ASIA-PACIFIC
BUSINESS & TECHNOLOGY REPORT
July 2009 / Vol. 1, No. 2
₩8,000 | www.biztechreport.com

United We Stand

CELEBRATING ASEAN-KOREA PARTNERSHIP (1989-2009) - **JEJU ISLAND**

Women Power in India

Dealing Asia its Fair Share of IP Addresses with IPV6

Training Your Brain

Nikon

At the heart of the image

Come to Reality

The Real FX

D700 Nikon's Original FX-Format DSLR

- Two Live View modes enable shooting while confirming subjects in the LCD monitor
- Continuous shooting speed up to 8 frames per second • Image sensor cleaning function
- Incorporates Nikon's original EXPEED digital image processing concept
- Superior picture quality throughout a wide ISO sensitivity range of ISO 200 to 6400

For customer service please call 080-800-6600 for assistance. Nikon Imaging Korea Co., Ltd. (nikon-image.co.kr / nikon.com)

Medical Capital of Korea
MEDI·CITY DAEGU

Daegu Medical Tourism

Medical Tour

We invite you to "The Medi-city Daegu"

Medi-city Daegu, famous for the advanced technology in hair transplant, plastic surgery and dental implant, and medicine market of 350 year-old rich history, invites you to the world of best medical service and great hospitality with reasonable price.

Privileges for foreigners

- The prior reservation system for foreigners
- 'One-stop service' from immigration to departure
- Check up result will be translated into your language within 24hours
- We have medical teams who can speak in English, Chinese and Japanese

For more details or reservation, please visit our website at www.meditour.go.kr.

The best place for 'High-tech Medical Complex'

Daegu · Gyeongbuk !

http://meditour.go.kr

Daegu Metropolitan City, Republic of Korea

hus+hu

Medical + Multiplex

The Hus'hu health clinic offers a wide range of services in dentistry, ophthalmology, and dermatology with high-end medical services. We focus to provide modern, quality health care to expatriate community, international travelers and local people. It has three branches and is located in three different areas (Apgujeong, Gangnam, and Bundang).

Services

Dental clinic

INVISALIGN/IMPLANT/VENEER/
ALL CERAMIC CROWN/
TOOTH WHITENING/TMJ/
GENERAL DENTISTRY

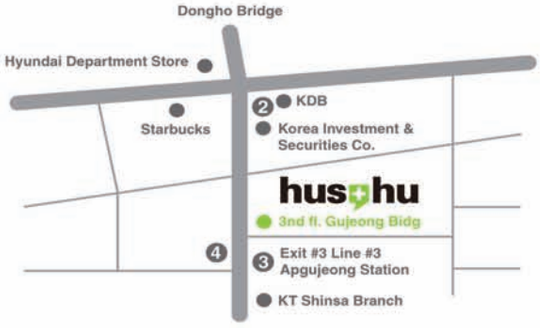
Eye Clinic

EYE EXAM/LASIK/LASEK/CATARACT/
LENS CLINIC/PRESBYOPIA SURGERY/
ICL/ DRY EYE SYNDROM/GLAUCOMA

Skin Clinic

ANTI-AGING/DERMABRAISON/BOTOX/
FILLER/ACNE/LIPODISSOLVE/
MEDICAL SKINCARE

Address 3rd Fl., Gujeong Bldg.,610-5,
Sinsa-dong, Kangnam-gu, Seoul



Branches of hus'hu

hus+hu Skin Clinic Gangnam

Service ANTI -AGING,BOTOX,FILLER,IPL,LIPODISSOLVE, SCALP CARE, MEDICAL SKINCARE

Getting There Exit 6 Line 2, Gangnam Stn., 8th Fl. Daejun Bldg (1st Fl ,IBK Bank)

hus+hu Dental Clinic Bundang (Gyunggi)

Service IMPLANT/VENEER/ALL CERAMIC CROWN/ TOOTH WHITENING/TMJ/GENERAL DENTISTRY

Getting There Exit 3, Line Bundang, Sunae Stn. 2nd Fl., Humax Village

Homepage www.hus-hu.com Tel. 1588-7464(English) 1588-9467(Japanese)

Contents

July 2009 / Vol. 1, No. 2 | **www.biztechreport.com**

Publisher: Groove Korea

Chief Consultant:
Dr. Lakhvinder Singh
Indo-Korean Business and Policy Forum

Chief Policy Advisor:
NK Goyal
President CMAI
www.cmai.asia

To contact Asia Pacific Business and Technology Report for advertising, submissions, subscriptions or general comments please email to **contact@biztechreport.com**

Issue date: July 15, 2009

United We Stand: Korea & ASEAN

BY ADAM WALSH

It has been 20 years since the establishment of dialogue between the Republic of Korea and the Association of Southeast Asian Nations. Today, there is a lot more going on between the two than mere conversation. They have grown to understand how working together can be more than mutually beneficial on a number of levels. In order to further their prosperity, President Lee Myung-bak, leaders of ASEAN's 10 member nations and 700 businesspeople all gathered on Jeju Island on June 1 and 2 for the ASEAN-Korea Commemorative Summit, which ran in tandem with the ASEAN-Korea CEO Summit. Over the two-day period, discussions were held and plans were made concerning the "**New Asia Initiative," while the theme for the summit was "Partnership for Real, Friendship for Good."**

In 1967, ASEAN was formed with five members: Indonesia, Malaysia, the Philippines, Singapore and Thailand. In 1984, Brunei Darussalam joined the group, while 1995 saw Vietnam added and 1997 was the year when both Laos and Myanmar were admitted. The last country to be granted membership to the group was Cambodia, which was added in 1999. The group's objectives are to enable and enhance economic growth, develop cultural understanding and accelerate social progress. The member nations also strive to achieve regional tranquility while following the guidelines of the United Nations. ASEAN's three main pillars are the security community, the economic community and the socio-cultural community. A detailed list of the group's core values and principles is listed under the Treaty of Amity and Cooperation in Southeast Asia. In addition to discussing some of what is mentioned above, the TAC also lists member dispute resolution and the policy of non-interference of member nations between each other. The 2006 statistics on the group number its population at roughly 560 million, its area at 4.5 million square kilometers and a Gross Domestic Product of $1.10 trillion.

As ASEAN continues to grow and become more organized, it is no wonder that South Korea has sought to deepen its connections with the group since the commencement of bilateral discussions in 1989. Also, given Korea's need to do business with both production- and consumption-based

As ASEAN continues to grow and become more organized, it is no wonder that South Korea has sought to deepen its connections with the group since the commencement of bilateral discussions in 1989. Also, given Korea's need to do business with both production- and consumption-based economies, tighter links with Korea has made perfect sense for ASEAN over the years as its economies have changed from the former to the latter.

economies, tighter links with Korea has made perfect sense for ASEAN over the years as its economies have changed from the former to the latter. A big step for ASEAN and its business relationship with Northeast Asian countries came in 1999, with the ASEAN+3 (South Korea, Japan and China) meeting where the nations agreed to move toward a common market. Seeing the disadvantages the economies were starting to face from such things as the North American Free Trade Agreement and the ever-expanding European Union, ASEAN saw it as necessary to do its utmost to lessen the disadvantage. The turn of the millennium saw the commencement of the Chiang Mai Initiative, which involved regional currency swapping for support and aid. Trade and security accords were signed with the +3 nations in 2003 and work was started on a free trade area in 2005. Two years ago, a bilateral trade agreement on goods exports was signed between Korea and ASEAN, and in that time trade increased by 34 percent. The increases have made ASEAN Korea's third-largest trading partner and it aspires to climb ahead of the European Union for the number two position.

The Jeju summit was started on a cultural note with the ASEAN-Korea Traditional Orchestra performing for the first time. Musically, the orchestra is as diverse as the nations of the summit, including traditional instruments such as Indonesia's bamboo "dumdum," the Myanmar's harp "saung" and Brunei's "serunai," to name just a few. Given the contrasting sounds of instruments which are rarely, if ever, heard performing in one orchestra, the orchestra seems much like the rest of the summit; perhaps odd looking in the beginning, but able to make some beautiful music if given the proper direction. Orchestra co-chairman Park Bum-ho stated that the concert "is about becoming united through sound, through music." Cultural exchanges are also set to continue for the foreseeable future given that an Asian Culture Complex is being constructed in Gwangju with the intention of supporting and facilitating cultural exchanges with ASEAN nations. The complex is scheduled to be completed by 2012. In addition to the complex, Korea is also pledging $5 million of annual funding for cultural exchanges between groups. As a bonus to the pledge, Korea is also doubling its government scholarships for students from ASEAN countries.

After the cultural opening to the summit, discussions and planning centered on the "New Asia Initiative" began. Lee Myung-bak was quoted saying, "A global crisis needs countermeasures," and, "A joint effort between Korea and ASEAN, nations full of potential, is vital." Thai Prime Minister Abhisit Vejjajiva added, "Regional cooperation and integration are no longer luxuries, but are necessities." Add those opinions with President Lee's former life as a Hyundai CEO where he spent years working on construction projects throughout Southeast Asia. (In fact, the Pattani-Narathiwat Highway in Thailand was Korea's first overseas construction project and was completed with his help.) It is no wonder that both groups are so keen to forge ahead with the previously announced plans.

The plan itself involves Korea spending more money on aiding in the development of ASEAN members, while also sharing Korean know-how when it comes to construction and development technology. The current plan has Korea tripling its developmental assistance by 2015. Infrastructure aid will be combined with programs to battle the problem of poverty throughout Southeast Asia and narrow the income gap from country to country, in order to ensure that all ASEAN members benefit from the initiative. There will also be extra donations made to the "Initiative for ASEAN integration."

In terms of trade and business development, the third and final part of the Korea and ASEAN free trade agreement was signed at the end of the summit. As mentioned above, the road for this agreement started in 2005 and finally saw its completion on Jeju Island. It is believed that the FTA will protect investors in a way that the ASEAN comprehensive Investment Agreement could not. In a joint statement on the signing the leaders said, "We noted with satisfaction the positive impact of the implementation of the Agreement on Trade and Goods under the Framework Agreement on Comprehensive Economic Cooperation among the Governments of the Member Countries of the Association of Southeast Asian Nations and the Republic of Korea." The statement went on to say, "In this regard, we welcomed the entry into force of the Agreement on Trade in Services on May 1, 2009, and the signing of the Investment Agreement by our economic ministers on June 2, 2009, which marks the completion of the ASEAN-ROK FTA." Expected to take effect within a year, the deal is forecasted to increase trade to $150 billion by the year 2015.

A large part of the summit's time was also spent discussing "green growth." It is no secret that the Korean government has spent very large sums of money investing in eco-friendly projects under the title of "The Green New Deal" within its own borders. The new plan hopes to create job growth through clean energy initiatives, restoring the nation's four main rivers and creating bike paths. President Lee, while Mayor of Seoul, was given the title of "Hero of the Environment" by Time Magazine for his environmental policies within Seoul. Not one to forget his past accolades, Lee pushed ahead his environmental visions at the conference by saying, "Climate change is a daunting challenge for the world. At the same time, it provides us with an historic opportunity to develop a partnership between Korea and ASEAN." Being a little more specific he added, "Through joint projects in reforestation and development of clean energy sources and carbon reduction technologies, we can become the world's pioneering leaders in those areas." Also at the summit, Korea proposed the "East Asia Climate Partnership Fund," which will see the Korean government provide $100 million between now and 2012 to ASEAN countries so they can reduce greenhouse emissions and do their part in stopping the ever real and growing threat of climate change.

As part of the overall joint statement on the purpose and intended goals of the summit, the need to boost security was also included. Expanding on comments towards North Korea made in Hanoi, the group stated that the North's decisions to walk away from the six-party talks, continue to develop its nuclear program and to provoke its neighbors through missile tests constituted "clear violations of the six-party agreements and the relevant United Nations Security Council resolutions and decisions." They added, "The denuclearization of the Korean peninsula through the resolution of the North Korean nuclear issue in a peaceful manner is essential in maintaining peace and stability in the Asia-Pacific region." The leaders went on to encourage the resumption of six-party talks. Other security issues on the agenda included terrorism, cyber crime, arms smuggling and human trafficking.

Having concluded a successful summit with Korea's ASEAN partners, the next logical step seems to be the signing of a free trade agreement with India. The India-Korea Comprehensive Economic Partnership Agreement (CEPA), which originally started negotiations in 2006, is expected to bear more fruit in the near future. The negotiations have reportedly gone smoothly and an agreement would obviously boost bilateral trade of goods, services and investments. Last month, South Korean Foreign Minister Yu Myung-hwan visited India for talks on CEPA and closer ties between both countries. Some speculate that an announcement on a deal could be made within the coming months. One Indian official was quoted as saying that,"Representatives from India and South Korea will attend the forthcoming ASEAN summit in Thailand and hence, both deals could be signed there." He added, "Such high profile summits are favored for announcing or inking deals," with regard to potential FTA agreements with both Korea and ASEAN. If not Thailand, some are also speculating that a deal could be signed on the sidelines of the ASEAN summit scheduled for October. Consideration and emphasis has also been placed on the establishment of a Korean industrial complex within India. Given that the world's Real GDP is expected to shrink by 3 percent in 2009, an additional free trade agreement with India could provide a much-needed boost to Korea's economy, while also aiding India's. It must not be omitted that stronger relations with an emerging superpower and the world's largest democracy could also help Korea on the international stage when dealing with nations such as China and Japan, both of which Korea has had problems with before.

Korea's old slogan of "Dynamic Korea" is still apparent in its actions vis-à-vis trade and relations with its neighbors. It is not only making the most out of current relationships that have been nurtured over the past couple of decades, it is also looking ahead and emerging as more of a leader amongst Asian nations. Korea's willingness to help developing countries with a lesser amount of prosperity and forge cultural bonds for stronger ties and mutual understanding, while also encouraging eco-friendly initiatives, should enhance its reputation while also stimulating its economy. For Korea, links with ASEAN are now stronger than ever and India seems to be on the horizon, with the next step being anyone's guess. All that is certain is that it is moving in the right direction.

Peninsula on the Brink

BY DONALD KIRK

So far it's only a war of words, but what a war. The vitriol spewed out on all sides in the confrontation of forces on the Korean peninsula is getting more poisonous by the hour. The exchange of threats and innuendoes escalated to a new level in the summit on June 16 at which U.S. President Barack Obama received South Korea's President Lee Myung-bak in the White House. If words were launched as missiles rather than missives, to judge by the results of the summit and the North Korean response, the United States and North Korea would be firing salvo after salvo in a widening war in which much of the North would be in ruins and parts of the U.S. in flames.

As it is, the war of words they're waging gets more intense by the day with the dreaded word "nuclear" coming up with alarming frequency. It was one thing for North Korea to declare its need for nuclear weapons to "bolster defense" against the U.S. and to say it was producing ever more plutonium for atomic bombs and reveal its nascent program for enriching uranium for still more bombs. It was quite another, however, for President Obama, darling of the American liberals, to sign on to a joint statement with South Korea's conservative President Lee, pledging the commitment of a continued "U.S. nuclear umbrella."

That's the verbal equivalent of waving a red flag in front of a bull, bandying about a term that's going to provoke a torrent of snarling invective from North Korea on a scale far more venomous than the North's response to the latest United Nations Security Council sanctions for detonating a nuclear device underground on May 25. It's a phrase that U.S. officials may spout out such big talk in briefings, but they will avoid writing it into formal statements because it connotes such an obvious threat. If you're going to talk about a "nuclear umbrella," after all, does that mean you're poised to drop one of them without much prior notice?

The phrase was sneaked in, almost deliberately buried, in a declaration issued in the names of both Obama and Lee under the flowery title of "joint vision for the alliance." After a great deal of verbiage that seemed to be the presidential equivalent of a love-in, after promising to maintain "a robust defense posture, backed by allied capabilities," the statement got to the real point. "The continuing commitment of extended deterrence, including the U.S. nuclear umbrella," it said, "reinforces this assurance." Those were the words the South Koreans wanted to hear. It was one thing for the United States to promise to defend South Korea, as it has since preserving the South in the Korean War, and it was fine for American commanders to talk about a nuclear umbrella over the region, but South Korean leaders wanted it in writing.

Naturally, Pyongyang has taken up the challenge. Perhaps the editorialists there already had their commentary ready for release the moment they saw the text of the statement from Washington. One North Korean newspaper promised to retaliate "one thousand times" for any assault on its territory – or its shipping. Just how or when or whether the North would retaliate was far from clear, but the motivation was obvious. Dear Leader Kim Jong-il seems compelled to show off his machismo while recovering, if indeed he really is recovering, from a stroke suffered nearly a year ago. He wants to show his restive generals he remains the boss while putting his youngest son, Kim Jong-un, still in his 20s, on a fast track to succeed him when he departs this world.

Kim Jong-il also counts on another audience – that is, the South Korean activists who so vociferously opposed President Lee during the demonstrations that went on for months last year over the reopening of the South's market to American beef. The noise about "Mad Cow" disease was really about long-term leftist opposition to the resurgence of conservative rule and to much else that President Lee wants to do to enhance the power of the mighty chaebol or conglomerates that dominate the economy more thoroughly than they did before the 1997-1998 economic crisis. Leftist activists now have a new cause in the memory of Roh Moo-hyun, the former president who tragically took his own life in the midst of an investigation into corruption among members of his family, notably his wife. The corruption in this case was relatively small scale – about $6 million or so, a pittance compared to the massive fraud during the presidencies of Chun Doo-hwan and Roh Tae-woo, the generals who led the country after the assassination of the dictator Park Chung-hee in 1979. For that matter, greater corruption was discovered among the sons of the two other civilian presidents of recent memory, Kim Young-sam, elected in 1992, and his successor, Kim Dae-jung, elected in 1997 at the height of the economic crisis.

Roh Moo-hyun would undoubtedly have weathered the storm, perhaps with a wrist-slap probation or a suspended sentence, but with his death he has become a martyr to the

left. They accuse Lee Myung-bak of having gone after him and members of his family in a spirit of vengeance that is all too typical of Korean politics. It seems significant that Dear Leader Kim Jong-il sent a message of condolence after the death of Roh, who had sought to perpetuate the Sunshine Policy of reconciliation initiated by Kim Dae-jung. Since his landslide victory over Roh's former unification minister in December 2007, President Lee has managed to reverse the policy even while holding out the prospect of massive economic aid if only North Korea will come to terms.

The issue is that of "verification" of whatever North Korea claims to have done to get rid of its nukes. No one believes now that North Korea had any intention of disabling or dismantling its nuclear program, and North Korea has confirmed that by promising to rev up the facilities for fabricating nuclear devices with plutonium at their core at the Yongbyon facility and has acknowledged the existence of a separate program for developing highly enriched uranium for warheads. It was the existence of that program, which U.S. officials claim North Korea acknowledged in 2002, that detonated the 1994 Geneva agreement and set in motion the negotiating process that resulted in two new agreements in 2007 as a result of the six-party talks hosted by China. Now, all that is history as the sides line up for a new nuclear crisis.

