

Global affinity, leading the growth of the Indian IT industry

Kim Yeung-ki (gate@gate4india.com)
Managing Director of BTN Ltd.

Recently, it has become popular in Korea to attach “nationality” to types of overseas business. One good example is the “Korean Wave.” This newly-coined term is used for everything, from the entertainment business—the origin of the Korean Wave—to general trade goods. The Korean Wave is getting a lot of attention and raising hopes, because it represents success achieved through human capital, not through manufactured goods.

The term “Indian Wave” might be used to describe recent successes in India, an IT powerhouse. According to a research conducted by one economic institution, the Korean Wave was worth as much as USD 4.2 billion in 2011, its economic impact and direct sales combined. Meanwhile, the Indian IT industry recorded USD 59 billion in direct exports in 2011. Exports from India's IT industry rely heavily on human resources, and little on products such as semiconductors and cellular phones.

However, the Indian IT industry has not limited itself by calling its success the “Indian Wave.” The industry intended to grow in the global

business ecosystem, and continues to evolve. This strategy is the reason the Indian IT industry has been able to grow despite the ongoing global financial crisis. In fact, the Indian IT industry has expanded by 900% over the last decade.

○ ● **Continuing growth despite the global financial crisis**

The IT industry, which originated in the USA, began being transplanted to India in 1984 by Texas Instruments, a US-based IT firm. Since then, the Indian IT industry, which has matured through the investment of many foreign companies, has gone through many stages of evolution and become

the core business of India. India's export-oriented IT sectors, particularly the software and service sectors, now have an undeniably strong presence in the global IT industry. The growth of the Indian IT industry is a source of pride for Indians. In the past, India introduced itself to the West by exporting teas and spices. In the 21st Century, the IT industry is

reintroducing India to the world.

The Indian preference for IT jobs has been consistently strong, except during the 2008 global financial crisis, when interest fell temporarily. According to a survey conducted by Business Today, nine out of the top twelve companies for which Indians aspire to work are IT firms. The IT industry was transplanted into India by foreign firms, but it was the skills and determination of Indians that led to the growth of the Indian IT sector, which is now going global.

The ongoing global financial crisis has not stunted the robust growth of the Indian IT industry. The industry recorded USD 89 billion in revenue in 2011. In 2012, its total revenue is expected to surpass USD 100 billion,

As a growth and survival strategy, India's IT industry is expanding its business by attracting customers in new areas, while offering new services to existing customers.

including USD 69 billion in exports and USD 32 billion from the domestic market. This estimate is twice the total revenue of 2007. The European sovereign debt crisis that began last year did not have a significant impact on the Indian IT industry. Even though many EU governments lost money, liquidity of EU companies did not suffer as badly as expected, and had a limited effect on the Indian IT industry.

Despite the global recession, the Indian IT sector's reputation is still growing, because global companies are continually increasing their spending on technology innovation. Thanks to innovation in global business models and the industry's ever-expanding territory, the Indian IT industry is riding high.

● ● **Growth rate expected to double by 2020**

India lacks investment in information and technology, and has substandard infrastructure. This signifies the potential of markets related to the infrastructure industry to grow into mega-markets. By the same token, India's insufficient informatization suggests that there is room for continuous expansion of markets related to information technology. In fact, demand for IT in India is on the rise.

The National Association of Software and Services Companies (NASSCOM), a trade association of India's software industry, predicted that the revenue of the Indian IT industry will reach USD 225 billion by 2020. This figure is twice the estimate for this year, USD 100 billion, suggesting that NASSCOM sees growth potential in the domestic market. Of that USD 225 billion, the revenue from the domestic market is expected to reach USD 50 billion. US-based market research firm Forrester's Research released a similar forecast. Suggesting that India will become the world's fastest-growing IT country by 2015, Forrester's Research predicted that the Indian IT industry will grow by 14% this year.

Promising sectors in the Indian domestic market include building infrastructure (medical and healthcare, resident informatization, and utility) and the entertainment sector (movies and games).

Despite the global recession, global companies are not reducing their investment in technology innovation and informatization. Rather, they are increasing investment to improve their corporate competitiveness. Meanwhile, India's contribution to the global outsourcing market rose from 55% in 2010 to 58% in 2011.

Some people worry about the loss of global competitiveness of the Indian IT sector due to fast-chasing late-comers. This is an issue that has been raised over the last decade. However, India maintains its competitive edge in the IT sector, proving that such worries are unfounded.

