Vietnam as an IT Outsourcing Destination

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Abstract

Vietnam is quickly emerging as a dynamic destination for the development of low-cost quality software in Asia. The country has the advantages of a strong young, talented labor pool with the lowest labor cost compared to other IT outsourcing rivals and a safe, stabile government environment. The Vietnamese government also has provided great support to the IT sector, including legal and financial incentive packages. However, there are four main challenges that the Vietnamese IT sector is facing which need to be addressed including government corruption, the small scale of IT market, workforce limitations and piracy.

Background

Information technology (IT) outsourcing has grown in popularity as an efficient, cost-effective, and expert solution designed to meet the demands of systems implementation, maintenance, security, and operations. Access to skilled personnel, advanced technology infrastructures, flexibility, and cost savings are the driving forces behind IT outsourcing. The United States, corporations plan to outsource many thousands of Information Technology (IT) jobs to outside firms. Most of these jobs will belong to so-called offshore organizations in India or Southeast Asia. The media buzz and corporate momentum around IT offshoring and outsourcing continues and shows no signs of abating. Specialized IT companies provided their services to many client companies at lower prices than the client companies could do the work in-house. Both companies, the service provider and the client, profited from the arrangement.

In recent years, the phenomenon of global outsourcing of economic activity to the developing countries by businesses in the developed countries has acquired significant importance for both policy-makers as well as for politicians. Although there is no strict definition, the phenomenon of "Outsourcing" refers to the strategic use of external resources by businesses to perform the economic activities that were erstwhile being handled by its internal staff and resources. It thus involves contracts provided by businesses to specialized and efficient service providers, usually located in another country, to perform major functions for the company on a long-term basis. The prime objective behind outsourcing is to reduce global business costs and sustain competitiveness.

Global outsourcing has largely evolved into two forms. The first is Information Technology Outsourcing (ITO), which involves the provision of some or all information systems by one or more service providers, and the typical functions outsourced under an ITO includes data conversion, database administration, help desk, content development, application development, systems administration, mainframe, network management, and website development functions. The second phenomenon is that of "Business Process Outsourcing" (BPO) when an organization turns over the management and optimization of a business process to a third party that conducts the activity based on a set of predetermined performance standards. Typical examples of BPO include call centres, HR administration, finance, and accounting functions.

With globalization and the rapid advancement of information and communication technology (ICT), it is now easier for companies to break up their service functions, and outsource some of these functions to low-cost locations overseas on the basis of

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geographical diversification either by contracting the job to a third party (offshore outsourcing) or by setting up a subsidiary at an overseas location to undertake the same (which is also termed offshoring). This largely complements the existing phenomenon of production fragmentation, wherein manufacturing activities were also broken down into stages and undertaken in different countries in line with their comparative advantage.

Global outsourcing, which was largely initiated by US multinationals and is increasingly being adopted by businesses in developed economies, has led to a massive redistribution of jobs and economic activities around the world. The developing countries in Asia have been an important beneficiary from this, emerging as a major outsourcing destination, because of low-cost considerations. Thus, in the services sector, thousands of jobs have been migrating from the United States, Japan, and some OECD (Organization for Economic Cooperation and Development) countries to India, China, Singapore, Malaysia, the Philippines, and other developing countries in Asia.

Recent trends suggest that US businesses dominate the global share of offshoring (constituting 70 per cent of the market share), followed by Japan and some European economies. According to a study by Cornell University and the University of Massachusetts for the US - China Economic and Security Review Commission, the United States lost more than 400,000 jobs in 2004 to Mexico, China, India, and other Asian nations as multinational corporations (MNCs) restructure operations and shift production abroad.   A study by Forrester (a leading IT analyst) also found that the number of US jobs offshored will grow from 400,000 in 2003 to approximately 3.3 million by 2015, accounting for some US$136 billion in wages.4 McKinsey Global Institute

projects the offshoring market to grow at the rate of 30 to 40 per cent a year for the next five years. In fact, the offshore market is still at an early stage, as among the world's 1,000 largest companies, some 70 per cent have still not outsourced any business process to lower-cost countries. This indicates that significant opportunities still exist for developing countries in Asia, including those in ASEAN, to reap the advantages by positioning itself as an attractive outsourcing destination.