If much of the rest of the U.S.-South Korean "joint vision" was boilerplate, the emphasis on the "nuclear umbrella" was not. Regardless of whether Obama would ever pull the nuclear trigger and order a strike, say, on the North Korean nuclear facilities at Yongbyon, the message was obvious: In a showdown, we've got a lot more nukes than you do, and we're willing to use them if that's what it takes to stop your nonsense. In fact, when it comes to who's really holding the nuclear club, Obama saw no reason to recognize North Korea as a nuclear power at all – the same view adopted by the U.S. after the first North Korean nuclear test in October 2006.

The "joint vision," as envisioned by the American and South Korean presidents, standing side by side in the Rose Garden outside the White House, represents a triumph of diplomacy for South Korea at a critical juncture. Lee is under pressure not only from a militant North Korea but also from a militant political opposition that just can't get over the fact that he defeated a leftist candidate in the December 2007 presidential election, reversing a decade of liberal leadership of South Korea. Lee this time did not go to Camp David, the presidential hideaway in the Maryland woods north of Washington, as he did for his first summit with U.S. President George W. Bush in April of last year. Lee was flattered at the time by the invitation, evidence of the rapport that he hoped to build with the White House in contrast to the uneasy meetings that his left-leaning predecessor, Roh Moo Hyun, had had with Bush over the previous five years.

Against the din of the latest North Korean rhetoric, however, this summit was far more meaningful than the first. The fact that American liberals think so highly of Obama added to the significance. Obama could speak out in language that critics of George W. Bush would have automatically denounced in knee-jerk unison had he dared to say

Roh Moo-hyun would undoubtedly have weathered the storm, perhaps with a wrist-slap probation or a suspended sentence, but with his death he has become a martyr to the left. They accuse Lee Myung-bak of having gone after him and members of his family in a spirit of vengeance that is all too typical of Korean politics.

Ling and Lee, it seemed, had come to symbolize to North Korean strategists the U.S.-led response to North Korea's emergence as a nuclear power, recognized or not.

anything so tough. No way, said Obama, could North Korea go on in "a pattern" of behaving "in a belligerent manner" and then waiting to be rewarded. "We are going to break that pattern," said Obama. More menacingly, he said that "belligerent provocative behavior that threatens neighbors will be met with enforcement of the sanctions in place" – a reference to the UN Security Council sanctions calling on nations to search ships and planes suspected of carrying materiel for weapons of mass destruction or the missiles for delivering them to distant targets.

Such language was a far cry from the talk that had marked the later years of the Bush administration, not to mention that of his Democratic predecessor, Bill Clinton. This president did not have to refer to the failed Geneva agreement of 1994, which Clinton and his top aides like to say had headed off the danger of war. Nor did he allude to the two agreements of 2007 that promised the North untold billions in return for disablement and dismantlement of everything to do with its nuclear program.

Presidents Obama and Lee did pay ritual obeisance to the concept of the six-nation talks, hosted by China, that resulted in the 2007 agreements. With North Korea declaring it will "never" return to the six-party process, such palaver has receded into the tortuous history of diplomacy on the Korean peninsula. Now all sides appear to be waiting for an "incident" – the actual search of a North Korean vessel, the "act of war" to which North Korea has promised to respond with equal force. In the meantime, just hours before the summit, North Korea played another card, that of the two women arrested on March 17 as they were reporting for Current TV, the internet cable network, along the Tumen River border between North Korean and China.

It did not seem coincidental that North Korea should have chosen this moment to come out with an explanation, via Pyongyang's Korean Central News Agency, of why the women, Laura Ling and Euna Lee, were arrested. They had crossed the frozen Tumen River and shot video inside a courtyard on the North Korean side, all in a campaign to "smear" North Korea, said the KCNA. Just where Ling and Lee, each sentenced to 12 years in prison, fit into the big picture was not clear. The KCNA said the reason it was reporting on what they had done was so the world would know "the American crimes were committed at a time when an unprecedented confrontational phase is building up on the Korean peninsula against the United States."

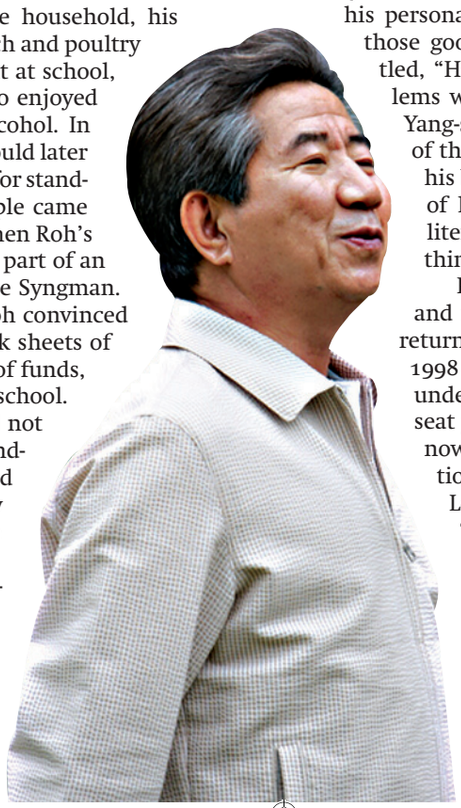
The KCNA said the producer cameraman, Mitch Koss, and a Korean-Chinese guide had escaped, but neither is talking. The incident did not appear to have come up in talks between Obama and Lee or parallel conversations between their aides. There was, of course, no way to corroborate that version. No one doubted, however, the veracity of the KCNA's claim that "we are following with a high degree of vigilance the attitude of the U.S., which spawned the criminal act against the DPRK" – the Democratic People's Republic of Korea. Ling and Lee, it seemed, had come to symbolize to North Korean strategists the U.S.-led response to North Korea's emergence as a nuclear power, recognized or not. As symbols, they may be considerably more valuable than as mere pawns. Amid rhetorical flurries, they will have to wait before tensions ease – and it's possible to negotiate their release. In the meantime, we may only hope that the "hard labor" to which they were sentenced turns out to be editing North Korean propaganda – including, perhaps, the verbal blasts against the U.S.

The Life of a President

BY ADAM WALSH

South Korea has the highest suicide rate of any member country of the Organization for Economic Development and Cooperation. The rate today is even higher than it was during the economic crash of 1997 that led to scores of financial problems and job losses. South Korea is also a developed nation with a strong democracy and is considered a big player within Asia and the world. It is within the paradigm of the latter that former President Roh Moo-hyun was viewed. He was a determined, intelligent leader who fought for greater democracy for his country and was the face of South Korea during his tenure. Looking at his life and accomplishments, it was nothing less than shocking when Roh Moo-hyun took his own life on May 23. His life, and perhaps even more so his death, has caused a divide that has sunk deep within Korean society.

Roh Moo-hyun was born in 1946 in the village of Gimhae, which is located in Korea's Southeast. Raised in what would be labeled a low-income household, his parents were hard-working peach and poultry farmers. Roh was an apt student at school, but while in high school he also enjoyed skipping class and drinking alcohol. In his youth he earned, what he would later be well known for, a reputation for standing up to authority. One example came from his middle school years when Roh's class was told to write essays as part of an annual tribute to President Rhee Syngman. Not a fan of the assignment, Roh convinced his whole class to hand in blank sheets of paper. Due to his parents' lack of funds, Roh was only able to finish high school. Although smart enough, he did not have the cash for a post secondary education. Instead, he opted to serve his mandatory military time and once completed he worked making fish nets.



Realizing that he was capable of so much more in life, Roh Moo-hyun studied law books on his own while working as an unskilled laborer. Achieving what would be nearly impossible today, Roh passed the bar exam in 1975 on his third attempt. After being appointed to the bench at the Daejon Regional Court, he went on to work as a tax lawyer.

Becoming a lawyer without any post secondary education was a huge victory in Roh's life. Another defining moment came when a mentor of his talked him into taking a risky human rights case in 1981. Being a tax lawyer, Roh may not have seemed like the best choice to represent the group of Busan students charged with violating the National Security Law. Tenacity does not, however, necessarily show itself on paper. The youths were arrested and subsequently tortured for being in possession of banned literature under Dictator Chun Do-hwan's 5th Republic. The ordeal was later dubbed the "Boolim Incident" and when asked to comment on it years later Roh was quoted as saying "When I saw their horrified eyes and their missing toenails, my comfortable life as a lawyer came to an end." It was after the "Boolim Incident" that Roh changed his direction and started to work as a human rights lawyer. He fought against the many injustices during President Chun's reign and also for democracy. While supporting striking union workers during this period, he even served three weeks in prison.

Once democracy came to Korea, Roh Moo-hyun heard politics knocking at the door and ran for a seat in the National Assembly. He was elected in 1988 and served on a committee that was tasked with investigating allegations of corruption within the previous regime. The investigation earned Roh the title of "star lawmaker" because of the way he unrelentingly questioned former top government officials and conglomerate (chaebol) heads.

The path that Roh Moo-hyun chose for his public life may have been with others and his country in mind, but his personal life choices were if anything antitheses of those good decisions. His 1994 autobiography was titled, "Honey, Please Help Me" and laid out his problems with alcohol and the abuse of his wife, Kwon Yang-sook, whom he married in 1973. At the time of the book's release, Roh had reportedly changed his behavior and distanced himself from that part of his life. He credited reading women's rights literature with aiding his shift in behavior and thinking.

Roh would lose his Assembly seat in 1992 and fail in a bid to become mayor of Busan. His return to elected office would have to wait until 1998 when he would serve as fisheries minister under President Kim Dae-jung. Roh would lose his seat yet again in 2000 but would be a come-from-nowhere candidate in the 2002 presidential election. Roh won the contest against conservative Lee Hoi-chang by a very narrow margin. Called "the first internet president" for the manner with which his campaign was able to harness tech savvy youth and their ability to use the untapped resources of the Internet for campaigning. A definite outsider without big business connections, Roh's victory was a

Roh's policies during his term were unable to satisfy his critics and even many of his supporters. He continued with his predecessor's "Sunshine Policy" of giving aid to the North regardless of what they did; bent to U.S. pressure and sent troops to Iraq; attempted to carve a legacy for himself by pushing for the moving of the capital away from Seoul; and took a hard line against the Japanese on many issues that arose between both nations.

surprise to many. He was also immensely popular amongst the "386 Generation" (those who took part in the democracy protests of the 80s) thanks to his reputation earned during his time as a human rights lawyer. Also factoring in Roh's win was his ardent anti-American stance. Stemming from the deaths of two middle school girls who were accidentally killed by a U.S. military vehicle, Roh's spouting of anti-American rhetoric made him even more popular. During his campaign, he was asked about South Korea's stance if a war broke out between the United States and the North. He responded that there was a possibility that the South would remain neutral. Other election promises included putting an end to bribery and other forms of government corruption, while also uniting the different factions within the government.

Roh's tenure would prove to be anything but one that united those of differing opinions. In a move that was considered by some to be petty, Roh was forced in his second year, to take a two-month break from his responsibilities as president for violating a minor election law. Thousands of protestors would take to the streets in support of their president. Once the impeachment charges reached Korea's Constitutional Court, they were thrown out and Roh was able to resume his presidential duties. In the ruling, it was said that there had been a violation of election law, but that it was in no way grave enough to warrant removing a president from office.

Roh's policies during his term were unable to satisfy his critics and even many of his supporters. He continued with his predecessor's "Sunshine Policy" of giving aid to the North regardless of what they did; bent to U.S. pressure and sent troops to Iraq; attempted to carve a legacy for himself by pushing for the moving of the capital away from Seoul; and took a hard line against the Japanese on many issues that arose between both nations. On his list of achievements can be noted the leaders' summit between himself and his Northern counterpart Kim Jong-il in 2007, positive changes to Korea's elections system and a free trade agreement with the United States. Looking back, President Roh was criticized for his low popularity ratings towards the end of his term, yet they pale in comparison to the depths which Lee Myung-bak's popularity fell in his first year at the helm. Dubbed a "leftist," Roh had to battle tooth and nail against the country's right-of-center media. He was also accused of not knowing enough about foreign policy and the economy. During his tenure, however, the KOSPI tripled, the won was strong and the nation was experiencing around 4 percent economic growth per year.

Looking for a quiet retirement that would allow him time to "watch the news again" and be a somewhat regular citizen, Roh was unable to realize his wishes. A year after his retirement, Roh was summoned by prosecutors to Seoul for questioning over alleged corruption. His family, and possibly even Roh himself, was suspected of accepting bribes totaling $6 million dollars. Roh was subjected to 10 hours of questioning and reportedly went into a depression after the ordeal. He ate little and suffered from insomnia. In the early morning hours of May 23, Roh Moo-hyun leapt from a cliff near his home in the village of Bonghwa. He was pronounced dead at Busan National University Hospital at around 9 a.m. that morning. A suicide note left on his computer stated that he didn't want anyone to be blamed for his death. It added that "Many have suffered too much because of me."

In the wake of Roh's death, people once again took to the streets in his name, but this time it was in order to mourn. The police presence was deemed by many to be overwhelming and prohibitive of the citizens' freedom of assembly. In the government's eyes, the police were deployed to keep order and civility. Makeshift alters were removed by authorities and as time went by there were even scuffles between mourners and right wing civic groups bent on seeking the cessation of public grieving. Throughout Korea's blogosphere questions arose around unanswered questions about Roh's death that have pushed his supporters further away from trusting the current government. Questions surrounding his death include: the bodyguard's presence or lack thereof as Roh jumped off the cliff, the subsequent suicide of the first doctor to examine Roh and the fact that the note on his computer was saved after he left for his early morning hike.

Regardless of political view, the death of a democratically elected former president should be mourned by all instead of adding fire to divisions. Roh Moo-hyun was seen as an everyman for many Koreans. Honest, hardworking, fiery and sincere are but a few traits he was reputed to have. For all he accomplished in his life, it is unfortunate that not even with his death was he able to realize his goal of uniting his country. It is even more unfortunate that for all that his name has been associated with in the past, a new link has been forged with a terrible statistic. Perhaps one thing that his death will achieve is a self reflection by Koreans on why the suicide rate is so high and how it can be lowered.

Go Green for Good Business

RAJANI BABURAJAN

For a number of companies, adopting a 'green' theme has become a tool to position their products and services in a better way. This is beyond the usual jargon of "supporting the earth and environment" and "improving the bottom line" used earlier by many enterprises globally.

Beyond the publicity created by these organizations through green campaigns, their actual contribution to save the earth is meager when compared to the damage they created by making and selling products and ignoring warnings from consumers and consumer forums. Climate change is a global challenge that demands urgent attention and investment from all ICT stakeholders in India.

While these large companies celebrate green campaigns, they tend to forget the poor infrastructure conditions, among many other things, in several Indian cities. Many of these companies' employees do not even exercise their vote to choose their government.

Interestingly, companies that are looking at green technologies are ICT organizations. Most of them are from overseas, selling products inside the country – either made here or imported from other locations. In both cases, they are contributing to the damage being done to the earth.

According to ITU, ICT industries are vital instruments in monitoring the spread of global warming and in promoting carbon displacement technologies. Though ICTs contribute only an estimated 2.5 percent of total greenhouse gases, the underlying cause of global warming, this is set to increase as ICT usage expands globally. It makes good business sense to go green, especially during the current global energy crunch.

Green Initiatives in India

Handling e-waste is a major focus area for these companies. For instance, handset maker Nokia is working with different stakeholders to drive environmentally sustainable initiatives. Nokia's environment initiatives are aimed at focusing on devices and services to reduce their impact on the ecosystem.

Nokia started its take-back and recycling initiative in India in January 2009. Mobile customers can drop their old and used Nokia phones, chargers and accessories, irrespective of the brand. Within the first 45 days of the launch, Nokia collected three tonnes of e-waste, which was then sent to authorized recyclers.

According to Ambrish Bakaya, director of Corporate Affairs at Nokia, their approach to tackling the e-waste threat is two-fold. Firstly, Nokia works on managing substances in its products so that they do not pose any environmental risks at the end of their life. All of its products comply with legislation and environmental standards such as the EU and China ROHS. Its latest chargers are Energy Star compliant.

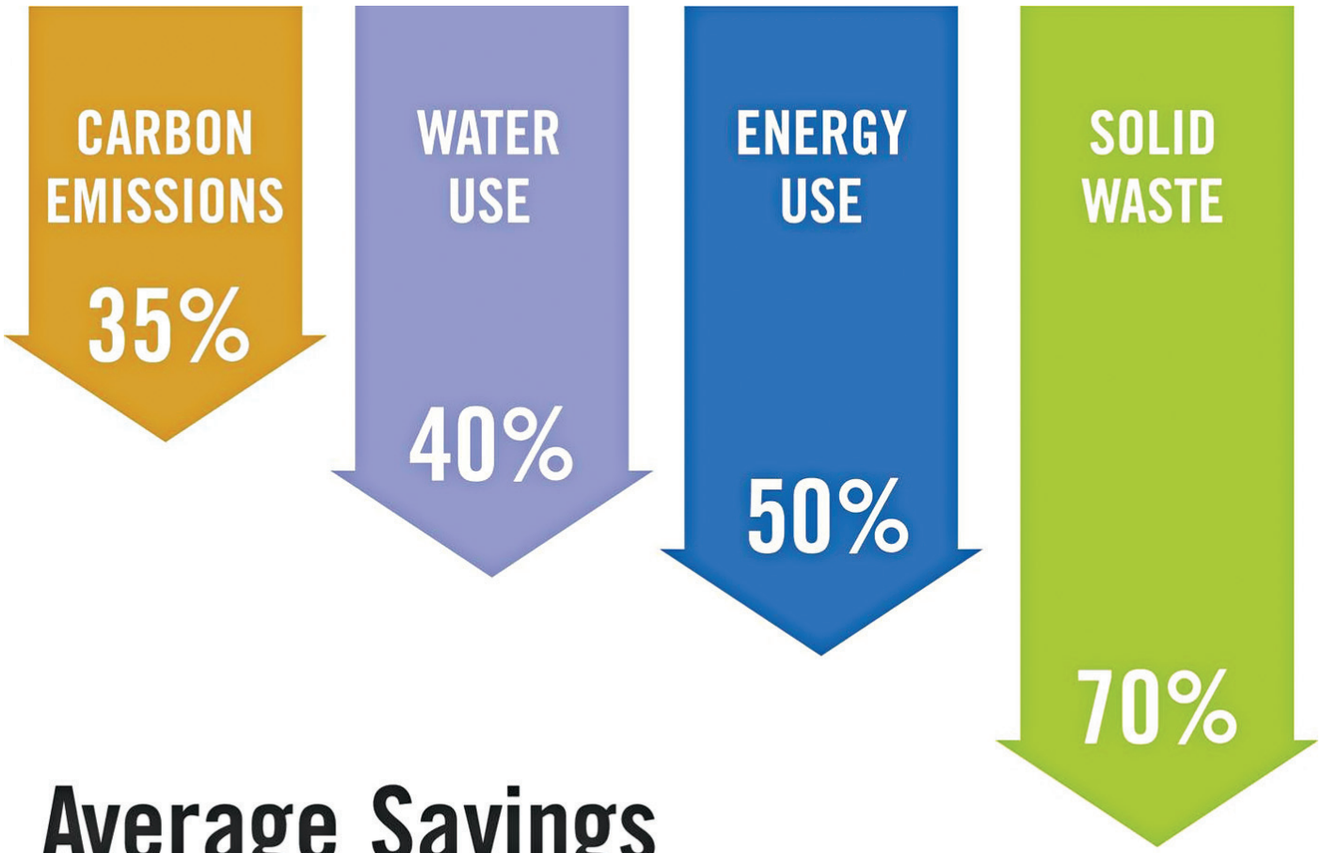
Secondly, the company encourages consumers to responsibly recycle their unwanted products and have laid out a robust recycling infrastructure across India with over 1,300 recycling bins across all Nokia Priority Dealers and Nokia Care Centers. To recycle an old phone, battery or charger, the consumer has to drop it off at any Nokia recycling point and the company takes care of the rest.