○ ● **Heralding change through super-advanced expertise**

As information technology spreads to new areas, rapid innovation and advancement can be seen in certain high-tech sectors. Major Indian IT firms are capable of responding to the demands for change. These companies develop technology and offer their services with super-advanced expertise. Based on their abundant experience, they are producing excellent results, unmatched by any late-comers.

The Indian IT industry continues to transform externally as well. Its adoption of the Hub and Spoke Model is a good example. With India as its main hub, the industry has created offshore hubs to handle requests from various customer sites nearby. By doing so, it is increasing access to customers and improving response effects.

More importantly, this system is opening communication between Indian hubs and offshore hubs. India's main hubs, located primarily in six Indian cities, are operated in conjunction with sub-regional hubs.

India's top twenty IT firms account for 60% of the total revenue of the IT industry, while the next thirty IT firms account for another 17%. Putting

the numbers together, the top fifty IT firms represent 77% of the total revenue of the IT industry. These representative IT firms are achieving both economies of scale and specialization.

○ ● **All-out efforts to expand business to Japan and China**

As a growth and survival strategy, India's IT industry is expanding its business by attracting customers in new areas, while offering new services to existing customers. While maintaining market share in the USA and Europe, India's main export destinations, Indian companies have made efforts to diversify export markets. As a result, they have achieved great success in Eastern Europe, and secured a bridgehead to Africa. The Indian IT sector continues to grow in China and Japan, too. With the abundant cash accumulated from these efforts, Indian IT firms are seeking M&A's to secure a stronger foothold in these markets.

Indian IT firms have demonstrated aggressive movement in the Asian market, particularly in Japan. They have also made rapid progress in China, despite receiving lower returns on their investments than they do in the American and European markets. This shows how Indian IT firms are actively expanding their business. Unlike the American and European markets, the Asian market has language barriers and differences in corporate culture. Indian IT firms have reason to be disappointed by slow growth, and by high investment with low profit in the early stages of their entry into the Asian market; however, they endeavor to succeed in the Asian market in the long run. Acknowledging that language and exclusive corporate culture are barriers to growth, some Indian companies offer language and culture classes to their engineers. In the meantime, African entrepreneurs and public officials invite Indian companies to take part in various exchanges, and Indian companies are actively acquiring African companies in order to establish a bridgehead to Africa.

○ ● **Global affinity is the answer**

From the start, the Indian IT industry has been largely dependent on overseas markets. Clinging to the Indian way in responding to customers would not have allowed the Indian IT industry to become the global IT powerhouse it is today. It would not have prepared the industry for the changing global environment, allowing it to attain innovation and growth.

Indian companies are doing their best to satisfy customers: offering re-education programs to teach their employees American English to better attend to American customers; adopting quality control guidelines on par with those of competing countries; changing their work environment to match those of their customer companies. One Bengaluru-based Indian company doing business with Japan offers sushi at its company cafeteria. The success of Indian companies in the global market lies in these customer-oriented measures.

Currently, approximately 2.8 million people are directly employed in the IT industry in India. About 40,000 of them are foreign professionals, and this number is expected to rise. This is proof of the global affinity demonstrated by the Indian IT industry.

Despite the economic recession in advanced countries, including European countries and the USA, the Indian IT industry will continue to grow, based on its strong growth fundamentals, including robust domestic demand, and its commitment to exploring future markets. 

India seeks efficiency and transparency through e-government

Imm Jeong-seong

Senior Business Analyst of POSCO Research Institute

People often ask me, “Is there no identity card in India? Then how can you verify the identity of 1.2 billion people?” I answer, “India is not some backward country without any means of identification. Passport, driver’s license, permanent account number (PAN), ration card, and voter ID card are all publicly recognized as proof of identity.” Fortunately, I will no longer have to give such a lengthy reply. In January of 2009, the Indian government established the Unique Identification Authority of India (UIDAI) to implement a project for providing all Indians with unique electronic identity cards. Prime Minister Manmohan Singh appointed Nandan Nilekani, the founder and former CEO of the prominent Indian software company Infosys, as the chairman of UIDAI. Having left Infosys, Nandan Nilekani is now leading the public project, determined to devote his life to country and people.