Vietnam, with the software industry's annual growth at 40%, is making a big push to turn itself into an outsourcing powerhouse. Foreign investors continue to show a high level of confidence that Vietnam will deliver on its potential. In the first quarter of 2008, foreign direct investment (FDI) commitments for new projects reached US$5.4bn, up from $4.1 billion in the same period of 2007.

When Americans consider Vietnam, the first images to come to mind are rarely associated with technology. Yet the world's twelfth most populous nation has a rapidly growing technology sector. Annual IT spending in Vietnam was estimated at $1 billion in 2002, and the market is expected to grow 25-30 percent a year through 2010, making it one of the fastest growing tech markets in the world.

While Vietnam suffers from a variety of market conditions that typically limit technology expansion, the market has been so tech-starved that deman-pull is outweighing the many in-country challenges. A significant portion of the surprising rise in Vietnam's tech sector is fueled by the development of an indigenous outsourcing industry catering to offshore contract work. By 2001, roughly 30 software development companies were operating in Vietnam. And while much of this work remains small-

scale and low end, the list of organizations outsourcing projects to Vietnam is impressive. Anheuser Busch, Bayer, BMG, BP, Cisco, Critical Path, Daiwa, Fuji, IBM, Merrill Lynch, Nortel Networks, NTT and Sony have outsourced development to Vietnam, either directly or through thried-party outfits. And while India might initially be considered an offshore rival, several Indian firms have also been active in Vietnam. India's Aptech, NIIT, and Tata Consultancy Services hae each opened training centers in Vietna and TCS has even deployed Vietnamese programmers at one of its centers in Mumbai.

Several factors favor Vietnam for IT outsourcing including lower production cost, a skilled labor pool, a growing number of government incentives, national stability.   Each of these is described in the next section.

Vietnam as an Outsourcing Destination

Cost

One of the most compelling reasons for software outsourcing in general and offshore outsourcing in particular is production cost is production cost. Labor cost in Vietnam is considered the cheapest in all potential outsourcing destinations. Vietnamese programmers can be hired for an average annual salary of $4,000. IT workers with two to three years' experience earn about $5,400, and managers with five to eight years' experience get about $8,500. In India, entry-level workers earn an average salary of $5,443 and mid-tier workers about $8,400, while experienced managers pull in $13,100. China is an emerging competitor to India but is actually more

expensive today. Entry, midlevel, and experienced IT workers there earn average annual salaries of $5,460, $8,800, and $13,730, respectively.

What You'll Pay
Average annual salaries for midtier tech workers
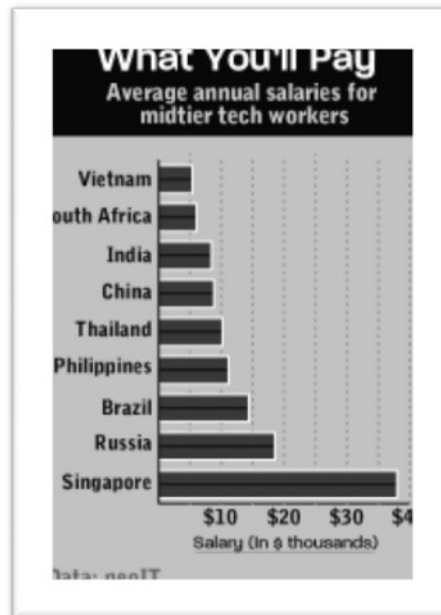
Workforce: A Strong Labor Pool

The population of Vietnam is young, literate and increasingly interested in technology.   Roughly 60% of the population is age 25 years or younger and many are distinctly pro-Western.   The literacy rate of 97% is among the world's highest, roughly equal to the rate in the US, Ireland and Russia and well ahead of India.   And while technology fields are relatively new to the Vietnamese higher education system, these disciplines attract some of the best Vietnamese students each year. Vietnam's education system has a bias towards mathematics that has created a ready source of talent for the IT industry.   Primary education emphasizes science, math and logic providing a solid base for later training. 83% of the graduates from Vietnamese colleges and universities graduate with science degrees. In addition, Vietnam's labor

pool has 80,000 IT graduates, a figure that increases 9,000 per year making Vietnam a particularly good destination for technology outsourcing.