Under Nokia's material and substances management initiatives, all new Nokia devices are made free of PVC, lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers. By 2010 they will also be free of brominated and chlorinated compounds and antimony trioxide. In May 2007, Nokia became the first mobile manufacturer to put alerts into phones encouraging people to unplug their chargers.

HCL Infosystems, an ICT system integrator and distribution company, began its 'green bag' campaign. The campaign, which will cover 99 HCL Touch Centers across major metros and mini-metros, will enable the centers to accept e-waste under the 'green bag' campaign in its 'ecoSafe' environmental initiative.

The campaign will encourage people to dispose of their useless IT equipment including computers, keyboards, scanners, printers, etc., in an environmental friendly way. The ecoSafe initiative will create awareness on environmental issues and educate customers on how to responsibly dispose of their e-waste. For this purpose, HCL has tied up with e-waste collection and recycling service providers throughout India.

"The environment is a key aspect of our lives, therefore it is our duty to do everything possible for its protection.



Average Savings
of Green Buildings

HCL, being a responsible corporate citizen, is launching this campaign by extending its environment protection initiatives through 'HCL Touch,' to enable one and all to come forward and dispose of their e-waste responsibly," said JV Ramamurthy, chief operating officer at HCL Infosystems.

For Infosys Technologies, green means the creation of awareness among its employees. It created an awareness campaign organized by the Infosys Voice of Youth team and the Infy eco-club. As part of this campaign, Infosys started 'Polythene bag-free Commitment' across all Infosys campuses globally. As part of this initiative, Infosys employees will not use polythene bags. This is aimed at reducing the consumption of non-biodegradable plastics. NGOs like Sandhi and others were invited to set up stalls in the Bangalore, Hyderabad, Mysore and Pune Infosys campuses, to introduce, build awareness and make available eco-friendly cloth bags as alternatives to polythene bags.

Infosys conducted instant dipstick quizzes across campuses, with questions on Infoscions' roles in ensuring energy efficiency and environment conservation. Movie screenings aimed at enhancing the environmental consciousness of employees were also organized at some campuses. Besides this, Infy TV, the internal television network of Infosys, aired messages from senior management and employees, sharing the need to become energy efficient and the tools to achieve this task.

Abhay Gupte, CEO of Logica India, a leading IT and business services company, says, "Driving sustainability has always been Logica's priority and we have responded to the challenges and opportunities around climate change and the environment. With our focus on lowering carbon emissions, Logica in India has achieved a remarkable reduction of our carbon footprint by 11.3 percent over the last 18 months. We have set another achievable target for the next one year to reduce our carbon footprint across all our facilities by 10 percent."

Power Consumption and Green

Some of the telecom infrastructure equipment makers are also utilizing green opportunities. Alcatel-Lucent started its first alternative energy laboratory and pilot site in the world. Located at its Bell Labs research site in Villarceaux, France, this station forms part of an alternative energy strategic program launched by Alcatel-Lucent. The program is aimed at responding to the demand from wireless operators for energy-autonomous and green wireless networking equipment. Green wireless networking equipment can provide advanced communications capabilities even in remote areas with no access to commercial power grids.

Alcatel-Lucent's Alternative Energy program will assist operators in extending the reach of their wireless services to access potential new subscribers. Currently, more than one billion people are living in areas, which are not served by an electrical grid. Unfortunately, these people do not have access to phone or broadband services, vital tools for economic and social development.

This program builds on Alcatel-Lucent's recent innovations to create more energy efficient wireless networks and leverage its experience, deploying more than 300 radio sites powered by alternative energy sources. The goal is to develop a mass-produced alternative energy solution capable of being deployed to more than 100,000 wireless base station sites through 2012. The Villarceaux pilot site consists of a wireless base station powered by a hybrid system of solar panels and wind turbines, but not dependent on the electrical grid. At the same time, the laboratory section is researching other energy sources, such as fuel cells and bio-fuels.

ICT industries are vital instruments in monitoring the spread of global warming and in promoting carbon displacement technologies. Though ICTs contribute only an estimated 2.5 percent of total greenhouse gases, the cause of global warming, this is set to increase as ICT usage expands globally. It makes good business sense to go green, especially during the current global energy crunch.

"The site offers Alcatel-Lucent and its customers and its industrial, institutional and academic partners, the ability to analyze, test and validate the solutions proposed by the dynamic, but fragmented, alternative energy sector. It is also a center for people within the company and outside to discuss and try out new ideas to bring the worlds of telecom and alternative energy closer together," said Rich Garafola, director of Sustainable Power Solutions at Alcatel-Lucent.

The team of scientists and researchers staffing this lab also will research technologies that will enable operators serving developed areas to retrofit existing base stations with alternative energy solutions, consequently cutting down on their carbon emissions and helping them reduce their network operating costs while protecting the environment.

For Sony Ericsson, with their smart and green phone, Naite, its customers can stay on top of their lives and make a greener choice with quick access to the tools that help them manage things more smoothly along with a host of green innovations.

"Naite is a phone that not only helps you to organize your life and work, it allows consumers to make an economical choice with the low-power charger and reduce their impact on the environment," said Quentin Cordier, marketing business manager at Sony Ericsson. "Going green shouldn't mean consumers have to sacrifice features or style so we've created a phone that is packed with impressive features such as high-speed 3G and Active desktop to help consumers manage their busy lives."

One of the first GreenHeart pioneer phones to be launched by Sony Ericsson, Naite includes an electronic, in-phone manual replacing the standard paper version, saving over 90 percent in paper and giving convenient access to a product support guide wherever the customer is. The e-manual reduces the impact of transporting the final product through more compact packaging. Made from a minimum of 50 percent recycled plastics, Naite includes a low-power charger, one of the most energy efficient to be introduced onto the market. Due to these innovations, the overall CO_2 footprint of Naite is reduced by 15 percent. Naite also includes an Ecomate application to help users make greener choices in their everyday lives as well as a carbon footprint calculator to show users just how much CO_2 they are saving when they walk instead of taking the car.

Moving On to Greenery

As part of observing World Environment Day, Nokia India has partnered with Rotary Bangalore Midtown and Ahimsa, Chennai, to plant saplings as a part of its Take-Back recycling program. Both parties will plant 10,000 saplings each in Bangalore and Chennai over the next 12 months. The Rotary Bangalore Midtown will plant saplings in colleges affiliated to Bangalore University and other educational institutions, while Ahimsa, Chennai will plant saplings there and in the villages of Kalakattur, Kooram, Maruthuvanpadi and Sankarapuram, all in the Kancheepuram district of Tamil Nadu. To date, 1,000 saplings have already been planted.

According to Ambrish Bakaya, director of Corporate Affairs at Nokia India, "Global warming has brought ecological concerns to the forefront. As a responsible leader, we have taken a holistic approach to the environment and work with different stakeholders to drive environmentally sustainable initiatives. We believe recycling old products is a key part of this approach and we are fully committed to educating consumers on the need for responsible mobile phone waste management. Over the next few months, Nokia will extend the Take-Back program to other cities across the country and our partnership with Rotary and Ahimsa will further help us in supporting this cause."

Nokia has also launched a unique SMS campaign wherein customers can get to know about the nearest Nokia mobile waste collection point by simply sending an SMS with the word 'Green' to 55555 from their handsets. The company believes better mobile waste management will contribute to a greener tomorrow for people around the world. According to a study by Nokia, if every Nokia user across the world recycled just one unused phone at the end of its life, together it would save nearly 80,000 tonnes of raw materials.

Retailers are yet another community that is going green. Dayalu Arasappa, head of Support & Facilities and chief security officer at Tesco, said, "We at Tesco have undertaken conscious initiatives to go green. Simple steps like using solar-water heating for our kitchens and gyms, switching to LED lighting systems, maintaining infrastructure software to hibernate our desktop systems have considerably reduced our carbon emissions. Further, as a retailer, we will print the carbon footprint on each of our products, to help consumers make an informed choice when making a purchase."

Many enterprises recognize the essential role the IT and communications sectors must play in the global effort to address environmental issues such as climate change. More companies in India must play an active role beyond the usual campaigns, involving their suppliers and other partners in a socially responsible approach that respects the diverse local communities.

Hydrogen Fuel Cell Cars

"This is our dream."

This simple remark created excitement among investors when South Korean President Lee Myung-bak introduced eco-friendly hydrogen fuel cell cars to the leaders of the ASEAN countries at the ASEAN-Korea CEO summit in June.

South Korea placed booths at the Intercontinental hotel, the venue for the ASEAN-Korea CEO summit, to introduce Korean green-energy products. The president told the leaders "this is our dream" while visiting a section that showcased hydrogen fuel-cell cars.

Hydrogen related stocks rose that day by the allowable 15 percent daily limit and kept soaring for another four consecutive days on the hope that hydrogen energy would be used for commercial services.

The tech-heavy Kosdaq-listed HS Holdings, which owns a hydrogen fuel cell developing subsidiary company, gained 15 percent per day for five days in a row, rising from 700 won per share to 1,500 won per share.

However, patience is needed if we are to see and make this dream come true. Korea, which imports more than 95 percent of its annual energy consumption, set a goal to develop alternative energy – one of President Lee's green growth strategies.

In August of last year, the Lee administration announced its alternative energy development plan designed to generate renewable energy.

Under the plan, the government will spend a total of 111 trillion won (US$87.5 billion) to increase the portion of non-fossil fuel energy sources from the current 4.6 percent to 11 percent by 2030.

The Ministry of Knowledge Economy unveiled this year's renewable energy plan budget at 659 billion won ($535 million) and a plan creating a 100 billion won ($78 million) renewable energy fund to encourage private companies to invest.

Also, the government said it will allocate 150 billion won ($120 million) over the next five years to improve the fuel efficiency of cars.

The size of the hydrogen-related technology market is expected to reach $23 billion in the United States and Europe by the year of 2020.

In this regard, the Korean government's recent move to develop alternative energy is considered a step in the right direction, but there is still long way to go.

As one of the most promising sources of alternative energy, hydrogen fuel cells have been studied and developed by global car manufacturers. Since Hydrogen fuel cell vehicles are clean, nontoxic as an energy carrier, and their only byproducts are heat and water, which don't harm the environment, most countries encourage their car makers to develop and produce these kind of cars.

With the strong support of their governments, global automakers have been competing for environmentally friendly technologies in order to swiftly move into the hydrogen fuel cell vehicle market.

At the moment, most hydrogen vehicles are currently only available in demonstration models or on a trial run in limited numbers and are not yet ready for general and commercial public use.

The leading car company in Korea, Hyundai Motor Co., established an Environmental Technology Research Center in September 2005 and has developed hydrogen fuel cell vehicles, which are currently being tested and are expected to reach the market in 2012. Hyundai Motor Co. aims to localize 98 percent of hydrogen fuel cell auto parts by 2010 and produce 1,000 cars in 2012.

Also in recent news, Hyundai-Kia Automotive Group announced that its hydrogen fuel cell powered vehicles, the Tucson and Mohave, completed the 2,655 km course in the Hydrogen Road Tour 2009.

The two hydrogen fuel cell sport utility vehicles drove at an average speed of more than 100 kilometers per hour over an average distance of 400 to 500 kilometers a day to complete the road trip. The company is currently testing 66 hydrogen fuel cell cars in projects organized by the U.S. Department of Energy and Korea's Ministry of Knowledge Economy.

In April of this year, Hyundai Motor Co. showcased its second hydrogen fuel cell bus at the Seoul Motor Show. Hyundai's first fuel cell bus was introduced in 2006 at the World Cup in Germany where it served as a VIP shuttle bus around Munich. Hyundai Motor Co. plans to put these second-generation hydrogen fuel cell buses into daily service in cities around Korea in late 2010.

Major global automobile makers such as Hyundai, Toyota and Honda have announced that they will produce fuel cell cars between 2010 and 2015, estimating that fuel cell vehicles will comprise 90 percent of the car market by 2040.

However, there are still many obstacles for the commercialization of hydrogen fuel cell vehicles. In May 2009, the U.S. Secretary of Energy said that hydrogen vehicles "will not be practical over the next 10 to 20 years."

Mr. Kong Jung-ho, an analyst at Eugene Securities, said, "The commercial mass pro-

Also in recent news, Hyundai-Kia Automotive Group announced that its hydrogen fuel cell powered vehicles, the Tucson and Mohave, completed the 2,655 km course in the Hydrogen Road Tour 2009.

duction of hydrogen fuel cell vehicles is likely to take another 20 years. The first mass production of hybrid cars is expected this coming July, though these cars cannot really be considered as 'alternative energy' vehicles. Hydrogen fuel cell technology won't work in near future."

Cost is a serious factor in the commercialization of hydrogen vehicles. As of now, the manufacturing cost for hydrogen fuel cell cars easily exceeds $500,000 and the price of major fuel cell auto parts start at $10,000.

However, it is believed that the price tag for hydrogen fuel cell cars will decrease to about 10 percent of its current level when the sale of fuel cell vehicles reaches 10,000 units a year. There is also the chance if oil prices surge again as they did last year, the market for hydrogen fuel cell vehicles will expand much more rapidly than expected.

Secondly, hydrogen fuel cell vehicles have some hurtles to overcome, primarily in the area of infrastructure. In Korea, there are only five hydrogen-equipped filling stations for hydrogen-powered cars, while in the United States, there are currently only a few hydrogen fuel stations run by utilities and car makers.

There need to be an abundance of these stations available to the public before hydrogen-fueled vehicles become a viable alternative. Unfortunately, the cost of hydrogen stations, by some estimates, will exceed $20 billion in the United States. Other estimates place the cost as high as $500 billion.

Moreover, due to high real estate prices in Korea, there is lack of land for building new hydrogen stations. Even the conventional gas stations are moving outside of Seoul to look for cheaper leases.

Technically, one of the challenges facing the use of hydrogen in vehicles is in the lightweight storage of the fuel. Hydrogen gas has good energy density by weight but poor energy density by volume; thus it requires a larger tank to store the equivalent amount of energy as a gasoline powered car. A larger tank will be heavier, yet consumers will still demand that vehicles using hydrogen power have comparable performance and space for passengers.

Alternatively, liquid hydrogen, with higher volumetric energy density, may be used for vehicles; but as liquid hydrogen boils at around -252 degrees C, a large amount of energy will be consumed in order to cool it down to that temperature.

The tanks also must be well insulated in order to prevent boil off. The insulation for liquid hydrogen tanks is usually expensive and delicate.

There is also a possibility that hydrogen, which is odorless and invisible, may leak while the car is in operation, so a detector has to be developed. In addition, charging time and maximum energy efficiency should be improved.

These technical hurdles currently make it extremely difficult to effectively meet the requirements needed for real driving conditions and the easy introduction of commercialized hydrogen fuel cell vehicles.

Dr. Lee Hyun-soon, vice chairman and CTO of Hyundai-Kia Corporate Research said, "Hydrogen is the dream fuel for our transportation needs: It's perfectly clean, it's limitless and it's now within our reach."

Although experts have different points of view about the timing of a hydrogen society and there are still many negative opinions on the possibility of commercialization, there is no doubt that the energy industry is going to transit from carbon-based to hydrogen-based.

It is believed that zero emission vehicles are likely to be the preferred purchase at some point in the future. Therefore, hydrogen fuel cell cars have great potential to beat the current and conventional market. Much work needs to be done, but the reduction of costs, the assurance of reliability and the creation of strong infrastructure will ensure that the commercialization of hydrogen-fueled vehicles will be not only viable, but inevitable.

Dealing Asia its Fair Share of IP Addresses with IPv6

BY ZACH BARDON

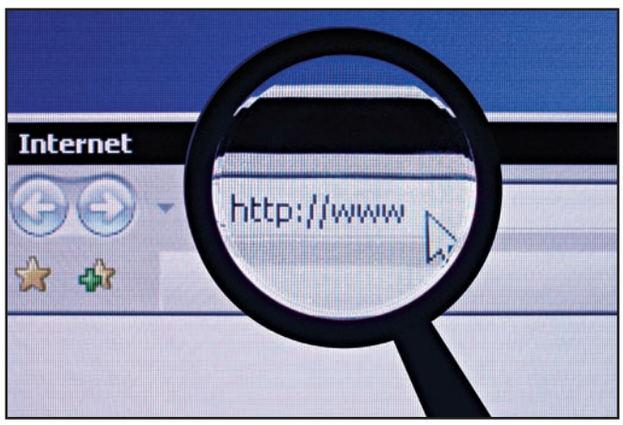
Many people are predicting that the Internet will run out of IPv4 addresses sometime between now and 2050, when the upper limit of about 4 billion IP addresses is reached. It is difficult to tell who is more accurate in their predictions, but everyone agrees that the Internet will run out of IPv4 addresses soon. In contrast, IPv6 will provide 340 undecillion (3.4 x 10^38), or 3.4 trillion trillion trillion addresses. This might be enough to give every atomic nucleus on the Earth its own address. This is a good thing, and most important for the Asian Internet scene, because currently the largest segment of the world's population, in Asia, is only using about 1 billion, or 25 percent, of the IP addresses.

Features of IPv6

IPv6 has auto configuration, and two methods to use it. The first will be to offer a stateful auto configuration, almost exactly like current DHCP functions. That is, when a device is connected to a network, it requests and receives a unique IP address from a list known by the nearest router. The second is called "stateless" auto configuration, where a device creates its own unique IP address by combining its LAN MAC address with a prefix provided by the nearest network router.

IPv6 provides security encryption, authentication and data integrity safeguards. The IPv6 authentication header extension guarantees that the recipient receives a packet that is truly from its source address and also provides end-to-end encryption at the network layer. With IPv6, IPSec support is mandatory. For possible security problems, refer to the "Possible Security Problems" section at the end of this report.

There are three technologies that will increase the speed of an IPv6 Internet. Multicasting is an integrated part of IPv6 architecture. While Multicasting is available in IPv4, it is an optional component and not widely used. This technology lets a device contact a group of addresses at once, instead of simply one address, allowing for faster information spread from server to client when there are multiple clients involved. A second technology used in IPv6



is called Flow Labels, which identifies all of the packets of a stream of information as being part of a stream together. This would enable intelligent routers to manage congestion better, routing packets in the order in which they are received despite heavy traffic. The third technology would be Priority, where server machines can specify a higher priority to some packets, such as VoIP packets, and route them first in the case of heavy traffic.

