-09 (RE)	6.0	4.4	6,27,949	3,26,515	2,41,273	2,18,294*
* includes special securities of Rs. 95,942 crore						

* * *

LETTER FROM Dr T.H.CHOWDARY

TO COO, TATA COMMUNICATIONS :

Forwarded herewith is the tale of woe and disappointment for a person seeking Tata Indicom's WiMax broadband connection. Can this be please looked into?

2. I am sorry to have to state that the response of almost every private telephone company (P-telco) is uniformly unsatisfactory. For eg: in this case, **how come that the inquiry is cancelled?** And if it is cancelled, should not the prospective customer be informed by the company itself?

3. Is there no waiting list? One can understand that there may be non-feasible areas/buildings; that is, where a company cannot straightaway provide service but for such areas, is there no waiting list which will enable the company to plan for the extension of service? Should not a company be able to advise an applicant as to why a connection can not be given and when it could be given? In the DOT which I served for nearly four decades, we did have what were called **non-feasible** areas where, although we have the exchange capacity, but in the particular geography there was no cable capacity. Over those non-feasible areas, we had a special watch and we advised the applicants what we were doing and when he would likely get the connection.

4. I am not a little surprised that some body from your customer service does not contact an applicant at his own initiative and explain to the customer as to how the matter stands. This is good public relations I expected that companies, especially like the Tatas would have very good customer care. I have moved the TRAI and the DOT the licensor, **to prevail upon the P-telos to hold Telephone Adalats** which the BSNL does. Should not P-telcos do better than government companies as regards customer care ? These expectations are the reason for de-monopolisation and privatization of telecoms.

5. I guess that you are aware of how much of my life I have devoted to end the government monopoly over telecoms and what risks I have faced as a government servant while doing this. I am perplexed and I am sad that the **p-telcos are much less caring to the customers than a government company**. If service provided by DOT/ BSNL is bad, the customer has the right to appeal to a series of ascending order of officers and also raise the issue in the Parliament . In the case of the P-telcos, there does not seem to be any remedy if they default on service. This is very bad. This is particularly bad if a company bears the name of Tata. Should we not expect that senior officers of the p-telcos enhance the image of their company and at the same time feel professional pride by distinguishing themselves as people-caring executives?.

Case study:

I wanted to find out if you can help us in getting Tata Indicom WiMax Broadband connection in the house where we will move in on July 11th.

I have tried at my end and exhausted all possibilities with Tata Indicom customer service.

Here is the background so far

- we will be shifting to the following address next Saturday, July 11th

18 Aparna Shangri-la
Gachibowli, Sheri Lingampally
R. R. District, Hyderabad - 500019

- I had talked to a couple of residents of Aparna Shangri-la to verify that Tata WiMax was available in the colony before I decided to sign the lease to move in. They were happy with the service (there is no other provider, including BSNL, that is currently available)

- On June 28th, I had called by Tata Indicom WiMaX customer service to request a feasibility study of WiMax at my address and they said they will get back in 3 days time. Inquiry Number 1851476 was provided to me to follow up

- I called on July 1st and was told that WiMax service is available for my household. I also went to their web site and verified using the inquiry number provided. I was told that someone from Tata Indicom will call me up to schedule an installation

- I went into their web site on July 3rd and wanted to re-verify based on the inquiry number provided (since no one from Tata had called me up). To my surprise, I found that the inquiry number had been cancelled

- I called up Tata Indicom WiMax customer service on both July 3 and July 4 and talked to floor supervisors but they did not know the reason why the inquiry was cancelled.

- I got a reply from their customer service via email on July 4th with the following:

"We would like to inform that your area is not feasible right now because of the number of connections in your area. To provide the new connections in your area we need to set up additional equipment due to which we are unable to provide the connection right now. As soon as your area is feasible we will definitely consider your connection on high priority basis."

- I talked to some new residents of this colony yesterday and found that the same service was provided to house numbers 24 and 25 last week. House number 15 (opposite our house no 18) will be

getting the service next week

- I am not sure why I am not getting this service while others are. I have asked Tata Indicom when they can install the new equipment but did not get any response

- since I am shifting in about a week's time, this is an urgent request and I wanted to see if you can help out

- All the telecom infrastructure at Microsoft where I work is managed by Tata Indicom. Internet connectivity at home is extremely critical due to all the late night meetings I have to do with Microsoft counterparts in the US.

* * *

ICNIRP REPORTS NO EVIDENCE OF HEALTH HAZARDS FROM MOBILE PHONES

As you are aware, Department of Telecommunication, TEC, vide its order dated 23rd July 2008,

has approved the adoption of ICNIRP (International Commission on Non-Ionizing Radiation Protection Board) guidelines for the telecom sector in India. These guidelines lay down the limits of maximum exposure that can be permitted from Mobile Phones and Base stations.