The educational attainment levels of Vietnam's workforce are further supported by government policies that place a strong emphasis on the importance of educations as well as a cultural emphasis on education and receptiveness to training. Primary education emphasizes science, math and logic providing a solid base for later training. As a testament to the quality of the talent, Vietnamese programmers were ranked second out of more than 60 nations in the 1999 International Software Olympiad. Further, researchers have moved recently to propose a more comprehensive, interdisciplinary IS curriculum for the Vietnamese institutions of higher education.

When partner firms have different native languages, these can increase transaction costs. Transactions costs have been suggested as being significant in determining whether a firm will choose to outsource projects or not. However, language skills in Vietnam pale when compared to the rich pool of native speakers in outsourcing hotspot of India, Ireland and Canada. Nevertheless, Vietnam benefits from an alphabet based on Roman characters and a historical legacy that has created a greater awareness of French and English than many East Asian rivals. English is now the primary second language that is taught in Vietnam from sixth to twelfth grade.

The lack of fluent English speaking workforce is also offset by the returning of Vietnamese diaspora, known as Viet kieu, who left Vietnam after the Vietnam War. There are as many as 300,000 Vietnamese experts living abroad, among them 150,000 in the U.S., 40,000 in France, and 20,000 in Canada. In California's Silicon Valley alone,

there are over 10,000, some of whom own hi-tech firms.   These people are highly encouraged by Vietnamese government to come back to Vietnam and use their skills and knowledge to develop their motherland.   In 2007, about 1,000 of them have come back and work in Vietnam, whereas more than 2000 utilize their skills and expertise in Vietnam while still living oversea.

Given the growing demand for in-country work, firms compete hard to retain talent. Significantly, staff attrition rates are lower when compared to Indian and the US onshore development. Low attrition rates foster familiarity between client and contractor and help ensure the project continuity that can be critical for timely and successful deployment.

Government Stability

Although still considered oppressive by western standards, the Vietnamese government has proven to be both stable and secure and is now widely recognized as "legitimate" by the world's major trade nations.   From a political standpoint, Vietnam has enjoyed over thirty years of political stability. The current government has been in place since the reunification of Vietnam in 1975. In the late 1990s, the Clinton administration took steps to normalize relations with Vietnam, signing a sweeping trade agreement in 2000.

From an economic standpoint, Vietnam has a strong and robust economy. Vietnam's gross domestic product (GDP) growth has averaged 7.4% over the past six years. Vietnam's GDP growth is the second fastest in Asia. In 2006, foreign direct

investment (FDI) in Vietnam has estimated to have reached $5 billion. This economic

growth and investment compares favorably with other outsourcing destinations.

Rising Fortunes
Foreign direct investment in
Vietnam, in billions

Source: Asian Development Bank
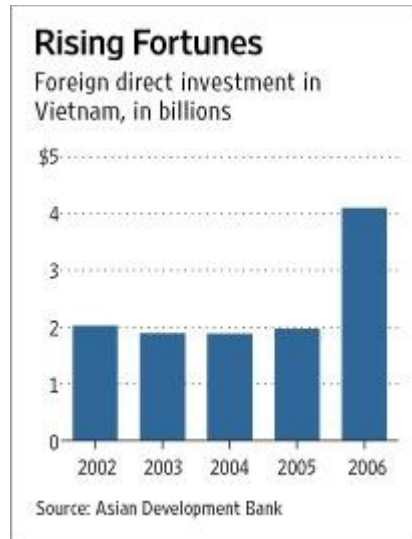
Vietnam is also relatively unique due to the absence ethnic and religious conflict.

Almost 95% of the country is ethnic Vietnamese and over 80% of the population has no

declared religion. Largely because of this, Vietnam has none of the social and religious

conflicts that arise in other outsourcing destinations.   Relatively positive relations with

neighboring countries have been promoted, particularly in the wake of recent concerns

regarding Indian projects being impacted by tensions with Pakistan and further tensions

on the Korean peninsula. Thailand as recently as September of 2006 experienced a

coup where the military unseated the standing government.   In Sri Lanka, the

Liberation Tigers of Tamil Elam (LTTE) and Sri Lankan military forces have clashed on

many occasions recently and there is a US Government travel warning in effect for Sri

Lanka. There is a similar travel warning in effect of Indonesia "due to ongoing concerns

about the possibility of terrorist attacks directed against American or other western

citizens and interest." In the age of heightened security concerns, it is noteworthy that in 2002, Vietnam ranked as the safest nation in Asia for US travelers.