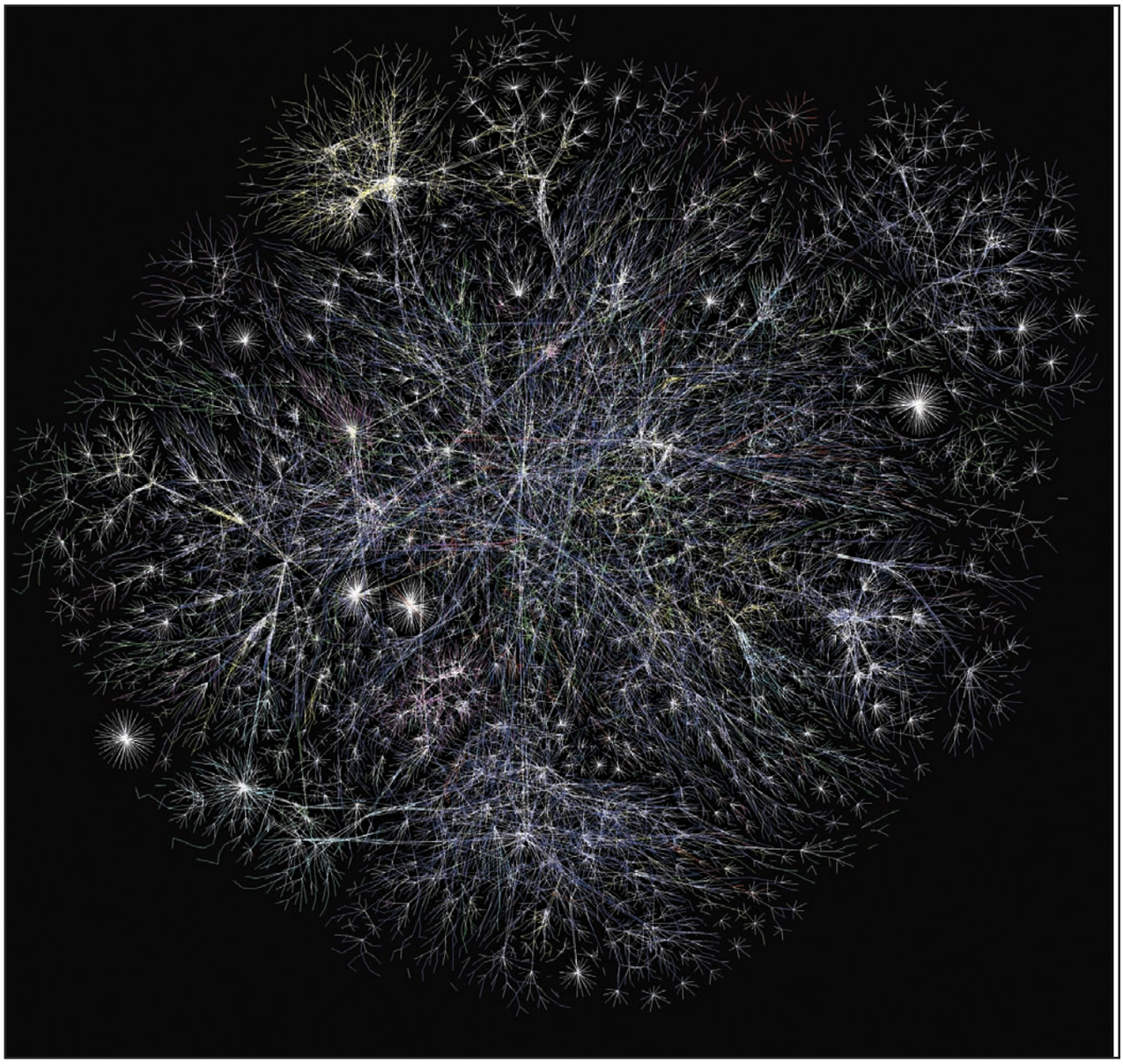
IPv6 seems to be more important to some countries than others. The countries that are leading the way in adopting IPv6 architectures are the countries that have the least IP addresses currently available to them.

In December 2004, China unveiled its first Core Router design that used IPv6. It took two years of development to complete. It is capable of transferring 320 billion bits per second. China has aggressively pursued IPv6 compatibility because it has 80 million Internet users and only a small number of IP addresses. And, of course, the number of Internet users in China is expected to grow very fast. Currently, U.S. companies and organizations control 3 billion of the IPv4 Internet addresses, leaving only 25 percent, or 1 billion for the rest of the world. Of these 1 billion, China controls approximately 28 million.

The same week that China unveiled their new IPv6 router, they also announced a new IPv6 backbone connecting 25 universities all across China. This backbone has been tested to a speed of 40 gigabits per second, which is the fastest data transmission rate outside of biological processes.

Japan is also fully IPv6 compatible, and has been since 2005. Japan is able to give IPv6 connections to any end user in their home or office. Japan is also using IPv6 for a new earthquake early warning system. In partnership with the Japanese telecom company NTT East, the new warning system uses multicasting in IPv6 to quickly alert all of its client computers of an incoming earthquake in a fraction of a second. Anyone can get the earthquake warning client, which causes their computer terminal to flash and emit a sound in the event of an impending earthquake.

The U.S. government required all federal agencies to



use IPv6 by June 2008. It is expected to have cost between $25 billion and $75 billion to finish the transition.

However, as late as May 2005, most U.S. IT decision-makers didn't see any reason to switch to IPv6. Some journalists are worried that the U.S. will lose its technology leadership, as it is already lagging behind Japan and China. Few other large technology companies or Internet Service Providers seem to be interested in making the switch. The few IPv6 service companies in the country report most of their business is outside the U.S., while inside the U.S. their only customers are U.S. Department of Defense contractors. The most likely reasons are the high cost of upgrading and the large number of IPv4 addresses still available to U.S. companies.

In Europe, most of the IT companies seem to share the same sentiment as U.S. companies, and have been slow in implementing IPv6 compatibility due to costs. A few ISPs in France and Spain are currently offering some initial commercial services. More encouraging is the educational and research institutions of Europe, which were all connected using IPv6 by 2004. There is a tentative plan in Europe to roll out IPv6 sometime before 2010. No mention has yet been made on who will bear the cost.

Also in Europe, BMW, Audi, Daimler, Volkswagen, Renault and Fiat car makers are working together to develop a car-based network with 802.11 wireless technology and IPv6. This network will be designed to let cars warn each other about accidents, bad traffic, poor weather conditions and other road problems. The network is called Continuous Communications Air Interface for Long and Medium Range (CALM). One drawback, however, is that it makes cars easily traceable, allowing people the capability to find out where you are driving at all times.

South Korea plans to fully support IPv6 technology before 2011. In 2003 the country made an initial investment of 83.6 billion won to begin planning to integrate IPv6 into the existing networking infrastructure of South Korea. South Korea is currently participating in the experimental multinational IPv6 network called 6bone, with 14 different locations tied in for IPv6 research and development projects.

In contrast, India only has two sites working with the 6bone experimental network. While there are some organizations in India who support IPv6 compatibility, India as a country has made no practical steps to use IPv6 yet. India may have to work hard to catch up to the rest of Asia.

New Security Issues

A new network architecture brings new security issues. The first security issue in IPv6 is firewall protection. Out of

all the current networking companies, only Linksys has an IPv6-capable gateway, their WRT54G model, and it only becomes IPv6 capable with a downloadable firmware upgrade. No other current routers or firewalls filter IPv6 information. A cheaper solution is to use a software firewall on every single IPv6-enabled computer. However, software firewalls such as Symantec Personal Firewall and Norton Internet Security do not currently support IPv6, and let all IPv6 packets through indiscriminately. The only software firewalls that currently filter IPv6 packets are OS firewalls, such as the ones included in Windows XP and most Linux distributions.

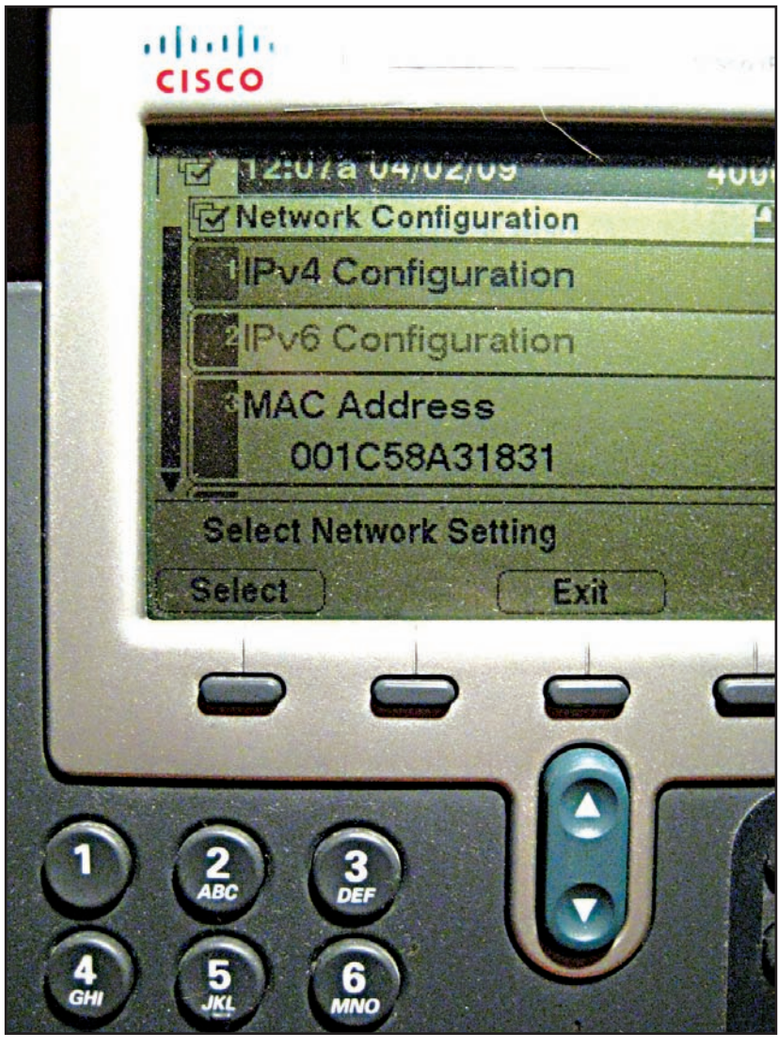
The second new security issue in IPv6 is actually good news. Every single computer on the IPv6 has a global Internet address, which makes it much easier to identify computers. Zombie computers infected with a virus that are participating in a DoS or DDoS attack can be immediately and precisely blocked. There is no longer a need to block, say, the entire nation of Russia or Brazil from your network.

Viruses and worms are another security issue, also with good news. Complete migration to IPv6 will make most network worms and viruses completely ineffective. All IPv4-based worms would simply become nonfunctional, as they would search for IP addresses that would no longer exist.

Privacy extensions are another security measure with mixed news. Every IPv6 address has two parts, a 64-bit address that is a computer's MAC address, and a 64-bit prefix that is from a computer's current ISP. That means that if a mobile device such as a laptop were to be activated at home in Korea, they would have an address that was its MAC+Korean ISP. Then if this mobile device was to be taken to the United States and activated, it would have a new IP address, which would be its MAC+U.S. ISP. This means that your approximate location in the world could be tracked by logging the changes in your ISP prefix section of the IP address. A privacy extension is simply a randomly generated MAC address, which means that when you change your location you can change your entire address instead of just the prefix. This means both that you can go to Starbucks and hide from the hacker who is trying to gain access to your laptop, and that the hacker can go to Starbucks to hide from you.

Another security issue that is a good thing to hear is simply the new limit of IP addresses in a subnet. If a hacker wants to scan the IPv6 subnet of a company to check for computers with open ports, he has to scan 2^64 (18,446,744,073,709,551,616) different addresses. This would be very difficult. However, it would be extremely easy for a hacker to know the IP addresses of every computer on your network if he were to gain physical access to your network. One ping to the linklocal multicast address will return a ping from every computer connected to the network, giving their addresses immediately. So physical security of the network becomes more important, while virtual security becomes easier.

The final and most important security issue has to do with IPSec. Every single IPv6 network-capable node, whether it is a computer, PDA or phone, must support IPSec. And they all support it. However, if a network wants to use it, they have to set up what is called a Public Key Infrastructure. This infrastructure is similar to security certificates that are currently implemented in web browsers, but they are lower in the TCP/IP stack. This means that if a network implements IPSec, every single node on the network needs a security certificate, and every single node on the network needs a list of every other trusted node's security certificates. If your network only has five computers, this is not a problem. If your network has 1,000 computers, with 1,000 cell phones and 1,000 PDAs all linked together, managing these security certificates can become a very difficult job. Adding one new laptop to this network means that the laptop must download certificates for all 3,000 devices already on the network, and all 3,000 devices must also download the security certificate of the new laptop. Currently, software that manages all of this is expensive. In order for the IPv6 Internet to work well with IPSec enabled, there must be an existing network of free IPSec security certificate servers similar to the existing free DNS servers to constantly manage these certificates. However, there are not any yet, and that is one of the major reasons for the slow adoption of IPv6 among corporations.



IPv6 is a good evolution of the Internet Protocol, with many useful features to increase speed, increase the size of the Internet, and provide more security. The nations that are first in implementing IPv6 are those industrialized nations that currently have the most trouble with IPv4. There are some costly issues involved with upgrading to IPv6, and some good benefits. The new security issues seem to be positive, on the whole, although IPv6 security is definitely still in its infancy. A free centralized database of trusted network addresses similar to DNS servers would go a long way to speed the process of IPv6 adoption.

सत्यमेव जयते

Department of Telecommunications
Ministry of Communications & IT

Telecommunication Engineering Centre

CMAI
Communications and
Manufacturing Association of India

Telecommunication Engineering Centre

and

Communications and Manufacturing Association of India

INVITE YOU TO

1st WORKSHOP ON MIGRATION FROM IPv4 TO IPv6 IN INDIA

Shri Siddhartha Behura, IAS

Secretary, Department of Telecommunications & Chairman, Telecom Commission
has kindly consented to inaugurate

Tuesday, 21st July, 2009 at 09:30 AM

Regal, Hotel The Lalit, Barakhamba Lane, New Delhi

Programme details at www.tec.gov.in, www.cmai.asia

RSVP

NK Goyal, President CMAI @ 98 111 29879

BK Nath, Dir (SA-III) TEC @ 98 681 37003

Presenting Sponsor

3com

Sponsor

RealTime™
Connect-Communicate-Converge

With support from

A New Dimension in Corporate Social Responsibility for Indian IT Firms

BY ARPAN BANERJEE

The basic philosophy that the corporate world follows is that every company, like every individual, has a duty to society. Just as individuals harm the environment, so does every company in its own way. Corporate Social Responsibility (CSR) thus focuses on reducing the negative effects to eradicate the harmful effects caused by a firm's processes and product-usage and takes steps towards increasing its positive contributions. Positive contributions can be brought about by taking proactive steps by using its resources, core competence, people and funds for the benefit of society and the environment.

Society has its share of multiple issues and problems. And as much as we look to good Samaritans in the government and NGOs to resolve them, the magnitude of the issues is such that it needs much greater participation. This participation must come from individuals and a body of individuals. The think tanks of corporations bring together the individuals and its resource pool within a strategic boundary, to create a holistic approach and plan to counter the problems. Corporations are important stakeholders of society, with the strengths of capable people, technology, access to funds and the reach to find meaningful solutions to the problems facing India today.

Early days of CSR in IT industry

Notwithstanding its contributions to the GDP growth of the country and the employment opportunities it has created, the IT industry is also obliged to meet its responsibilities towards curbing some of the social problems prevalent in India.

CSR is not a new phrase for Indian IT firms. Many IT firms have already incorporated corporate social responsibility concepts in their core values. However, it also appears that there is no real consensus about what it really means. According to a survey conducted by Nasscom a few years back on IT firms' understanding of corporate social responsibility and its importance to their firms, the key barriers to CSR used to be a lack of knowledge of the concept, insufficient resources and lack of commitment. Moreover, though many international standards were available to support, measure and assist companies implementing CSR, most of the Indian firms did not follow those guidelines in the past.

CSR, until early this decade, was basically understood in terms of philanthropy or charity. Welfare programs or initiatives were introduced not as a responsibility but as a form of charity that was supposed to indicate the virtues of a company. Many industrial groups like the Tatas or Birlas had set up charitable trusts that provided financial grants for various worthy causes. But due to the fundamental base being just charity, this model had its share of problems when applied by a lot of other firms:

Commitment was lacking and often the activities were just one-off cases or periodic financial grants rather than sustained efforts towards a problem's resolution.

Community participation was lacking in managing such programs due to lack of ownership and strong involvement of employees.

Corporate involvement was lacking and led to low levels of accountability and transparency at the implementation level.

Many companies made token gestures towards CSR in ways such as donations to charitable trusts or NGOs and sponsorship of events, without taking any ownership and accountability. Most companies believed that charity and philanthropy equals CSR, while very few companies used their core competence to benefit the community.

Some companies even used CSR as a marketing tool to further spread the word about their businesses. Very few companies actually communicated openly about their CSR policies, damage caused by their processes and products, the steps they had taken to minimize the damages and uplift the society and how much they were spending on CSR activities (which remained a small fraction of their regular corporate spending).

The new emerging trend

However, some strong trends are emerging in the Indian CSR front in the past few years. The stakeholders are becoming CSR savvy. They expect more from the corporations beyond just their profits and now demand accountability of a company's social and environmental performance. Further, there is an increasing awareness amongst consumers, management and students who now appreciate the CSR fundamentals more and are ready to participate. Thus, one of the motivations for some IT firms still remain as an effort to change the stakeholders' perceptions on the organizations without changing their actual economic performance.

Quite a few IT firms undertake health service initiatives such as building hospitals, treating cancer patients, blood donation camps and food programs (such as midday meals for school children or providing food for people affected by flood, famine, earthquakes and other natural disasters) and even green technology movements.

The geographical and climatic changes are also emerg-

ing as mainstream issues, with natural disasters such as the 2004 tsunami, Hurricane Katrina, Aila and others receiving greater attention and participation in terms of relief efforts. Quite a number of firms engage in community development to meet such natural disaster situations with a planned approach. Such engagements are initiated more often by employee groups rather than upper management. The firms contribute to community development programs by topping up the monetary contribution made by its employees towards community development programs. A focus on global energy issues has also intensified as crude oil prices topped $135 per barrel last year, driving consumer awareness to conservation efforts, alternative fuel development and green technology investment.