Recently, ICNIRP has published two review papers, one addressing epidemiological evidence related to mobile phones and one reviewing evidence for the full radio-frequency (RF) spectrum.

The first paper, authorized by the ICNIRP Standing Committee on Epidemiology concludes as follows:

'...Overall the studies published to date do not demonstrate an increased risk within approximately

10 years of use for any tumor of the brain or any other head tumor. The available data do not suggest a causal association between mobile phone use and fast-growing tumors such as malignant glioma in adults (at least for tumors with short induction periods)...For slow-growing tumors...the absence of association reported thus far is less conclusive because the observation period has been too short.'

The second report on **RF review** prepared as an input to the WHO EMF project concludes as below:

ÀÛ¾Ü *'...the plausibility of various non-thermal mechanisms that have been proposed is very low.*'

ÀÛ¾Ü *'...recent in-vitro and animal genotoxicity and carcinogenicity studies are rather consistent overall and indicate that such effects are unlikely at SAR levels up to 4 W kg-1.'*

ÀÛ¾Ü subjective symptoms '*...are not causally related to EMF exposure.*'

ÀÛ¾Ü *A wide range of subjective symptoms including headaches and migraine, fatigue, and skin itches have been attributed to various RF sources both at home and at work.* ***However, the evidence from doubleblind provocation studies suggests that the reported symptoms are not causally related to EMF exposure*.**

ÀÛ¾Ü *'The experimental data do not suggest so far that children are more susceptible than adults to RF radiation, but few relevant studies have been conducted.*'

In India, there are many misconceptions and apprehensions with regard to the radiations from the Mobile Phones & Base Stations. However, it has been repeatedly brought out by ICNIRP review papers and WHO fact sheets that RF radiations from Mobile Phones and Cellular Towers have no adverse effect on human body.

Source: Cellular Operators Association of India 1 July 21, 2009

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BOOKS By Dr. T.H.CHOWDARY

* **THE TALES THE TELEPHONES TELL**
  (Telephone Cheppina Kathalu in Telegu-First persons narration of Telecom persons while in duty) (1981)
* **FROM AMERICA TO ANDHRA**
  (Plays with telegraph & telephone services as themes) (Telugu) (1982)
* **WE THE TELEPHONE MEN IN YOUR SERVICE**
  (Delineation of the duties, functions and work of DoT's employees) (1982)
* **RIGHT NUMBER : CHEAP SERVICE, TELEPHONES UNLIMITED**
  (Play on how telephone services are administered by techno-bureaucrats and ministers) (1983)
* **TELEPHONING RURAL AREAS OF ANDHRA PRADESH** *(1987)*
* **ARE YOU LISTENING?**
  (The story of his struggles in the DoT to deliver service and not merely administer rules) (1990) Rs.60/-
* **ISSUES IN TELECOM DE-MONOPOLISATION IN INDIA** *(1999) Rs.100/-*
* **INFORMATION AND COMMUNICATION TECHNOLOGIES INTO THE NEW MILLENNIUM (2000)** *Rs.10/-*
* **THE DYNASTY AND CORRUPTION (1999)** *Rs.5/-*
* **P-TELCOS IN INDIA : WHY DID INDIA GET THEM SO WRONG?** *(2000) Rs.350/-*
* **INDIA UNDER STRAIN** *(2002) Rs.100/-*
* **INDIA! SPEAKUP!** *(2003) Rs.125/-*
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* **INDIA EXPLORATIONS (2004)** *Rs.150/-*
* **IN TRUE CONSCIENCE (2006)** *Rs.150/-*
* **ALOCHINCHANDI (Telugu) (2007); Second Print, 2008.**
* **MELUKOLUPU (REVEILLE) (Telugu) (2007)**
* **YEDHCHHASI TATHAKURU (Telugu) (2008) Rs.100/-**

Journals (besides this) being Edited

* Bharatiya Pragna (since 1996)
* "Secularism" Combat (since 2003)

Editor:
Dr.T.H. Chowdary

Edit Team:
G. V. Gopichandran
G. Padma Reddi
N. Lakshmana Murthy

Secretary:
A. Lakshmi Sujatha

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No.8, P&T Colony, Karkhana,
(Secunderabad) Hyderabad-500 009. A.P. India.
Tel: +91 (40) 6667-1191 (O) & 2784-3121(R)
Fax: +91 (40) 6667-1111
E-Mail: hanuman.chowdary@tcs.com
Internet: www.drthchowdary.net
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Tel: +91 9246507989