Government Incentives

The nation's communist government presents significant challenges for rapid economic liberalization, however the nation is clearly moving to open markets and offer incentives, particularly in the IT sector.

By the late 1980s, the government had largely abandoned socialist planning. After the failure of its economic policies led to a severe food crisis in the mid 1980s, the communist leadership began to institute a series of reforms in 1988 termed "new though." The 1990s brought a boom-bust cycle that has led to a further maturing of the government's understanding of world markets. While many early investors flooded into the market, but initially struggled to wring profits from Vietnamese investments, the situation has since improved significantly. The local government has learned from early mistakes, and intense involvement from foreign governments and multinationals has helped to create a more positive environment. The strongest example of such improvement can be seen in the IT sector, which the Vietnamese government sees as one of the nation's keys to economic growth.

In June 2000, Vietnam's Prime Minister Phan Van Khai signed a decree to build and develop the country's software industry. Since the signing of the decree, the government has provided a variety of financial incentive packages. The government has kept import duties on IT products low and has introduced a set of tax and other incentives for IT firms. Businesses involved in software production and services, both

local and foreign-invested, are exempt from corporate income tax for four years from the date they generate taxable income. Software products will receive a zero VAT (value added tax) rate and be free from export tax. The government allows for foreign investment and most significantly full foreign ownership of Vietnamese firms involved in the technology sector. Setting up a software firm is also considered easier than creating service firms in sectors like advertising, which may be more considered more socio-politically sensitive.

Further reforms and investments are targeted at infrastructure and training. In February of 2003, in an effort to advance a more competitive and responsive tech sector, the government significantly restructured the leading state-owned technology entity, the Financing and Promoting Technology Corporation (FPT). The FPT has now been divided into three firms; FPT Information System Company (a state owned systems-integrator and software developer), FPT Distribution (the firm which owns the master distribution contracts with IBM, HP, Cisco, Microsoft, Oracle and other large firms), and FPT Internet, which controls Internet activities in both Hanoi and Ho Chi Minh City.

FPT reported 2005 revenues of more than US$517 million, and revenue growth averaging 70 percent annually over the past five years, making it one of the largest private technology companies in Vietnam by revenue. FPT leads the industry in terms of sales or subscribers in many of its business lines in Vietnam, which include mobile distribution, systems integration, software services, telecom, Internet and e-media content. FPT also reports 28,000 students enrolled in its technological training academies throughout the country, since 1999.

With the infusion of capital and global expertise from the investment firms, FPT intends to explore new product and services lines. The company, which is already a software-development services provider to Japan, also will have increased capability to expand its products and services to other geographies. Additionally, Vivek Paul, a partner with TPG, will serve as Special Strategic Advisor to FPT, bringing his global technology industry experience and leadership to help FPT achieve its global ambitions.

The most spectacular among the government's intended efforts to improve S&T infrastructure — and to help shape innovative capabilities for industrial and other purposes — are two high-tech parks. During the past 4 years, detailed plans have been made in both Hanoi and HCMC to relocate the R&D laboratories and facilities of the two campuses of the national university to the vicinity of two high-tech zones. The purpose is to stimulate closer interaction between academic staff and other specialists among Vietnamese and foreign firms and institutions. It is assumed that the spiral pattern of innovation, involving university–industry–government experts in a high-tech park, will capture the evolution of multiple linkages at different stages of the expected commercialization of S&T and related know-how.

The high-tech park in the Hanoi area, is implanted and building, is located in the Dong Mo-Ngai Son area about 20 miles from the centre of the city, where the new campus of the northern branch of Viet Nam National University is to be located — next to a national cultural centre and an attractive industrial zone. Saigon Hi-Tech Park is located 9.3 northeast from downtown Ho Chi Minh City.   It is proximity to 55 industrial zones and export processing zones surrounding HCMC and other major cities,

providing the supporting and clients' base to SHTP tenants. The Park is also adjacent to HCMC National University with over 15,000 students in science and technology.

On Feb 20th, 2008, Saigon Hi-Tech Park has officially become a member of Asian Science Park Association (ASPA), an international nongovernmental organization that was established in 1997 in Japan with a purpose to accomplish joint development of scientific technology and industry & economy in Asian region.