Today, the corporate world has just started seeing the opportunity to help solve the problems CSR addresses. It is relatively easy to claim good intentions, but it is much more challenging to deliver on them. The trick is to measure the impact. A number of national and international organizations promote CSR reporting guidelines and actively monitor corporate performance. Today, we see these as the norm and there is a willingness to adhere to such guidance by the corporations. The emerging trend is a move towards clear and comprehensive public disclosure of CSR data with an emphasis on measurable performance versus marketing spin.

The Global Reporting Initiative is one such example. The initiative's vision is to have reporting on economic, environmental and social performance by all organizations as routine and comparable as financial reporting. Officials have developed a sustainability reporting framework, of which the sustainability reporting guidelines are the basis for organizations to use for disclosure about sustainability performance. These guidelines also provide stakeholders with a universally applicable, comparable framework in which to understand the disclosed information.

There are other important factors providing the foundation for the business's financial success or failure as well. These other areas are: learning and growth, internal business process and customer satisfaction. Each perspective can include metrics that effectively measure CSR initiatives and help the organization realize benefits. Given these dependencies, there is a strong indication that CSR is moving from a tangential public-relations-driven initiative to a business imperative. Companies with strong corporate social values have embraced this transparency by publishing annual reports addressing these metrics.

CSR of tomorrow in the Indian IT space

With the shifting of the CSR paradigm to a stakeholder-centric approach, practices at the ground level have also undergone a radical transformation. In every aspect of CSR measures we are seeing corporations innovating to increase efficiency, effectiveness and accountability. The focus is on developing initiatives that are people-centric with active community participation at all levels. Further, the corporations themselves are moving away from the charitable initiatives like giving financial grants or sponsorships to providing products and services in a manner that would make a real difference in the target communities.

Let's have a quick look at some examples of Indian IT corporations' CSR activities.*

TCS has always recognized the responsibility corporations should have towards the wider communities in which they operate. TCS' community initiatives have been in areas addressing environmental and civic problems: Setting up and maintaining infrastructure for urban beautification, pollution reduction, healthcare, waste management in the office environment, tree plantation and water treatment.

Wipro Cares is an initiative by the Wiproites, their family members and friends to contribute in the areas of education, community and social development. Wipro Cares

contributes through a two-pronged strategy: Providing rehabilitation to survivors of natural calamities and enhancing the learning abilities of children from the underprivileged sectors of society.

The Infosys Foundation has worked to support the underprivileged in society and enrich their lives. Promoted by Infosys Technologies Limited, the Foundation began its work in Karnataka, India, gradually extending its activities to the states of Tamil Nadu, Andhra Pradesh, Maharashtra, Orissa and Punjab. It has successfully implemented projects in four key focus areas of healthcare, social rehabilitation and rural upliftment, learning and education, and arts and culture.

I-flex Solutions has special programs for disaster relief; a disabled children's program (where they sponsor disabled children to compete in the International Special Olympics); and the Association with Freedom Trust pool, Chennai, to provide support in the form of coaching, kits, and other assistance to underprivileged children. I-flex Solutions is also developing a comprehensive Decision Support System (DSS) at its own expense, to help the Education Department in Karnataka monitor the quality of elementary education in schools across the state.

The changing face of CSR in SME IT firms is also visible in baby steps that are taken in the direction of involving the employees to the cause. For example, Innominds Software of Hyderabad has devised special programs for a three-way CSR drive: Natural disaster relief support, Green Environment promotions and uplifting of small scale industries in the State of Andhra Pradesh. The innovation Innominds brought in is the way of attracting employees through its in-house club "Impressions," which along with the HR team creates an environment to generate employee participation in a sustained basis throughout the year for the CSR initiatives. Finally, it's the hands-on involvement of the employees and the backing of the management that makes the programs successful rather than simply funding charity programs.

It ushers in a new era of CSR in the Indian IT space, as we see the introduction of a host of innovative programs and schemes in areas like education, healthcare, rural development, environmental protection, protection of artistic and cultural heritage and disaster management. These programs are customized to meet the specific needs of target groups. Corporations devote not only financial resources, but expertise, manpower, products and services for the successful implementation of these schemes. As a part of the Indian IT community, we seem to be finally catching up with the fundamental definition of CSR.

**** Source www.karmayog.org***

The 3 Faces of Convergence

BY ZACH BARDON

Convergence is hitting the IT industry, there's no doubt about that. More accurately, it should be said that convergence is involving the IT industry in its process. The whole idea of convergence is that industries which used to be separate are becoming competitors, as the differences between their respective fields fade with the advent of greater communications technologies like the Internet.

There are three major players in the convergence of IT with other industries. These are content producers, broadcasters and Internet service providers (ISPs). These three sectors are both trying to jealously guard their traditional money-making roles in the global economy while attempting to sneak into the roles of the others. Broadcasters are becoming ISPs, ISPs are creating content, and content producers are broadcasting. Each one has a different reason to do what they do, and each has a different perspective. Unfortunately, if any of their individual perspectives win out, the consumer loses. The only way for the consumer to win is for traditional business roles to lose.

In order to understand the situation, it is important to examine each industry's perspective in order to know why they are acting in such a way. First, we can examine the content producers, and find out why they are still jealously guarding their products. Then, we can take a look at broadcasters and find out why they are trying to maintain their traditional distribution channels. And finally, we can look at ISPs and find out why they are trying to take over the other business models.

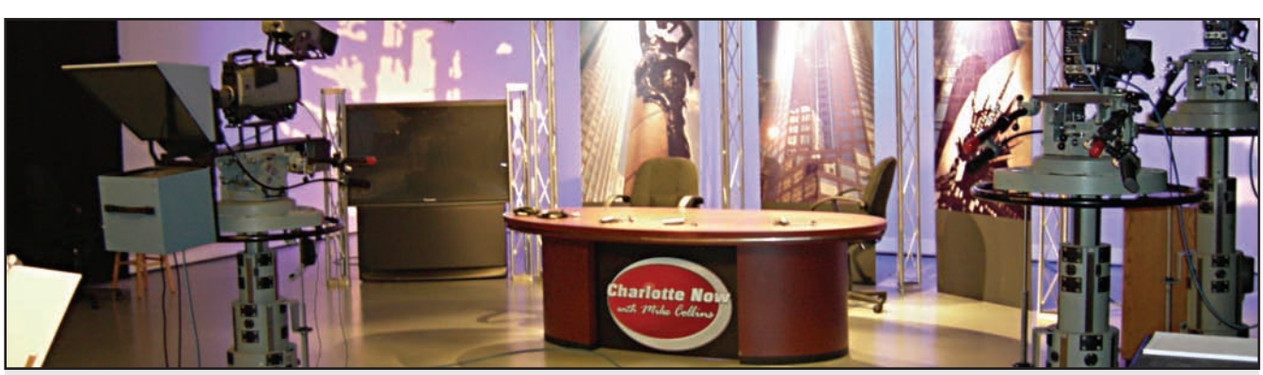
Content producers

Content producers seem to be in the most difficult position. These are companies such as movie and music studios represented respectively by the Motion Picture Association of America (MPAA) and the Recording Industry Association of America (RIAA). Because of the high demand for their goods and the exclusive contracts they have obtained over the years, they have created a multi-billion dollar industry in selling their products for extremely low prices to a worldwide audience. The cost in creating these products, however, is extremely large. Movies routinely cost over US$100 million to make, and a single music album can cost from $100,000 to $1 million to produce as well. This involves an extremely large commitment for the respective industries to a new work. However, when stores sell an album it is invariably $15, and when theaters sell movie tickets the cost is between $6 and $10 per person. The disparity between the investment by the companies and the investment by the consumers has created a culture of unequal valuation. Movie producers consider movies to be somewhat on par with constructing a skyscraper, while consumers consider movies to be the price of a good meal, with dessert.

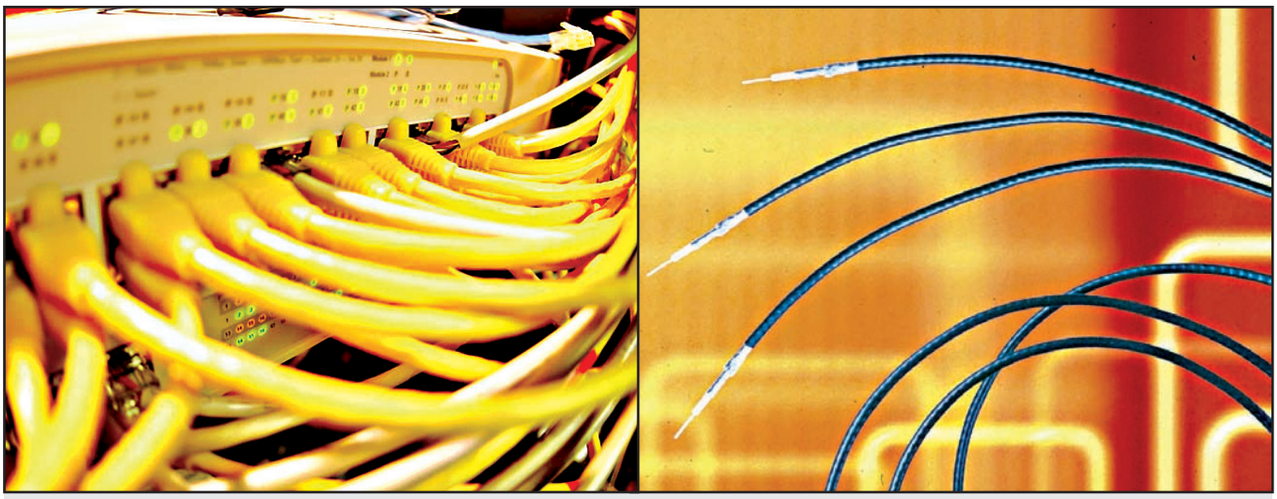
This valuation disparity didn't used to be a problem, because the content producers had all the distribution channels locked down. There was almost no way that a consumer could get a copy of the content without paying for it. However, the Internet has become a distribution channel over which content providers have no control. A distributed, non-centralized network of peers is extremely difficult to control indeed, and the content has escaped from its traditional channels and is now running wild on the decentralized network we call the Internet. Content providers see their cash cow getting away, outside of the fences they have set up for it, and want to catch it again. They want to control the Internet and are therefore trying to figure out ways to become a part of the Internet and offer Internet services like an ISP in order to control this new distribution channel.

Broadcasters

For a long time broadcasters had a pretty sweet gig too. They got paid at least once, sometimes twice, for doing their job. First, they got paid by advertisers who wanted to reach their vast and captive audiences, and if they were especially good they got paid by those audiences as well for the privilege of watching what the broadcasters gave them. They just had to provide a totally secure and reliable chan-



Specialized news services has been one content area in which broadcasters have excelled



These little things have changed the face of the world around us in only ten short years

nel for content providers and they were golden. Movie theaters, television channels, video stores – they all did well.

However, the rise of the Internet hit broadcasters twice. First, they got hit once in the advertising business – as the Internet's ability to track and determine the effectiveness of each and every ad revealed the shocking truth that advertising is surprisingly ineffective. Banner ads on the Internet, while they can be displayed millions of times per month, only attract the attention of 1 percent or 2 percent of viewers. This was a big shock to many advertisers, who stopped spending millions of dollars on online and offline advertising alike.

Broadcasters also got hit in the monopoly department – the Internet has become a distribution channel which they are not a part of. Broadcasters have been slow to realize this, but some of them have begun experimenting with distributing content in multiple formats. At the Korea Communications Conference for instance, Carlson Chu of PCCW in Hong Kong spoke about his company's experiments with content distribution. He announced that two weeks ago his company launched a handheld TV device that could receive 170 TV channels, and they were expecting it to be a great success. This is a step somewhat in the right direction, however the Internet has gotten people to stop wanting to have channels at all. A net-savvy person can find and download their favorite TV shows and watch them whenever they like – it is even a popular pastime for some consumers to save up a number of episodes of a TV show they like and to sit down and watch them all at once in a marathon session. These consumers who used to watch tightly controlled and regulated channel television now want to watch what they like, at their choice of time, and in a quantity of their desire.

So broadcasters have also seen their customers slipping away. In order to appeal to them again, they have been trying to create content of their own – getting in on the content producers' game. They poll their customers and begin to provide specialized content to them based on unique niches. High-quality live news has been one niche that broadcasters can fill, providing something that no one else can. Also, subtitled and/or dubbed content that appeals to specific language audiences has been a success story for broadcasters as well. They realize that in order to succeed, they must also become content producers to appeal to their customer base.

Broadcasters have also been trying to get into the ISP business, most importantly because they have content distribution networks already set up. This has been best illustrated with the advent of cable Internet. Cable TV providers have large, extensive high-bandwidth networks already set up, and in order to exploit these to appeal to their customers the most, they have been using them to provide Internet connections. Also, some broadcasters have become mobile phone operators in order to offer their services to people on the move.

Internet Service Providers

ISPs did not have any sort of business model before the Internet – instead they simply are the Internet. Their business strategy is the one most in alignment with Internet users of today – they want their customers to have the most content available to them in the easiest manner possible, because the more content someone can access from the Internet, the more customers will be interested in it. It is in an ISP's best interests to have complete movies and albums available for download, because more people will want to sign up for their service. Also, most ISPs offer tiered levels of speeds, so users who are interested in higher speeds to get more content end up paying more money to the ISP.

But a good ISP knows that simply providing a connection is not good enough. Everybody in the industry does that. An ISP needs an edge in order to compete, which means it is interested in either providing unique content to its users – acting like a content provider – or providing high-quality content for its users – acting like a broadcaster. Smart ISPs have tried to start doing both, and have broken into the business of broadcasting and content. Because the ISP also offers free access, theoretically, to the content of other broadcasters and content providers, this has some content providers and broadcasters a little miffed.

How to Win

If content providers had their way, a consumer would pay each time they saw or heard something. They would pay a higher fee for each different media format they saw or heard the content on, and they would like it. If broadcasters had their way, they would charge a small fee and play quite a few advertisements for exclusive access to high-quality content doled out in tiny increments at moments of their own choosing. If ISPs had their way, all content would be freely available on its network and its users would share everything. However, each of these scenarios is a loss for the consumer. The first is too expensive, the second is too restrictive, and the third means that the only content available would be guys recording themselves wiping out on their skateboards on YouTube. In order for the consumer to win, there has to be some sort of compromise. There has to be some sort of true, innovative convergence. Hopefully we will see that happen in the next five years.

The Rising Power of Women in India

BY NADEEM AKHTAR

Can you guess what the most positive aspect of India today might be? The answer is a word called HOPE. Hope for a better tomorrow, hope for success, hope for greater possibilities and hope for a country that is indiscriminating of cast, creed and gender. In the dark ages as well as the stone ages, physical might was what dominated existence, wherein it was acceptable to place women in a lower position. Yet with the passage of time, might was gradually replaced with intellect, art, science and inventions, culture, and so on. With this evolutionary progression has come the inevitable change in the status of women in essentially every sphere of influence. The following essay has been written in tribute to six prominent female icons, in support of further acceptance of the intrinsic and fundamental might of women in all domains.

Pratibha Devi Singh Patil

As the first female constitutional head of a democratic nation, this esteemed leader was responsible for aptly redefining the title of 'First Man' to 'First Woman.' The post of president of a titular signatory had a lot of sheen to it back during the tenure of Dr. APJ Abdul Kalam, the father of India's nuclear energy program, but over time the position had gradually become tarnished. However, I am confident to the extent of being boisterous that it will now regain its well-deserved dignity and rightful say under Mrs. Pratibha Devi Singh Patil. Mrs. Patil is a veteran in the field of social causes and polity. She represented the Edlabad constituency in Jalgaon District, Maharashtra, as a member of the Maharashtra Legislative Assembly (1962-1985), and was deputy chairwoman of the Rajya Sabha (1986-1988), a Member of Parliament from Amravati in the Lok Sabha (1991-1996), and the first female and 24th overall Governor of Rajasthan (2004-2007). She married the educator Devisingh Ramsingh Shekhawat on July 7, 1965, had a son and daughter, and together with her husband, she set up an educational institute, Vidya Bharati Shikshan Prasarak Mandal, which now runs a chain of schools and colleges in Jalgaon and Mumbai. She has also set up the Shram Sadhana Trust, which runs hostels for working women in New Delhi, Mumbai and Pune, as well as an engineering college in Jalgaon. She founded and was the chairwoman of a cooperative sugar factory known as Sant Muktabai Sahakari Sakhar Karkhana, and a cooperative bank named after herself as the Pratibha Mahila Sahakari Bank. She was also involved in setting up an industrial training school for the visually challenged in Jalgaon, and the running of a school for poor children of Vimukta Jatis and nomadic tribes.

Pratibha Patil began her political career in 1962 at the age of just 27. She became a deputy minister for education after re-election in 1967 in the Vasantrao Naik ministry. In her next terms (1972-78), she acted as full cabinet minister for the state. She handled the portfolios of tourism, social welfare and housing for successive congress governments under several chief ministers. She was continually re-elected to the assembly, either from the Jalgaon or the nearby Edlabad constituencies, until 1985, when she was elected to the Rajya Sabha as a Congress candidate. It is noteworthy that she has never lost an election that she has contested.

Few people know that Mrs. Pratibha also managed Indira Gandhi's kitchen when Sanjay Gandhi died. She protested the arrest of Indira Gandhi in December 1977 and subsequently spent 10 days in prison. In November 2004, eight years after she had completed her term in the 10th Lok Sabha, Pratibha Patil was recalled from political hibernation to become the first woman Governor of Rajasthan. She was only the second politician from Maharashtra to hold this post, the first being Vasantdada Patil. With Pratibha Patil as Governor, Rajasthan then had women in three significant positions of power in the state, including Chief Minister Vasundhara Raje and Assembly Speaker Sumitra Singh. UPA Chairwoman Sonia Gandhi described her nomination as an "historic occasion" in India's 60th year of independence. She had faced Bhairon Singh Shekhawat, an NDA-supported candidate, in a straight contest, and visited state capitals to garner support and finally won by over 300,000 votes. This also resulted in the potential that she would become the first female President of India.

Sonia Gandhi

The personality we are about to discuss is quite in contrast to Mrs. Pratibha Patil. Referred to in discussion as 'The Madam' (a term used both affectionately and derisively), Gandhi has roots in polity by virtue of her marriage into the first family of Indian politics. Born as Sonia Maino in Ovassanjo (a modest Italian village), she later

married Rajiv Gandhi and was then content to live a life away from political and public glare. But destiny weaved a much different plot by first getting Rajiv Gandhi into public office following the death of Indira Gandhi. With her husband's death, the neglected and sorry state of affairs of the Indian National Congress was something she could not ignore. Rather than waiting for a political miracle to happen, she took the onus upon herself and thrust herself with an acumen and might which could be paralleled by notably few persons. The result of the tussle amongst the phraseology of 'India Shining' and 'Aam Aadmi' (Ordinary man) is known to one and all. She displayed acute diplomacy, farsighted vision, mature decision making, fearless leadership and to top it all off, she showed the nation firsthand what sacrifice means when she rejected the offer of becoming the Prime Minister, whereby her detractors were then found staying away from TV 'bites and quips.'