Easy access to public services through NeGP

In 2003, the Indian government launched the National e-Governance

Plan (NeGP). Realizing the limitations of a project implemented by a single state or government agency, the Indian government launched the e-government project on the national level.

In the past, Indians had to wait in a long line to receive even simple administrative services. They had to visit a public office several times to deal with the same affair. Postponement was a daily event. It often took days or months from submitting requisite paperwork and filing applications to getting a copy of a land registry, receiving a passport or driver's license, receiving certificates of birth, death, income, caste, and residence, or receiving pension benefits or other social services. However, it is becoming increasingly easy to receive public services in India. Thanks to the e-government project, public services are available 24/7 online, whenever and wherever Indians want. The Indian government is actively implementing the e-government project by utilizing its globally competitive IT-BPO (Business Process Outsourcing) companies.

SDC Implementation Status (As of September, 2011)

SDC Operational	Gujarat, Tripura, Rajasthan, Tamil Nadu, Puducherry, West Bengal, Andhra Pradesh, Meghalaya, Karnataka, Manipur, Orissa, Sikkim, Haryana, Kerala
Implementation in progress	Nagaland, Maharashtra, Uttar Pradesh, Andaman and Nicobar Islands
Bid process completed	Mizoram, Madhya Pradesh, Bihar
Bid in progress	Jharkhand, J & K, Himachal Pradesh, Uttarakhand, Chhattisgarh, Lakshadweep
Request for Proposal (RFP) under preparation	Goa

Source: Department of Electronics and Information Technology under the Ministry of Communication and Information Technology

The NeGP vision is to “Make all Government services accessible to the common man in his locality through Common Service Delivery Outlets and ensure efficiency, transparency and reliability of such services at affordable costs to realize the basic needs of the common man.” This vision can be realized by implementing various programs and building infrastructure. NeGP infrastructure is comprised of four main components: the Statewide Area Network (SWAN), State Data Center (SDC), the National e-Governance Service Delivery Gateway (NSDG), and Common Services Center (CSC).

First, SWAN is a backbone system, connecting 27 States and 6 Union Territories of India. The Indian government approved the SWAN scheme in 2005, and earmarked INR 33.34 billion for it. If the SWAN project is completed, 50,000 government agencies across the country will be connected to one another. Second, the SDC's are data centers being built by state governments to offer G2G, G2C, and G2B effectively, and INR 16.23 billion has been earmarked for five years. The SDC service will be connected to the core infrastructure, such as SWAN and CSC's, and expanded to the village level. As of September of 2011, SDC's were in operation in 14 states, and in test operation in 4 more states. Other states are building SDC's. Third, the NSDG is a project to share and consolidate

CSC Implementation Status (As of April, 2012)

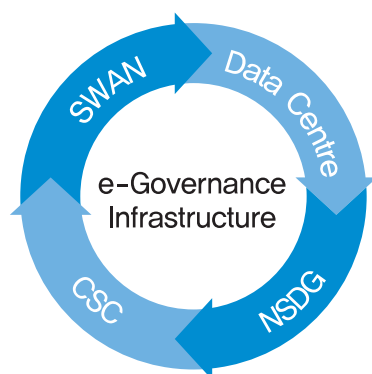
100% operation	Arunachal Pradesh, Chandigarh, Gujarat, Kerala, Madhya Pradesh, Manipur, Puducherry, Sikkim, Tripura
≥ 70% operation	Assam, Bihar, Himachal Pradesh, Jharkhand, Maharashtra, Meghalaya, Mizoram, Nagaland, Uttarakhand, West Bengal
≥ 50% operation	J & K, Orissa, Rajasthan, Uttar Pradesh

Source: Department of Electronics and Information Technology under the Ministry of Communication and Information Technology

information among the central, state, and local governments. Fourth, CSC's are part of the Common Minimum Program (CMP) of the current government for introducing e-government on a massive scale. The objective of CSC's is to provide services of education, public health, remote healthcare, and entertainment. Moreover, CSC's also offer remote rural citizens web-based e-government services, including issuance of various applications and certificates, and payment of utilities. The CSC project was approved by the government in September of 2006 and INR 57.42 billion was earmarked for four years. The private sector and non-government organizations are playing an important role in implementing the CSC project. As of April of 2012, 97,558 CSC's were in operation across India.