Outsourcing to Vietnam: The Challenges

1. Government-related

The present government clearly struggles with finding what it feels is an appropriate balance between pro-market and pro-socialist ideology, often with mixed results. While success and progress in the IT sector is notable, particularly when compared with other sector, the nation has been slow to broadly execute the second phase of modernization. The Vietnamese government continues to suffer from a reputation for slow-moving, corrupt and capricious relations with foreign firms as well as a lack of transparency and legal protection for firms doing businesses in country.

2. Scale

For all its growth and promise, the Vietnamese market for quality export-oriented software services is still very small. In fact, comparisons with Indian market, the two are significantly different in scale and capabilities. Software exports alone in India topped $6.2 billion in 2001, a figure that is over six times larger than Vietnam's entire IT market. Vietnamese firms will also have to grow to be considered for larger, more

comprehensive deals. There are only a few firms that have over 200 developers and no

outsourcing firm currently has a deep talent pool of 700 plus developers common

among the larger global outsourcing firms in other countries.

3. Workforce Limitations

While the nation continues to advance its training program for technology

workers, Vietnam is still largely an agrarian society.   The US Commercial Service in Ho

Chi Minh City reports that 80% of the population's 86 million people still live off the land,

and nearly 40% of the population lives in poverty. English skills among the local

population, while better than most regional rivals, are still limited. Western-style

management training programs are rare, and giving that foreign investment remains a

relatively new phenomenon, project management and general business skills among

the local population remain in short supply.

4. Technology Infrastructure

Vietnamese internet connections are often slow and expensive and there are

strict controls on the flow of information. While the government has pledged to address

the problem of telecommunication costs, Vietnamese telecommunications are

considered among the costliest and most restricted in Asia (Peng).   A 128K leased line

can cost $2000 per month and international phone calls are among the most expensive

in the world.

The tension between the openness of the Internet and its potential for positive

economic impact is often at odds with the long-standing censorship policies of the

current regime. The government is liberalizing Internet restrictions on privileged

organizations, particularly those associated with IT projects with Western customers. However, the Internet was banned in Vietnam prior to 1009, and attitudes toward Net use remain rigid. Two Vietnamese "cyber dissidents" were jailed in 2002, one received a four year sentence for posting Internet essays criticizing the Vietnamese government, the other received a 12 year sentence for e0mailing information to dissidents abroad. The Culture and Information Ministry has also proposed several restrictive measures including requiring Internet cafés to monitor patron activities and requiring Vietna-based websites to obtain licenses and seek approval each time content is changed (Associated Press, 2003). The government continues to block hundreds of potentially useful commercial Internet sites for most users, however a gateway solely targeted at enabling software companies to bypass Internet restrictions has been promised. It remains to be seen how such policies are perceived by trade partners when comparing Vietnam to other outsourcing destinations.

5. Piracy

Also as in many developing nations, piracy is rampant. Still, about 92 percent of software in Vietnam was pirated as of 2004, the highest rate in the world, according to the Business Software Alliance, a trade group funded by Microsoft. This dynamic has the unusual effect of the encouraging the local software market to remain focused on providing products for export, indeed, in 2001, it was estimated that one in every five in local IT contracts were for projects delivered outside Vietnam. The lack of dependable intellectual property protection will restrict the growth of the domestic software industry as well as limit the appeal of Vietnam as a market for high-quality imported software and training materials.

Other IT outsourcing destinations

Philippines

The Philippine economy has been grappling with one of the highest unemployment rates in Southeast Asia and has to cope with a huge budget deficit. In spite of this, it is one of the leading centres for ITO in Southeast Asia. As a former US colony, with 300,000 fresh graduates produced per year, Filipinos are more familiar with American culture, business environment, and accent. It ranks second amongst the most popular destinations for offshore outsourcing involving ITO, with an industry estimated to be worth US$1 billion, employing about 130,000 people in call centres and back office service centres. The number of agents in Philippine call centres has doubled to about 40,000 over the past year and industry analysts expect that number to double again by the end of 2005.7 A Columbia University survey of 45 US-based companies has observed that the Philippines have been the second-largest recipient of ITO, sharing nearly 30 per cent of the market.6 This is largely due to the high level of IT skill availability in the Philippines at a relatively lower cost than in Singapore.

Thus, the immense potential for global outsourcing to the Philippines could be reaped to gainfully employ Filipino graduates. With this industry expected to channel US$800 million this year to the Philippines, outsourcing can evolve as a solution to finance the country's US$3.5 billion annual budget deficit.