On May 28, 2005 Sonia Gandhi was elected as President of the Indian National Congress by overwhelming support across the country from all states. In a short span since, she has plunged into active politics before the February midterm Lok Sabha elections. Since Rajiv's death, Sonia had led a nearly reclusive life for six years, save for her appearances at a few official functions. In fact, the top job of the Congress organization was offered to her on a platter immediately after the death of her husband on May 21, 1991. The grieving and reluctant widow declined the offer, however. Sonia, whose Italian origin gave her opponents 'propaganda grist,' became a full-fledged Indian citizen in 1984 following the death of Indira Gandhi. Sonia never let herself succumb to the sometimes-intense propaganda of the opposition. Choosing instead to fight bravely with the situation, she managed to come up with a roadmap for the success of her party. Nowadays, Sonia is not only in the thick of politics, but her children, Rahul and Priyanka, are both dedicated workers of the Congress party.

A question arises of why Sonia has become so popular in such a short span of time. The answer can be found in the way by which she launched a nationwide campaign in the 2004 general elections, crisscrossing the country on the 'Ordinary Man' slogan, which stood in contrast to the 'India Shining' slogan of the BJP-led National Democratic Alliance (NDA). She countered the BJP by asking, "Who is India Shining for?" Her policy was to stick with the questions of a common man that made her popular in each and every part of the world's largest democracy. Her refusal of the prime minister's post after the successful drive in 2004 gave her an angel-like personality in the eyes of many of her countrymen. Through taking charge of the PM's post instead, she then recommended noted economist Dr. Manmohan Singh for the Prime Minister's post, whose innocent behavior and sober personality went on to win the hearts of more than a billion citizens.

Meira Kumar

Here we take a look at the life of yet another inspiring lady, Meira Kumar, the newly elected speaker. The daughter of former Deputy Prime Minister Jagjeevan Ram and a lawyer by training, she has been elected to Parliament five times and has also served as social justice minister. She gave up her job as a career diplomat to enter politics. As speaker, Kumar presides over India's powerful lower house of Parliament, or Lok Sabha. One can aptly say that this move was indicative of a greater national acceptance of women's leadership. With an endearing smile on her face Meira always portrays an air of calm. She has served as an IFS to many countries as representative of India. India's Parliament elected her as its first-ever female speaker after the formation of the 15th Lok Sabha. Her appointment is also important because she belongs to India's lowest caste.

At 64, Meira Kumar was elected unopposed and immediately assumed her post, replacing Somnath Chaterjee. Lawmakers thumped their desks in cheering Kumar as she was congratulated by Prime Minister Dr. Manmohan Singh and L.K. Advani, the leader of the opposition. Meira Kumar has long been actively participating in various movements pertaining to social reforms, human rights and democracy. During the last century's worst drought in 1967, acting as the chairperson of the National Drought Committee of the congress party, she launched a 'Family Adoption Scheme,' under which affluent families adopted those draught-affected families. Meira Kumar is very much committed to human rights and the abolition of India's caste system, and towards this she has visited many places where atrocities were committed against lower castes and targeted tribes during the last 20 years. She has not only staged and led demonstrations, but she has also filed a number of public interest litigation cases in the Supreme Court to ensure justice for those who cannot defend themselves.

Kumari Mayawati

Like Meira, Kumara Mayawati is a female politician of lower caste origin who has been chosen by the Indian masses to a high-ranking position, namely as chief minister of UP, India's most populous state. Mayawati has been the Chief Minister during three other short tenures, but her party holds the absolute majority in the state at this time. She is the highest income-tax payer amongst all politicians in India, paying Rs. 26 crore for the year 2007-08. From her beginnings as a teacher to her ascension to politician, Mayawati always proved herself as a sentinel of the Dalits (a lower caste). In 1977, Kanshi Ram became very influential in her life, resulting in her joining his core team when he founded the BSP in 1984. She has struggled throughout her life towards making a place for herself in Indian politics. In 2001, Kanshi Ram named her as his successor, after her electoral experience and considerable groundwork over the previous 10 years.

Mayawati first won in the Lok Sabha elections in 1989 from Bijnor. In 1995, while a member of the Rajya Sabha, she became a Chief Minister in a short-lived coalition government, and validated her position by winning from two constituencies in 1996. She was again Chief Minister for a short period in 1997, and then for a somewhat longer term in coalition with the Bharatiya Janata Party from 2002 to 2003. In her tenures as Chief Minister, Mayawati had a number of monuments erected to honor Buddhist and Dalit heroes such as Bhimrao Ambedkar, Chhatrapati Shahuji Maharaj, Gautama Buddha and others. Through her tireless campaign efforts, Mayawati managed to attract support from Brahmins, Thakurs, Muslims and OBCs, resulting in the first election of a Dalit party, partly because it (the BSP) had offered seats to people from these communities and partly because of her invincible social engineering formula. Her work had led to a full majority for her party, the first such majority since 1991.

Sheila Dixit

There is one more political name whose discussion is important in order to know the larger picture of effective female leadership of India. She is Delhi's Chief minister Sheila Dixit. Born on March 31, 1938, she has held this po-

sition since 1998, as a member of the Indian National Congress. Dr. Dixit was sworn in as the Chief Minister for a third consecutive term of the Government of the state of Delhi in January 2009 after pulling off a surprise victory in November 2008. She is only the second female Chief Minister of Delhi in history. During the period between 1984 and 1989, she represented the Kannauj Parliamentary Constituency of Uttar Pradesh. As a Member of Parliament, she served on the Estimates Committee of the Lok Sabha. Dr. Dixit also chaired the Implementation Committee for Commemoration of Forty Years of India's Independence and Jawaharlal Nehru's centenary. She represented India at the United Nations Commission on the Status of Women for five years (1984-1989). As President of the Delhi Pradesh Congress Committee, she led her party to victory in the Assembly elections in 1998. She had also served as a Union Minister from 1986-1989, first as the Minister of State for Parliamentary Affairs and later as a Minister of State in the Prime Minister's Office. In 2008, she was short-listed for the World Mayor award. As Chief Minister of Delhi, Dixit was awarded the Best Chief Minister of India by the Journalist Association of India. Her political career hasn't been all roses, as she has received an equal amount of thorns along the way. Along with her 82 colleagues, she was jailed in August 1990 for 23 days by the state government when she led a movement against the atrocities being committed against women.

Indra Krishnamurthy Nooyi

From the political arena, we now conclude with female leaders from two different fields; first from the business sector, then concluding with a sports personality. PepsiCo, the world's fourth-largest food and beverage company's CEO is none other than an Indian woman named Indra Krishnamurthy Nooyi. Born on October 28, 1955 in Chennai, Tamil Nadu, India, Nooyi was named the successor to Steven Reinemund as chief executive officer of the company. She was effectively appointed as CEO by PepsiCo's board of directors on October 1, 2006. Nooyi ranks as the world's third Most Powerful Women, according to a poll of Forbes magazine conducted in 2008. In 2006 and 2007, Nooyi was named the Most Powerful Business Woman in the world by Fortune magazine. In 2008, Nooyi was named one of America's Best Leaders by U.S. News & World Report.

After graduating from IIM-C in 1976, she worked in Cotton Fields. She was admitted to the Yale School of Management in 1978 for her master's degree. Following her graduation in 1980, Nooyi started at The Boston Consulting Group (BCG), from which she moved on to strategy positions at Motorola and ABB. At present, Nooyi is also a fellow at the Ho Corporation and serves on the board of several organizations, including Motorola, the Federal Reserve Bank of New York, the International Rescue Committee, Eisenhower Fellowships and the Lincoln Center for the Performing Arts. Among her friends are former Secretary of State Henry Kissinger, who describes her as a "wild New York Yankees fan." In 2007, she was awarded Padma Bhushan by the Government of India. In 2008, she was elected to the fellowship of the American Academy of Arts and Sciences. She joined PepsiCo in 1994, and was named president and CFO in 2001. On August 14, 2006, she took over as CEO, only the fifth in PepsiCo's 42-year history.

Indra Nooyi had recommended the spinning off of Taco Bell, KFC and Pizza Hut, arguing PepsiCo couldn't bring enough value to the fast food industry. Nooyi also took the lead in the acquisition of Tropicana in 1998, and the merger with Quaker Oats Co. Business officials rave at her ability to drive deep and hard while maintaining a sense of fun. According to some prestigious business reports, since she started as CFO in 2001, the company's annual revenues have risen 72 percent, while net profit more than doubled to $5.6 billion in 2006. Nooyi has also played a vital role in starting Tricon, which is currently known as Yum! Brands Inc. In March 2008, Nooyi was elected Chairman of the U.S.-India Business Council (USIBC), a non-profit business advocacy organization representing nearly 300 of the largest U.S. companies doing business in India and two dozen of India's global companies investing in America. Nooyi leads the USIBC's Board of Directors, an assembly of 25 senior executives representing a cross-section of American industry.

Sania Mirza

Last but not least, there is one more pearl in India's pocket. She is Indian tennis star Sania Mirza. Born on Nov. 15, 1986, Mirza is the highest-ranked female tennis player ever from India, with a career-high ranking of 27th in singles and 18th in doubles. She holds the distinction of being the first Indian woman to be seeded in a Grand Slam tennis tournament. Earlier in 2005, she had become the first Indian woman to reach the fourth round of a Grand Slam tournament at the U.S. Open. She started her professional tennis career in 2003, and in 2004 she was awarded the Arjuna award by the Indian government. Mirza was born to Imran Mirza, a sports journalist, and her mother Nasima in Mumbai. She was brought up in Hyderabad in a devout Muslim family. In April 2003, Mirza made her debut in the India Fed Cup team, winning all three singles matches. Mirza won the 2003 Wimbledon Championships Girls Doubles title, teaming up with Alisa Kleybanova of Russia. In winning the Mixed Doubles event with Mahesh Bhupathi at the 2009 Australian Open, she became the first Indian woman to win any grand slam event. In 2006, Mirza was awarded a Padma Shri, India's fourth highest civilian honor for her contribution to tennis.

These six examples of stupendous achievement by Indian women provide an inspiring reference to a wider, national female collective, and hence it has been decided upon by 'people who matter' to endeavor to provide an equal footing, or at least a congenial environment, wherein the aspirations of Indian women are able to be met. The UPA government is unequivocal and thoroughly committed to the passing of a women's reservation bill within its first 100 days in office. The 'First Woman' has also been emphatic in proposing the formation of a national mission for female literacy and a national mission for the empowerment of women.

The elevation of women's status and the positions being offered to them should not be viewed solely through the eyes of gender issues, but we will know in our hearts of hearts it is only a small homage to endless dedication and a small token against countless wrongdoings, innumerable misgivings and neglect that our mothers, sisters and daughters have been subjected to.

The work for building a new India must continue.

With Best Compliments From

SolBridge International School of Business
Woosung University

www.SolBridge.ac.kr

The Asia Institute Makes its Presence Felt

As Others Focus on North Korea, One Think Tank is Concentrating on the Environment and Technology in Asia

BY PAMARTHY LIKITH
AND SRINIVASA CHAITANYA

There is a remarkable new think tank in Korea that is slowly making its presence felt through a focused approach to engagement in business, technology and policy: The Asia Institute. To start with, the Asia Institute is not located in Seoul, but rather in Daejeon, Korea's center for science and technology. The reason for this decision is clear. The Asia Institute has thrown itself at addressing the pressing issues of our time: global warming, food sustainability, disease and nuclear nonproliferation. Science and technology will be at the heart of the solution to these problems, so it makes sense that a think tank grappling with those issues should be located in such a technology cluster. The Asia Institute has close working relations with research institutes, including the Korea Research Institute of Bioscience and Biotechnology (KRIBB), the Korea Institute for Nuclear Safety, the Korea Institute for Non-proliferation and Control, the National Nano Fabrication Center and Korea's leading technical university, KAIST.

The Asia Institute brings to researchers and technicians a global perspective that can help to integrate their efforts into larger projects. Asia Institute experts in business and policy learn more about the detailed workings of technologies. When the Asia Institute's experts in business and international relations talk with researchers working on genetic treatments for liver cancer at KRIBB, they get a first-hand perspective on contemporary biotechnology that most think tanks do not have. When the Asia Institute holds a seminar with engineers at the Korea Institute for Nuclear Safety, it offers a behind-the-scenes view of the technical aspects of the challenges of nuclear power. SolBridge's Alp Malazgirt, a Silicon Valley entrepreneur, remarked, "The Asia Institute

Emanuel Yi Pastreich
Director
Asia Institute
SolBridge International
School of Business

Equally striking is the decision to put an American in charge of the Asia Institute. Although the heads of such international organizations in Korea are internationals, it is unusual for a research institute within a Korean university to be administrated by a foreigner – especially a program focused on Asia. Dr. Emanuel Pastreich has plenty of experience with Asia: fluent in Chinese, Japanese and Korean, Pastreich has written on Asian culture, politics, science, policy and diplomacy.

is an outstanding forum for engaging in business, technology and policy. We can debate with leaders in the field, challenge assumptions and dream of what is possible. The range of topics is not limited to the political or the economic, but plunges deep into the technical – which is near and dear to me." Recent Asia Institute events have brought leading figures from Georgia Tech, the Nautilus Institute, Stanford University and Tsinghua University to engage in this hands-on policy discussion.

Many think tanks put on seminars about North Korea, APEC, free trade agreements and summit meetings. Few actually have experts on nuclear power present in the discussions on North Korea's programs. The Asia Institute wants to consider the long-term questions that policy makers and businessmen care about: which technologies will be critical to the response to global warming? What techniques in biotechnology promise to contribute to the goal of developing plants that will require less water to thrive?

The Asia Institute is located inside the Solbridge International School of Business. That business school is unusual in itself as it is the only academic institution in Korea with an entirely international faculty and with students from 20 countries. That institutional foundation in a business school that is inherently international positions the Asia Institute to look at business and policy issues from multiple perspectives.

Equally striking is the decision to put an American in charge of the Asia Institute. Although the heads of such international organizations in Korea are internationals, it is unusual for a research institute within a Korean university to be administrated by a foreigner – especially a program focused on Asia. Dr. Emanuel Pastreich has plenty of experience with Asia: fluent in Chinese, Japanese and Korean, Pastreich has written on Asian culture, politics, science, policy and diplomacy. He established a popular lecture series on international relations at the Korean Embassy in Washington, D.C. before coming to Korea, first to serve as advisor to the governor of Chungnam Province, and then to take up duties at the Asia Institute last year.

An Israeli, Dr. David Bigman, is currently conducting a high-profile study of national competitiveness on behalf of the Asia Institute. Bigman is a leading scholar on trade, currency and food security who has just released a book through Macmillan Publishing entitled "Democracy and Hunger."

Fahad Altouraif of Saudi Arabia's NCB Capital, a leading Middle Eastern investment bank, heads the East Asia Middle East Initiative at the Asia Institute, an effort to encourage closer dialogue between these two critical regions.

Director Pastreich imagines a research institute that grapples with Asia as it is. "We hear all about how important Asia is in the Western media, but you would be surprised just how little effort Western think tanks put into actually figuring out how Asia works. Business schools talk about the Pacific Rim, but the case studies produced are seldom set in India or China and rarely focus on leading Chinese, Japanese and Russian firms," explains Pastreich.

The Asia Institute is open to engagement with all of Asia. That point is summed up in the Institute's slogan: "A Broader vision of Asia; A Deeper understanding of contemporary challenges." This expansive perspective captured the imagination of Markku Heiskanen, a retired Finish diplomat with extensive experience in Asia who now serves as its Senior Associate. Heiskanen notes, "The Asia Institute aims at covering all of Asia, which is increasingly linked by finance, energy needs, communication and transportation networks and shared global concerns. I think it is important to enlarge these visions to the whole of Eurasia, which is, in many respects, one and the same continent."

Programs like the Korea-India Science and Technology Initiative, run by Neeru Biswas, and the Korea-Japan Environmental Policy Initiative, administered by Toraaki Nakamura, a Japanese scholar of environmental policy with a Ph.D. from Seoul National University, consider issues that weave regions together. The work of this bilateral Initiative has resulted in a Memorandum of Understanding between the Indian Nano consortium and Korea's National Nano Fab Center. An international conference on information and communications technology involving Korea and India has been another result of the collaboration.

The Asia Institute was at the center of the founding of the Daejeon Green Growth Forum, an effort by scholars in the research institutes of Daejeon to address environmental issues more effectively. That forum now works with Tsukuba University's 3E (Energy, Environment and Economy) Forum and launched a first-ever Asian 3E Forum in May 2009. That 3E Forum in Daejeon involved leading scholars from China, Japan and Korea discussing cooperative approaches to environmental problems.

Such activities can create a spirit of unity by rising above the common habit of just complaining about neighbors in Asia in order to achieve a higher level of business understanding. Granted the scale of the economic and environmental crisis, this process is critical for developing nations.

There are many high-profile conferences that grab attention with their lofty pronouncements. The Asia Institute is notable for its focus on the building of low-key, working-level relations between nations to follow up on those initiatives. The approach may not grab every headline, but it is an absolutely essential role.

Train Your Brain

BY BRIAN THWAITS

We've learned more about the brain in the last 20 years than everything we knew about it before that time. The declaration that the 1990s would be the 'Decade of the Brain' unleashed such a burst of activity in the field of neuroscience that, by the end of those 10 years, scientists had literally turned our knowledge of the brain on its head.

And now, almost another full decade later, we're continuing to add to that now very impressive bank of knowledge. On an almost daily basis, we're learning more and more about the brain, and it's important that we delve as deeply as possible into the implications of what all this research is telling us.

In a practical business sense, we especially need to know how we can improve the way we use our brains to think, learn, communicate, solve problems, market our services and work with others. Certainly, understanding the way our brains operate can give us plenty of ideas about improving pretty much every aspect of our lives. After all, the way we use our heads has everything to do with everything we do.

First of all, it's essential that we're aware of why information doesn't always "stick" easily in brains. Basically, there are three reasons: no interest, no attention and no effort.

No Interest

This is a HUGE problem. The fact is that much of the information most of us deal with isn't, on its own, the most fascinating stuff we've ever thought about. And, unfortunately, this causes our brains to tune out. Like it or not, our brains aren't especially interested in dull, dry facts — and that's a major problem, particularly when those facts are important components of our work.

It's really too bad that we call the brain "gray matter," gray being pretty well the dullest color imaginable. We need to realize that our brains are, figuratively speaking, interesting and colorful and adventurous. They love having a good time! So, to get their attention, we'd be wise to "dress up" information in any way we can, and that can be done in various ways.

For instance, the way we use language has a great impact on whether our message gets across powerfully. The overuse of clichés and buzzwords can easily cause our listeners and readers to simply stop paying attention to what it is we're saying or writing. Their brains more or less go on automatic pilot when words are presented to them in such a banal way, so we need to put a great deal of thought into the way we express ourselves. After all, there's nothing that brains like better than something new and different.