Based on these four components, the Indian government is planning various e-government programs. Among them are 27 Mission Mode Projects (MMP) approved in May of 2006. Mission Mode implies that "the objective and the scope of the project are clearly defined, that the project has measurable outcomes and service levels, and the project has well-defined

The structure of NeGP infrastructure



Source: Department of Electronics and Information Technology under the Ministry of Communication and Information Technology

milestones and timelines for implementation.” Currently, 10 central MMP’s, 10 State MMP’s, and 7 integrated MMP’s spanning central and state governments are in operation. If all of these 27 MMP’s are completed, India’s notorious bureaucracy and slow administrative processes will be improved significantly.

It is natural for Korean companies to have interest in India’s massive e-government project because the e-government market is huge, and has great potential.

○ ● **Rising IT demand in the transport and power sectors**

India’s transport and power sectors, among others, are recently drawing significant attention from system integration companies. Under the aegis of international organizations, such as the World Bank and UN Development Programs (UNDP), the Indian government is building an Intelligent Transport System (ITS) in order to improve its out-of-date transport infrastructure. Since December of 2005, the Indian government has implemented the Jawaharal Nehru National Urban Renewal Mission (JNNURM) with a price tag of USD 20 billion. JNNURM includes plans to develop public transport infrastructure and offer basic transportation services to the poor in 61 cities. In addition, the Indian government introduced the National Urban Transport Policy (NUTP) in 2006 to replace old buses and increase the convenience of public transportation by introducing the ITS. Moreover, with a fund of USD 170 million from the central government, World Bank, and state governments, the Ministry of Urban Development is planning to invest in the Urban Traffic Control System, e-Ticket System, and Electronic Tolling System for medium and small cities.

State electricity agencies of India are actively implementing smart

NeGP 27 MMP's status

10 Central MMP's	10 State MMP's	7 Integrated MMP's
• Banking • Central Excise & Customs • Income Tax (IT) • Insurance • MCA (Ministry of Company Affairs) 21 • National Citizen Database • Passport • Immigration, Visa and Foreigners Registration & Tracking • Pension • e-Office	• Agriculture • Commercial Taxes • e-District • Employment Exchange • Land Records • Municipalities • Gram Panchayats • Police • Road Transport • Treasuries	• CSC • e-Biz • e-Courts • e-Procurement • EDI for e-Trade • National e-Governance Service Delivery Gateway • India Portal

Source: Department of Electronics and Information Technology under the Ministry of Communication and Information Technology

grid projects to modernize facilities and systems. A smart grid is an electricity grid that adds information technology to a one-way grid (from power generation to transmission and sale) to maximize energy efficiency by exchanging real-time two-way information between power providers and users.

○ ● **Technology and cost competitiveness**

It is natural for Korean companies to have interest in India's massive e-government project because the e-government market is huge, and has great potential. The Korea Business Center, New Delhi, under the Korea Trade-Investment Promotion Agency (KOTRA), advises Korean companies that intend to participate in various IT projects led by the Indian government as follows: First, it usually takes 12-18 months just for the bidding process. Korean companies must respond flexibly to

various requests for change made by the Indian government before making a successful bid, while taking a responsive approach to negotiation suggestions. Second, any project ordered by the Indian government has a long period of implementation; therefore, Korean companies must manage project schedules by phase according to a timeline. Third, Korean companies should have strong determination to address challenges and difficulties that may arise during the project. Fourth, they should bear in mind that payment even of government-led projects can be overdue. Fifth, they must target important figures in each stage, taking into consideration the importance of building a strong network of decision-makers. Sixth, it is necessary to clarify the scope of available services, target projects, and target areas. Seventh, Korean companies must establish taskforces, given that India's public projects are as difficult as explained above.

However, an increasing number of Korean companies are succeeding in the Indian market. Samsung SDS has built an automatic fare collection system for the Delhi Metro. XeLine, a Korean Programmable Logic Controller (PLC) company, has received an order for a pilot project of the government of Assam for a high-speed telecommunications-based remote inspection and Internet network system, funded by the Asian Development Bank (ADB). Suprema, a leading Korean biometrics company, has concluded a contract to provide Fingerprint Live Scanners for a project for unique electronic identity cards. KBT Technology has entered into an agreement to provide 800,000 smart cards. Presidents of these Korean SME's point out that the most important factors for successful public bids in India are advanced technology and cost competitiveness. Their advice is worthy of note for Korean companies with interest in the Indian IT public infrastructure. 