Malaysia

Malaysia's IT-savvy infrastructure, large pools of local and foreign graduates, and a multilingual society are favourable factors that have led it to be chosen as an offshoring centre. The country has invested US$10 billion in two high-tech parks - Cyberjaya and Putrajaya - as part of its Multimedia Super Corridor (MSC) project to attract international businesses. The MSC is now being evolved as the region's leading outsourcing centre. This is so as outsourcing operations have emerged as one of the largest sectors in the MSC, spawning investments of more than one billion ringgit by 49 companies and creating some 8,000 new jobs.9 A global survey by US consultancy firm AT Kearney ranked Malaysia as the third most attractive offshore location in terms of cost and skills, behind India and China.

In 2003, banks and transportation companies such as Maybank and Malaysian Airlines (MAS) signed several large ITO deals. Market research firm IDC (International Data Corporation) estimates that outsourcing by Malaysian companies will rise at a compound annual growth rate of 27.2 per cent over the next five years and the ITO market grow to almost US$350 million in 2008.10 However, medium levels of IT skills availability and IT network infrastructure could be an impediment for Malaysia to attract jobs that are outsourced at the high end of the value chain.

Singapore

Singapore's comparative advantage on outsourcing is different from other Southeast Asian countries. In terms of wage cost, Singapore is less attractive to outsourcers but costs are not the only determinants. Very few countries are comparable with the city-state's infrastructure facilities and strong and efficient legal systems, which

are important determinants for offshoring service functions, particularly through BPOs. Thus, factors such as a wage rate lower than in the United States, world-class telecommunication infrastructure, efficient logistics, strong legal system, intellectual property rights protection, and a trusted regulatory framework in areas such as finance and telecom, stable government, and a highly skilled workforce of 2 million people, prompt US companies to choose Singapore for high-end sensitive service operations such as data centres as well for other high-skilled service functions, namely, R&D, design services, software development, medical testing or analysis, and technology system designs. Japan is also increasingly outsourcing such high-end activities to Singapore, due to the latter's well-developed logistic services and state-of-the-art international laboratories. Singapore can now receive and deliver diagnostic samples consignment within 24 hours to Japan.11 Thus, in 2003 approximately 20 per cent of Japanese laboratory tests were outsourced to Singapore. This has led to a tenfold increase in biomédical packages from Japan. This strengthens its position to be a leading hub for biomédical services. Indeed, Singapore is targeting to reap the benefits from outsourcing US$300 million worth of pharmaceutical business, 20 per cent from Japan, amounting to about 20 per cent of the total market size.12

A newly released report by the US Department of Commerce reveals that Singapore has been ranked as the second fastest-growing outsourcing hub (after India) as far as US businesses are concerned. This industry has been growing at an average rate of 21.7 per cent per year, and in 2003 Singapore executed US$800 million of outsourcing business from the United States.13 Invariably, the large presence of US

MNCs in Singapore has contributed to shaping the city-state as one of the fastest-growing outsourcing hub in the world, especially for higher-end BPOs.

Current IT Companies in Vietnam

TGP

TPG is a private investment partnership that was founded in 1992 and currently has more than US$30 billion of assets under management. With offices in San Francisco, London, Hong Kong, Fort Worth and other locations globally, TPG has extensive experience with global public and private investments executed through leveraged buyouts, recapitalizations, spinouts, joint ventures and restructurings. TPG was one of the first private equity firms dedicated to the Asia region through its investment arm TPG Newbridge. The firm seeks to invest in world-class franchises across a range of industries including technology (Lenovo, MEMC, Seagate), industrials (Altivity Packaging, British Vita, Grohe, Kraton Polymers, Texas Genco), retail/consumer (Debenhams, Ducati, J. Crew, Myer Department Stores, Neiman Marcus, Petco), airlines (America West, Continental), media and communications (Findexa, Hanaro Telecom, MGM, TIM Hellas), financial services and banking (Endurance Specialty Holdings, Fidelity National Information Services, LPL Financial Services, Shenzhen Development Bank) and healthcare/pharmaceutical (IASIS Healthcare, Matrix Laboratories, Oxford Health Plans, Parkway Holdings, Quintiles Transnational), among others.[1]

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[1] www.tpgventures.com

In 2008, TPG has invested $15 millions in FPT stocks, becoming one of FPT's major partner.