Another way to create interest is to pay heed to the visual style of the information we present to others. In a sense, given their ability to put data so strongly into so many brains, those in the advertising industry are the biggest "brain trainers" in the world — and they're well aware of the potency of shape, color and design. So we should always be aware of how we can create visual impact through the way we present information to others, even when we're forced to deal with just words and numbers in black and white. After all, even something as dry as a résumé can have a significant effect if designed in a way that takes advantage of features such as font choice, paragraph style and white space.

No Attention

Another reason that information doesn't always "stick" to brains is that it tends to enter the brain at a much slower rate than what is considered the brain's slowest operating speed. Neuroscientists believe that brains process data at between 1,000 and 25,000 words per minute (WPM).

Now, compare the minimum rate of 1,000 WPM to the average adult reading rate of 250 words per minute, and you can easily see why we often read material and then almost immediately forget what we just read. The problem is that, in most cases, at least 75% of our brain activity wasn't actually reading; it was, instead, thinking about all sorts of other things. Remember: our brains like to have fun and will always attend the most to what is personally interesting to us.

The act of listening is an even bigger issue. The average speaking rate of most individuals is barely over 100 WPM, suggesting that, when we think we're listening to someone, the truth is that probably over 90% of our brain activity isn't listening at all; instead, it's enjoying itself at that brain party inside our heads!

No Effort

Most of us, unfortunately, believe in "the magic wand" of learning. In other words, we mistakenly think that we can read or listen and somehow retain information without using any kind of technique. We attend meetings and hope that, when we walk out the door, we'll somehow remember all the important information that was shared. We read reports and believe that, when we finish the last page, we'll be able to recall all the details that we read. All without any kind of help. It's as if we wave an imaginary magic wand and hope for the best.

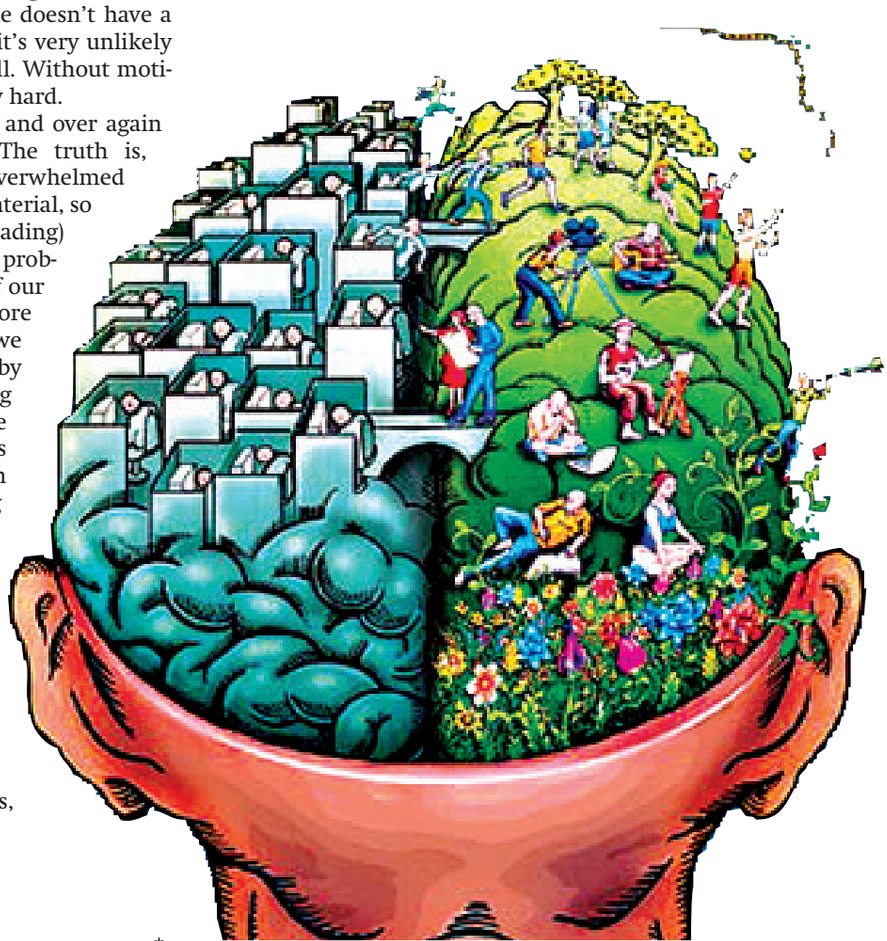
Well, our brains don't actually work that way. They need help to retain information, and that assistance can take the form of many conscious decisions we should make, especially when engaging in passive learning activities such as reading and listening. Taking notes, asking questions, working in groups, discussing material with others who are involved in the same task — these are the kinds of strategies that will help our brains understand and remember better. The rule of thumb is that any type of active learning strategy will lead to more success than trying to learn in a passive way.

Many recent studies have suggested that the most important skill we can develop to be successful in the 21st century, in a world that's constantly changing at a faster and faster pace, is knowing how to learn. In his best-selling book, The World Is Flat, Thomas Friedman obviously agrees as he says that "being adaptable in a flat world, knowing how to 'learn how to learn,' will be one of the most important assets any worker can have."

So, to address this need to develop learning skills as a prerequisite to fostering success, I offer you the following list of what I like to call...

The Seven Principles of Brain Training

1. **Motivation —** This is a tough one. It's difficult enough to motivate ourselves to do things we don't really want to do so, obviously, motivating others to do things they're not terribly interested in can be a daunting task. But it's a challenge that has to be confronted because, if someone doesn't have a personal desire to do something, it's very unlikely that they'll perform their jobs well. Without motivation, brains just don't work very hard.
2. **Practice —** We've been told over and over again that "practice makes perfect." The truth is, though, that brains can be easily overwhelmed when faced with an overload of material, so reading and re-reading (and re-reading) pages and pages of information is probably not a particularly wise use of our time. Rather, we should spend more time condensing the material as we read through it the first time — by highlighting, underlining, making notes in the margins, etc. Once the most essential information has been cut down in this way, we can then incorporate practice by using repetition as a way to strengthen recall for later on.
3. **Emotion —** We remember experiences that make us happy, sad, exhilarated, angry — and that's because anything that has some kind of emotional hook tends to be remembered by our brains. It's almost like our brains and our hearts are connected in some way. This explains, for instance, why elderly people often will forget something mundane that just happened minutes ago, but can recount a sentimental incident that occurred many years (even decades) ago. So adding an emotional element to information, especially material that's dull and dry, will go a long way towards making it more memorable.
4. **Association —** For some reason, the human mind recalls a number of individual items that are connected to each other much better than those same items when they're presented one at a time. Strange but true! That's why lists of separate facts are usually so quickly forgotten, but stories that include a series of facts are often remembered for quite some time. So, if we can figure out a way to join facts together, our brains will thank us for the help.
5. **Meaning —** Unfortunately, many of our school experiences taught us the bad habit of just stuffing new information into our heads without actually understanding it in the first place. And the net result of that practice was that those facts weren't remembered for long. To improve the way we store information, then, we should spend much more time making sense of the material at the outset so that we can recall it more easily later on. Again, active learning techniques such as questioning and working in teams will make the processes of both learning and remembering much more effective.
6. **Visualization —** "A picture is worth..." A thousand words? Well, probably even more than that, really. Brains, don't forget, are attracted by visual effects — so adding any kind of graphic appeal to written material should instantly improve the potential for the success of a learning experience. Obviously, we can't always add bold, colourful pictures to our business documents and presentations, but using charts, diagrams and illustrations is one way we can quite dramatically capture the attention of other people's brains in a way that black-on-white text simply can't compete with.





But we've been so enamoured of these left-brain skills that we've, regrettably, underestimated the tremendous value of what the other side of the brain, the creative side, can offer. Perhaps we've too quickly jumped to the conclusion that the left brain is "school and work" and the right side is "the weekend and the vacation." In fact, it sometimes seems like we've decided that the two sides are so different that they're practically enemies who are fighting with each other.

7. **Chunking —** The main problem with trying to learn a large amount of information all at once is that the experience can be far too overwhelming. It's just not a good idea to attempt to force 30-odd pages of material into our brains en masse! A better idea would be to first break it down into smaller parts, or "chunks", giving our brains the opportunity to absorb just one bit at a time. That's why, for instance, reports that make use of several sections, introduced by headings and sub-headings, seem more readable than others.

So those are the basic principles that help our brains work better. Most of us might use a few of them at any particular time, but it's those of us who manage to use all seven of them at once who will achieve the greatest success.

And, lastly, there's one more thing to keep in mind when looking for ways to enhance the way we use our heads, and that's to understand that the two sides of the brain have very different responsibilities. We've often been told that the left side is the logical one. As a result, we're big fans of left-brainers because we know that successful individuals, in most professions, absolutely need to have strong analytical abilities in order to do their jobs well. And that's certainly true.

But we've been so enamoured of these left-brain skills that we've, regrettably, underestimated the tremendous value of what the other side of the brain, the creative side, can offer. Perhaps we've too quickly jumped to the conclusion that the left brain is "school and work" and the right side is "the weekend and the vacation." In fact, it sometimes seems like we've decided that the two sides are so different that they're practically enemies who are fighting with each other.

However, what brain researchers are now telling us is that the left side actually depends on the co-operation of the right side to work effectively, that it's the power of the right side that makes the left side perform much, much better. So, if we truly want to achieve the maximum potential of our brains, here's a concept we should definitely embrace:

Encourage both sides of the brain to work together as a team.

With Best Compliments From

www.ikbforum.com

Solar Energy is the Way Forward for India-Korea Cooperation

***Ramchandra Pode** - Assistant Professor of Physics at Kyung Hee Univ.*

BY AMANDA MIN CHUNG HAN

"I believe that Korea will create a space for herself in the near future as a top exporter in the global market in the field of solar energy."

In an interview with the Asia-Pacific Business and Technology Report, Ramchandra Pode, assistant professor of Physics at Kyung Hee University, said Koreans' achievement, hard work and vision to invest in science and technology are very admirable.

"As a part of undergraduate course work in Kyung Hee, I asked the students to collect information about the solar cell activities in Korea in recent years. Many students said that big conglomerates have shown interest in solar cells and industries are prepared to start solar cell activities on a large scale and will achieve amazing result soon."

He was fascinated by the high level of confidence of the people and especially of the younger generation to overcome any barrier.

"Korea was one of the poorest countries in the 1960's with US$80 per capita GDP, which has since grown to over $20,000 in 2008."

That was not all he was deeply impressed by.

"Students were so sure about the success of these industries. The confidence they have shown was really incredible. Perceptions and the confidence I have seen here made me also believe that Korea will be a top exporter in the solar energy field," he said.

Asked why solar energy is one of the best alternative energies, he stressed that solar energy has the potential to change the world economies and politics, not just the Korean economy, since solar energy is fair to everyone.

"Solar radiation is free, natural and an abundantly available source of energy; there is no investment in receiving sunlight and no nation has the ability to solely control it. Both poor and rich nations equally receive the solar radiation emitted by the sun."

Solar energy is critical for those people who do not have access to the electric grid. About 45 percent of Indian households use kerosene lanterns for lighting, the cause of many serious health problems. Replacing kerosene lanterns with solar energy can reduce air pollution, improve studying conditions for children, and also lower the cost of kerosene. Overall, quality of life is improved.

According to his explanation, the total amount of energy received on the earth's surface everyday is 10,000 times more than the total global energy consumption per day. A 0.1 percent coverage of the total earth's surface with solar cells with 10 percent efficiency is sufficient to supply all of our energy needs.

"Conventional energy resources such as oil, coal and natural gas are depleting fast. The use of combustible fossil energy sources emits carbon dioxide, pollutes the environment and contributes to global warming."

He added, "When photovoltaic modules are used to convert solar radiation energy into electric energy, no carbon dioxide is emitted during this conversion."

That's why he suggests solar energy as a future alternative energy, a clean and green source of energy that neither pollutes the environment nor contributes to global warming.

"Thin film solar cells, flexible solar cells, and organic solar cells will be the next generation solar cell technology. In my opinion, the investment in renewable energy is the investment for the future and for a better world."

At the recent India-Korea IT Business Forum, Professor Pode suggested Korea and India join forces since the two countries have common and favorable features for collaboration in developing solar energy.

Regarding the size and the population of the two nations, Korea and India have different features. India is a very big country with a population of over 1 billion people, plenty of natural resources and some advantages regarding its geographical location. Although Korea is a small nation area-wise with almost no natural resources, it has the potential to contribute to the world's civilization, science and technology, he added.

"Korea has a strong base of infrastructure in displays and semiconductor fabrications, which makes it possible for Korea to readily adopt and implement solar-cell technology. However, the Korean domestic market for renewable energy is minimal and may saturate in the near future. On the other hand, the Indian domestic market for renewable energy is growing at an annual rate of more than 15 percent, but India doesn't have the basic infrastructure to adopt photovoltaic technology and to produce solar cells."

Although in its nascent stage, the Indian solar industry has huge potential. The lack of adequate investment in solar/photovoltaic manufacturing and R&D makes the growth rate slow. However, it is believed that the high demand for energy and India's tremendous rate of economic growth will act as a catalyst that will see this industry rapidly grow in the near future.

With the different features of the two countries, India and Korea can work to develop technology to convert solar radiation into energy that will be affordable by all, Pode said. In terms of solar radiation, both countries receive about 4~5 hours a day of solar radiation for about 300 days a year. "This way, both India and Korea will benefit from cooperation in this sector."

He also mentioned the two key ingredients to develop

Solar roof at Goethe Institute in Bangalore, India

future solar technology.

"Having the knowledge of both countries' civilizations is very vital to understand the people better. To be successful in any field of cooperation from culture, science and technology, to innovations between two countries, it is extremely important to understand the people from two different civilizations."

In this regard, Prof. Pode proposed that more Korean literature should be made available in the languages of the people of the Indian subcontinent and vice versa.

This solar energy expert also pointed out that the interaction between the global scientific community, research institutions and the multicultural scientific workforce will be the driving force in having a strong sense of competitiveness in scientific and technological innovations.

"At present, the United States leads the world in scientific discovery and innovation by drawing the best scientists to universities, industries and laboratories from around the world. I believe that the multicultural workforce of the U.S. is the essence of competitiveness in scientific and technological innovations."

He added that favorable rules, regulations and strong support by the government will help to grow the solar cell and photovoltaic module industries.

The Korean-German Cooperation Forum on solar energy was founded by the Korea Energy Management Corporation in order to promote the development of the country's domestic solar industry. Korean conglomerates such as LG Electronics and Hyundai Heavy Industries have joint ventures with German companies.

However, collaborations between Korean conglomerates and German companies are limited to the production and manufacturing of solar cells and photovoltaic modules in Korea, Pode said.

He strongly recommends looking beyond scientific cooperation in technology development and innovations.

"Until now, the current cooperation between India and Korea has been limited to the exchange of scientists and scientific research. This cooperation is more scientific than technological. Its functioning is more personal than institutionally based."

He went on say, "Instead of limiting themselves to only this first step, India and Korea must avail themselves of the potential and infrastructure available to them to work on technological innovation and development. They must set up procedures and rules, as well as adopt conceptual models and policies that could facilitate and improve their areas of cooperation."

He discussed the EU countries' co-project, OLLA – Organic LEDs for ICT and Lighting Applications – as a successful example.

"Under this cooperation, several universities, research institutes and companies from different European countries are encouraged to work on the development of next generation technology of energy efficient and eco-friendly organic lighting sources."

Although Korea has many famous electronic companies like Samsung and LG, it has shown little interest in the solar cell industry until recently. There were no domestic manufacturers of solar cells as recently as 2001. By 2005, South Korea tapped German expertise in order to help grow its own solar industry. Also, the Korean government has provided strong political support through an increase in trade and heavy R&D investment. Furthermore, the government has committed $210 million to R&D in the renewable energy field.

In 2008, South Korea emerged as the fourth largest photovoltaic market in the world after growth took off spectacularly in 2005. Domestic photovoltaic installations grew from 1MW of installed capacity in 2005 to 100MW in 2008. Korea is investing heavily in its photovoltaic energy production capacity; forecasts project that Korea will become the third largest manufacturer of photovoltaic modules by 2012, with a 10 percent share of the global market. Korea aims to deliver solar modules worth more than $8 billion and generate 2.67GW of energy by 2013.

While India has become one of the most rapidly emerging solar energy markets, it is also a favorite investment destination for both local and global players, thanks to the country's geographical location, large population, and government support.

The Indian government aims to make India a global leader in solar energy and envisions an installed solar generation capacity of 20,000 MW by 2020, 100,000MW by 2030 and 200,000MW by 2050. The average growth rate of photovoltaic manufacturing in India has been an astounding 35 percent during the past three years and the Indian photovoltaic market is expected to represent up to 600 MW by 2013.

"It is a radical change from the past. Truly, in today's competitive world, new discoveries and technological innovations in the field of solar energy are imperative in order to have an edge. A partnership between South Korea and India will help to develop competitive solar technology in both countries."

Unfortunately there are still many obstacles inhibiting the widespread adoption of solar energy systems. Affordability is a serious issue that must be overcome before the use of solar can become widespread.

"It is true that the initial costs of solar photovoltaic systems are very high and beyond the reach of common people. However, there is no further investment after the installation of the solar system. So, the solar energy system is beneficial in the long term and also does not contribute to global warming."

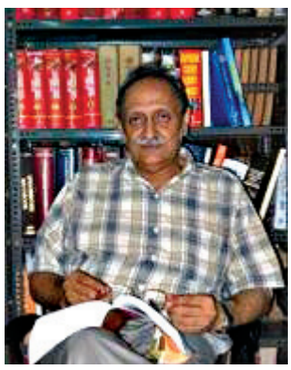
Pode said that the durability and reliability of the solar system are the most important for end users; they must provide reliable, uninterrupted electricity. "Of course, consumers must be assured that they will get electricity throughout the day," he added.

Professor Pode studied at the Nagpur University (India) and earned his Ph.D. in 1984. He worked as a faculty member at the same university until 2007 and is currently an assistant professor of Physics at Kyung Hee University, Seoul. He is teaching courses on Energy Efficient Lighting Sources Technology and Photovoltaic Solar Cells.

500kW a-Si: H modules, produced by KISCO, installed in Haenam, Korea

PATENT – The World of Inventions and Discoveries in India

BY PROF. RAJIV KHANNA



Patent is a right in the realm of intellectual property[1] granted for a particular period under the law to anyone, known as the patentee, who makes full disclosure of his or her invention or discovery of any new and useful process, machine, article of manufacture, or composition of matter, or any new and useful improvement thereof. Upon grant of the patent, the law gives the patentee a monopolistic right to commercially exploit the invention and also the legal protection against unauthorized use of his patent by others. The effect of grant of patent is quid pro quo, i.e. the monopoly is granted for the disclosure of knowledge. The law grants this monopoly for a specified period only and on the expiry of this period the said patentee's monopoly comes to an end at which time it automatically goes into the public domain for exploitation by anybody.[2]

The legal system of patents thus encourages inventions by promoting their protection and utilization so as to contribute to the development of industries, which in turn, contributes to the promotion of technological innovation and to the transfer and dissemination of information, knowledge and technology. In India, the rights conferred to the patentee have been enumerated in Section 48 of the Patents Act of 1970.[3] This law induces an inventor to disclose his invention to the whole world instead of keeping it as a secret. If the invention were to be kept a secret, then the inventor would be in constant fear of it being stolen by others. Such a disclosure not only makes the inventor famous, but also enables him to sell it to an industrial house and thereby gain economically. This object of the Patent Law thus provides a stimulus to others and also to industrial houses to carry out new inventions and discoveries.