Intel

Intel Capital, Intel's venture capital organization, makes equity investments in innovative technology start-ups and companies worldwide. Intel Capital invests in a broad range of companies offering hardware, software and services targeting enterprise, home, mobility, health, consumer Internet and semiconductor manufacturing. Since 1991, Intel Capital has invested more than US$6 billion in nearly 1,000 companies in more than 40 countries. In that time, about 180 portfolio companies have been acquired by other companies and another 155 have gone public on various exchanges around the world. In 2005, Intel Capital invested about US$265 million in about 140 deals with approximately 60 percent of funds invested outside the United States.

Arvind Sodhani, President of Intel Capital, said, "Our investment in FPT reflects Intel Capital's global presence and reach in emerging markets, and is a testament to our continuing efforts to encourage entrepreneurship and technology innovation worldwide. We see strong prospects for Vietnam's IT sector and look forward to making a contribution to Vietnam's success through support of fast-growing companies, such as FPT."

In 2008, Intel invested another $20 millions in Vietnams' FPT, on top of its current 1 billion invested in Saigon Hightech Park in Ho Chi Minh City.

Sun Microsystems and Frontline Technologies

In 2007, Sun Microsystems, Inc. and Frontline Technologies Corporation Ltd (Frontline) announced an agreement to establish Sun Vietnam, Sun Microsystems' first joint venture created as part of its new worldwide Sun Equity Partner (SEP) program, designed to improve access to Sun's products and services in emerging markets. Sun Vietnam extends Sun's current presence in Vietnam and supports the country's rapidly growing interests and demands for enterprise-class IT services and solutions.

"With a commitment to better serve our customers' needs and build stronger communities, the Sun Equity Partner Program represents a new route to market for Sun to fortify its presence in key markets around the world in partnership with leading regional experts," said Don Grantham, Executive Vice President, Global Sales and Services, Sun Microsystems, Inc. "The global approach of this program will allow us to expand our presence in emerging markets that adopt and adapt new technology at a rapid pace. Our stronger presence in Vietnam enables us to better support local entrepreneurs, regional businesses and our global clients."

Sun Vietnam is the first entity to be formed under the SEP program, a global push designed to drive growth for Sun by increasing market coverage quickly and cost efficiently. Sales offices are expected to open in both Hanoi and Ho Chi Minh City in 2008. Sun Vietnam's presence in the market is expected to serve as a catalyst to hasten the development of Vietnam's information and communications technology industry.

Sun has maintained a presence in Vietnam for years. The formation of Sun Vietnam extends its position as a driving force behind the growing wave of Internet and e-commerce companies in Vietnam and will continue to drive Sun's comprehensive range of software and systems solutions, including the Solaris(tm) Operating System, Java(tm) technologies, Sun Fire(tm) systems and Sun StorageTek(tm) offerings, as well as professional training and services. Sun Vietnam was modeled after the highly successful formation of similar partnerships in Indonesia and the Philippines in the past several years. Both regions now support hundreds of Sun-focused sales and services professionals.

Conclusion

With a growing and youthful IT workforce, low costs and high aspirations to develop its software services, Vietnam is a natural offshore location and has all the ingredients to become the leading market choice in the next few years. However, the Vietnamese government needs to solve problems that challenge the IT sector to help make the country become the most competitive IT outsourcing location in the world.

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APPENDIX:

1. Map of Vietnam

2. Map of Saigon High-tech park

3. Key Tenants in Saigon High-Tech Park

4. FPT Financial Statements

Keys Tenants in Saigon High-Tech Park

Intel Products Vietnam
- Country of origin: United Slates
- Total Investment: $1billion
- Scope of activities: assembly, testing and packaging of chipsets

 Nidec Corporation
- Country of origin: Japan
- Total Investment: $I billion (2005-2010 period)
- Scope of activities: Nidec Vietnam: manufacture of precision motor fans for computer hard
drives Nidec Sankyo: manufacture of precision stepping fans and optical pick-ups for computers

 FPT
- Country of origin: Vietnam
- Total Investment: $36 million
- Scope of activities: R&D centre for software development

Sonion
- Country of origin: Denmork
- Total Investment: $25 million
- Scope of activities: manufacture of super micro acoustic parts for cell phones.

Jabil Circuits
- Country of origin: United States
- Total Investment: $100 million
- Scope of activities: manufacture of printed circuit boards and ink jet printers.