Every country has its own Patent Laws and as such there is no "World Patent." However, there is an international filing system that is in accordance with the Patent Cooperation Treaty (PCT). By virtue of this treaty, when a PCT application is filed in one of the member-states of the PCT it is tantamount to the filing of an application for the grant of patent in all PCT member states. The law in India which deals with patents is The Patents Act of 1970 (as amended by The Patents [Amendment] Act of 1999, The Patents [Amendment] Act of 2002 and The Patents [Amendment] Act of 2005).

India is a member of the following international organizations and treaties in respect to patents:

- World Trade Organization (WTO)
- Paris Convention for the protection of Industrial Property
- Agreement on Trade-Related Aspects of Intellectual Property
- Rights (TRIPS)
- Patent Cooperation Treaty (PCT)
- Budapest Treaty

The Patents Act of 1970 specifically states that inventions relating to atomic energy[4] are not patentable and also categorically lays down that the following are not inventions within the meaning of the Act[5], namely -

a. an invention which is frivolous or which claims anything obviously contrary to well established natural laws;
b. an invention of which the primary or intended use would be contrary to law or morality or injurious to public health;
c. the mere discovery of a scientific principle or the formulation of an abstract theory;
d. the mere discovery of a new form of a known substance which does not result in the enhancement of the known efficacy of that substance or the mere discovery of any new property or new use for a known substance or of the mere use of a known process, machine or apparatus unless such known process results in a new product or employs at least one new reactant.

Explanation. – For the purposes of this clause, salts, esters, ethers, polymorphs, metabolites, pure form, particle size, isomers, mixtures of isomers, complexes, combinations and other derivatives of known substance shall be considered to be the same substance unless they differ significantly in properties with regard to efficacy;[6]

e. a substance obtained by a mere admixture resulting only in the aggregation of the properties of the components thereof or a process for producing such substance;
f. the mere arrangement or rearrangement or duplication of known devices each functioning independently of one another in a known way;
g. a method or process of testing applicable during the process of manufacture for rendering the machine, apparatus or other equipment more efficient or for the improvement

or restoration of the existing machine, apparatus or other equipment or for the improvement or control of manufacture;
h. a method of agriculture or horticulture;
i. any process for the medicinal, surgical, curative, prophylactic or other treatment of human beings or any process for a similar treatment of animals or plants to render them free of disease or to increase their economic value or that of their products.

A close analysis of Clause (d) reveals that "trivial changes" in generic drugs are not eligible for patents. This provision, therefore, lays stress on innovation and hardcore research instead of tinkering with known substances.

An application for grant of a patent for an invention can be made under the Patents Act by any person claiming to be the true and first inventor of the invention, or by any person being the assignee of the person claiming to be the true and first inventor in respect of the right to make such an application, or by the legal representative of any deceased person who immediately before his death was entitled to make such an application.[7] The application for a patent has to be confined to only one invention and it has to be made in the prescribed form and filed in the patent office.

Although the essence of a patent is a conferring of the exclusive right on the patentee, the grant of the patent is subject to the following conditions, namely that[8]

1. any machine, apparatus or other article in respect of which the patent is granted or any article made by using a process in respect of which the patent is granted, may be imported or made by or on behalf of the Government for the purpose merely of its own use;
2. any process in respect of which the patent is granted may be used by or on behalf of the Government for the purpose merely of its own use;
3. any machine, apparatus or other article or process in respect of which the patent is granted may be used by any person for the purpose merely of experiment or research including the imparting of instructions to pupils; and
4. in the case of a patent in respect of any medicine or drug, the medicine or drug may be imported by the Government for the purpose merely of its own use or for distribution in any dispensary, hospital or other medical institution maintained by or on behalf of the Government or any other dispensary, hospital or other medical institution which the Central Government may, having regard to the public service that such dispensary, hospital or medical institution renders.

After the grant of the patent, if it is found that the reasonable requirements of the public with respect to the patented invention have not been satisfied, or that the patented invention is not available to the public at a reasonably affordable price, or that the patented invention has not worked in India, then any person may make an application for grant of compulsory license after three years from the date of the sealing of a patent.[9] The issue of compulsory license of the said patent is subject to the conditions, namely (a) that the applicant pays to the patentee the royalty and other remuneration having regard to the nature of the invention, the expenditure incurred by the patentee in making the invention or in developing it and obtaining the patent; (b) that the patented invention is worked to the fullest extent by the applicant; and (c) that the patented articles are made available to the public at reasonable prices.[10]

In case of an infringement of a patent, the aggrieved patentee may file a suit in any District Court or a High Court having jurisdiction to entertain the suit. In such a suit, the aggrieved patentee viz., the plaintiff, will have to establish to the satisfaction of the court about the infringement of his patent by the defendant(s) i.e., the opposing party or parties, and upon doing so, he would be entitled to get an injunction order from the court which would restrain the defendant(s) from further infringing upon his patent rights. Normally in such a suit the plaintiff also seeks an "interim injunction" order from the court pending final decision, by making out a prima facie case and showing that the balance of convenience lies in his favor. Apart from seeking an injunction against the defendant(s), the plaintiff, in his suit for infringement, is also entitled to claim damages/compensation for the loss suffered by him as a result of the infringement of his patent. The plaintiff may also claim from the defendant(s) the profits made by them from the unauthorized use of his patent.[11]

From a bird's eye view it would thus be noticed that in India the patent laws conform to global standards. This is due to the fact that as India is a member of the World Intellectual Property Organization (WIPO), an international organization responsible for the promotion of the protection of intellectual property throughout the world, its patents law has to comply with the TRIPS Agreement.[12]

Prof. Rajiv Khanna is Professor of Law, University of Delhi, India. He is presently a visiting professor of law at Hankuk University of Foreign Studies, Seoul, Korea

References:

1 i.e. intangible movable property which is the result of creativity e.g., patents, trademarks, or copyrights.

2 In India the term of the patent is 20 years (Section 53 of the Patents Act, 1970, as amended)

3 Section48. Rights of patentees

(1) Subject to the other provisions contained in this Act, a patent granted before the commencement of this Act, shall confer on the patentee the exclusive right by himself, his agents or licensees to make, use, exercise, sell or distribute the invention in India.

(2) Subject to the other provisions contained in this Act and the conditions specified in section 47, a patent granted after the commencement of this Act shall confer upon thpatentee -

a. where the patent is for an article or substance, the exclusive right by himself, his agents or licensees to make, use, exercise, sell or distribute such article or substance in India;

b. where a patent is for a method or process of manufacturing an article or substance, the exclusive right by himself, his agents or licensees to use or exercise the method or process in India.

4 Section 4 of The Patents Act

5 Section 3 of the Patents Act

6 Clause (d) of Section 3 has been substituted by The Patents (Amendment) Act, 2005

7 Section 6 of the Patents Act.

8 Section 47 of the Patents Act, 1970

9 Section 84 of the Patents Act

10 Section 95 of the Patents Act

11 Section 108 of the Patents Act

12 an international agreement (which is governed and regulated by World Trade Organization (WTO) that lays down the minimum standards

SHAXI VALLEY, China

BY: JOSH FOREMAN

Bai women wear clothes inspired by Mongol soldiers' battle gear.

Women ascended the dusty mountain wearing Mongol garb. Their white turbans were normally black, but this was a day of mourning. Carrying trays laden with chili fish, smoked pork, rice noodles and candy, they marched to their ancestors' graves. Men sat around and gambled.

The people who gather here every year are Bai, and this is their valley.

In the southwest corner of a country that is more than 90 percent Han Chinese, this valley is almost completely inhabited by the Bai – an ethnic minority that has lived here for more than 2,000 years. The language spoken here is Bai, the food, Bai. The blue and black tunics, inspired by hordes that invaded 800 years ago, are uniquely Bai. Everything in this place feels like China – with a twist.

Down a cobblestone drive, on a small hill among fields of yellow colza, sits the theater of the King of Culture. Rusty nails jut from the building's fortified walls, but inside the stone and wooden theater, Wu Yun Xin chats with local politicians, studies French and puzzles over what happened to his Scotch.

Wu, 34, is the caretaker of the temple – a spot where parents have brought their children for good luck in their studies for 285 years. A few years ago, members of the local government decided to turn the theater into a community center. Funding ran short, and Wu was contacted. They asked him if he'd like to host visiting foreigners, and for two years he and his wife have lived here, serving as tour guides, cooks and ambassadors for the Bai.

In April, Wu, a Bai himself, trekked up a nearby mountain with dozens of valley residents and a few foreign tourists. The locals were celebrating Qin Ming, a festival honoring the recently dead. The Bai bury their dead on the mountains that dot this part of Yunnan Province, and once a year they climb to the graves and offer trays of meticulously prepared food, cigarettes and willow branches.

On this sunny day, people from around the valley got together to send off spirits who, according to local beliefs, hang around their graves, unaware they've died. Grandmothers clutched their grandchildren. Relatives hacked at weeds growing around raised stone tombs. Fireworks exploded. At a table hauled up the slopes, a group of men played cards – $30 to buy in.

After bowing, wailing, smoking and betting, men, women and children tucked into a Bai feast. Bowls of rice in hand, they dipped into dishes of sour pork lung, fish balls, bamboo shoots and mushrooms. They mixed rice and chicken soup with pickled cabbage, green eggs and honey-roasted peanuts. A girl walked around and doled out handfuls of candy and sunflower seeds. A gold-colored dog trotted from group to group, hoping for spoils.

After the feast, the women loaded baskets with the leftovers and headed down the mountain. Men stayed up, drinking and gambling until after dark.

Sarah Shannon, a 31-year-old Canadian, attended the celebration. Locals made her feel a part of the festivities,

After bowing, wailing, smoking and betting, men, women and children tucked into a Bai feast. Bowls of rice in hand, they dipped into dishes of sour pork lung, fish balls, bamboo shoots and mushrooms. They mixed rice and chicken soup with pickled cabbage, green eggs and honey-roasted peanuts. A girl walked around and doled out handfuls of candy and sunflower seeds. A gold-colored dog trotted from group to group, hoping for spoils.

Houses in the valley are made of whitewashed mud brick.

she said, giving her a woven basket of beer to haul up the mountain.

"They were really cool with us being there."

At lunch, Shannon enjoyed eating the local fare. She said it was delicious – mostly. "For me it was the aged egg that I really couldn't get down."

Shannon was following the Tea and Horse Road – an ancient trading path that linked China, Tibet, India and Southeast Asia for hundreds of years. Shaxi Valley was an important stop on the trail, and a glimpse into Bai history shows the influence of foreign cultures.

The well-known plateau nation of Tibet may conjure up images of red-robed monks chanting at an oxygen-starved altitude for many westerners, but for the Bai, the northerly neighbors have been a traditional nemesis. Wu remembers being a child, wary of roaming Tibetans who, according to stories, would collect Bai kids in black sacks.

"When I was young, I still thought Tibetan people ate kids," Wu said. "I was very scared."

According to legend, when Kublai Khan invaded in the 13th century and absorbed the Tibetan plateau into the vast Mongol empire, the Bai greeted him as a liberator. The invasion was violent, and in tribute to the Mongol dead, Bai women wore black turbans and tunics that mimicked the Mongols' plate armor.

"Bai people thought they were very helpful," Wu said.

Today, most older women still wear the outfits.

Remnants of the Shaxi Valley's trading past still shine at the weekly livestock market on Fridays. Tea and horses were traditionally traded in the valley and still are, along with a vast array of animals, food, clothes and sundries.

The market is divided into areas – chickens and chili in one, tofu and mushrooms in another. There's a pork pavilion where unlucky pigs are sectioned and sold, still steaming from the morning slaughter. In another area, women dump sacks of glistening fish onto tarps on the ground. The valley is wholly agricultural, and at the market farmers buy the soil's yield and the tools to tame it.

On a hot day in April, vendors sold brooms, chicken foot salad, purple rope and school supplies. Next to a line of women with sacks of giant beans a barber cut hair. Others hawked fedoras, razor blades and potted plants, cell phones, spoons and rhinestone-studded jeans. The smell of cilantro and chili pepper – ubiquitous in local cuisine – drifted through the thin air.

On the way back to their houses, locals displayed their hauls: woven baskets of veggies, new hats, piglets. Wu and his wife bought soft, fresh noodles and pork.

Wu's guests often leave him gifts from outside the valley: books, booze, an antique Scrabble game. One group left him a bottle of fine Scotch whiskey, but he discovered after a trip out of town that the amber liquid had been replaced with baijiu – a cheap local spirit; he suspects a boy who watched the place while he was gone.

In centuries past, visitors to the valley were minorities from other areas or Han Chinese, debtors, deserters and wanderers looking for a new place to settle. They found one in the Shaxi Valley, although it remains 95 percent Bai.

Today, locals are encouraging tourism. Wu and the Culture King's Theater will be included in Lonely Planet China – a standard tome for many travelers to the country – for the first time soon. But for now, the valley remains untouristed. Visitors still get inquisitive looks from locals, but "ngama" – Bai for "hello" – brings ready smiles.

Bicycle is still a popular mode of transport in Shaxi.

With Best Compliments From

Accentuating Global Opportunities

www.cmai.asia and **www.nkgoyals.com**

I WANT MY iPHONE

BY TRACEY STARK

"Why can't I get a Blackberry or an iPhone?" I asked the young man in the shiny silver suit at the mobile phone store. His reply was the Korean arm X, made by crossing the arms in front of oneself to say 'no' in an almost protective manner, as if such a question was dangerous.

Although this wasn't an actual answer to my question, his response spoke volumes. Essentially, his gesture implied "not possible."

At another store I was told it was a technology issue – something about chips or software. Another answer that I couldn't completely swallow. My current phone (made by LG), although not a smart phone, works in all of the places I have travelled to or changed planes in over the last year: the United States (including Hawaii, Guam and Washington, D.C.), the Philippines, France, Indonesia and Japan, so I doubt compatibility has anything to do with it.

According to the Apple website, the iPhone is available in such technological backwaters as Croatia, Mali, Botswana, the Ivory Coast, the Central African Republic and Honduras, to name just a few of the poorer countries on the list. With this in mind, I am completely dismissing the technology excuse in the most wired nation on the planet (and home to two of the world's top five mobile phone producers).

That leaves a much more sinister conclusion and one that I didn't want to reach: Protectionism.

While protectionism is officially defined as a government policy designed to restrict the import of foreign goods, it could be argued that under the rule of Lee Myung-bak, a former CEO of an affiliate of one of the nation's biggest conglomerates and an avowed believer in laissez-faire economic policies, the chaebol are the government.

Thus, if LG and Samsung want to deny the right of a company to sell their competing goods in Korea, so be it.

But what would be the purpose of preventing tech-savvy Korean consumers from having state-of-the-art gadgets just because they are produced by foreign firms? It's simply a matter of buying time so the domestic producers can come up with a comparable product (or 10) that could compete on an equal footing with, in this case, the Blackberry from Canada (first released in 1999) and the iPhone from the United States (on the market since June 2007).

Two years later and several versions of LG and Samsung touchscreen smart phones later and the foreign products still aren't available.

Rumors pop up again and again about the impending release of the iPhone through a partnership of Japan's NTT DoCoMo and Korea's KTF, but they remain, as yet, just rumors. (The Apple website makes no mention of Korea as a potential market.)

Worldwide, Apple has sold more than 21 million iPhones. Research in Motion say they now have more than 28 million people using the "Crackberry," as the Blackberry is affectionately known among its addicted users.

Samsung and LG phones are readily available in the United States and Canada, so why the disparity? It seems, despite the rhetoric of Korean politicians decrying protectionism as "dangerous during an economic downturn," as President Lee did during the G-20 summit this past spring, it is okay to practice "selective protectionism."

In a keynote speech at the financial crisis meeting in Washington, D.C., Lee said, "Especially at times of great economic difficulty, it is tempting to resort to protectionism." He added, "Protectionism in one country triggers protectionism in other countries. As a result, economic conditions worsen for the whole world… For this reason, I would like to propose that G-20 countries make a 'Stand-Still' declaration on trade and investment restrictions."

In his 18 months in office, Lee has done everything he could to roll back the policies of his predecessor in order to return the chaebol to their former levels of power. Late President Roh Moo-hyun remembered the 1997 Asian financial crisis and the collapse of several large conglomerates (and the near-collapse of many more) and put policies in place to protect the people from the chaebol and to protect the chaebol from themselves. Lee, on the other hand, believes the oft-repeated maxim heard during financial crises: "It'll be different this time."

If Korea wishes to be a leader on the world stage, it should continue to pry open its markets to more and more foreign products. Fair competition promotes innovation. When the pace of innovation slows in Korea and the best products are not available, it is the consumer who suffers in the end.

So what's it going to be, President Lee? An arm X to say "not possible" or a clean break from the policies of the past, when the young republic wasn't among the world's top 15 largest economies?

7 LUCK HILTON POKER ROOM

7 Luck Casino Poker Room has opened at the Millenium Hilton Casino in Seoul - May 15th, 2009 providing cash games and tournaments for players from Korea, Japan, China and the rest of the world.

Our cash games will include a variety of table stakes for different players, including USD .50/$1, $1/$2, USD $2/$5, & USD $10/$20 No-Limit Texas Hold?em Poker tables. Fixed-Limit and Pot-Limit games are also available upon request. In addition, corporate and social groups have the option to hire an exclusive private room within the 7 Luck Casino for private functions. Bookings will initially be available Thursday to Sunday and can incorporate a poker tournament and a variety of accomodations and/or food and beverage packages. If you have any questions about the 7 Luck Hilton Poker Room, please visit our website www.7luckpoker.com or call the poker room direct at 010 457 POKER.

poker room hotline

010 457 POKER

www.7luckpoker.com

M-F Open 5pm
Sa-Su Open 24 Hours

Seven Luck
CASINO

Ye 성형그룹
www.yemedical.com

All about beauty & health

Face & Oral design, Dental Clinic, Cosmetic plastic surgery, Dermatology, Obesity clinic

Your Dreams come TRUE

Total Obesity center

Acne clinic – Acne scar removal

Quick & Painless center – Botox/Filler/Magic Lift

Cosmetic plastic surgery

– Stemcell Injection/Liposuction

Skin regeneration – Medical aesthetic

Face & Oral design

Ye healthy smile – Scaling

Ye Plant – Implant

Ye Bright smile – Dental bleaching

10 Day Miracle Change – SK Laminate Veneer

Tel 02.541.9500
www.yemedical.com

Chungdam-dong 131-6 Kangnam-Gu **Ye Medical Group**

kangnam.yedental.com
Tel 02.557.9065