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SUSTAINABLE DEVELOPMENT OF OFFSHORE SOFTWARE OUTSOURCING IN VIETNAM: THE CASE OF FPT SOFTWARE

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Abstract

The aims of the paper are to describe the Vietnamese offshore software outsourcing industry and to investigate key success factors of the largest offshore software outsourcing company in Vietnam, FPT Software. Vietnam has taken ICT industry a strategic one for its economic development, and it has been showing high growth in that field. Especially, Vietnam has potential to be successful in offshore software outsourcing, but Vietnam won't be sustainable in this competitive market unless it overcomes several weaknesses. FPT Software as the best achiever so far is a good model for Vietnamese software companies. The key success factors of sustainable development in FPT Software are found in good managerial practices, application of international quality standards for software development, and highly motivated and skilled workforces. Based on the case study, we discuss the sustainability of Vietnam's offshore software outsourcing.

Keywords: Vietnam, offshore software outsourcing, sustainability, ICT, FPT Software

1 INTRODUCTION

Information Communication Technology (ICT) industry has been changing dynamically, especially as globalization proceeds. Globalization has allowed a new opportunity for developing countries, which have a large pool of well-educated human resource. They are willing to provide their skills at lower prices. Currently offshore software outsourcing has been regarded as a driving force for the development of developing countries, and it has gained attention especially since India became the most successful outsourcing destination.

Vietnam is one of the countries which take ICT industry a strategic one for their economic development, and it has been showing high growth in that field. Vietnam has a substantial size of skilled labor force specialized in ICT, and the government has set the long-term plan for its success in the world offshore software outsourcing market. Vietnam also has ICT companies actively penetrating into the world market.

However, as the offshore software outsourcing market grows and it is seen as an attractive opportunity to many developing countries, competition is becoming fierce at the same time. It seems that Vietnam

has successfully stepped into offshore software outsourcing market (Carmel and Tjia 2005) but its sustainability is not assured yet. It also contains some downsides, for example, a relatively lower quality of its services. Unless Vietnam takes proper strategies to overcome its limitations, it won't be able to step forward into the global market. Indian companies succeeded not only because of low labor costs, but also because of their ability to continuously move up along the value chain of software industry (Carmel and Agarwal 2002, Khan et al. 2002).

There are some studies on the Vietnamese offshore software outsourcing (Chidamber 2003, Doung 2004, HCA 2007) but there is little research on the firm level except Gallagher and Stoller (2004). Thus this paper will introduce one case, FPT Software. FPT Software took advantage of the benefits the Vietnamese software industry possesses, while it has successfully overcome its limitations. It is now one of the most successful companies in Vietnam. By analysing the strategies of FPT Software, the paper investigates what is required to Vietnamese software companies to be successful in offshore software outsourcing.

2 VIETNAM'S OFFSHORE SOFTWARE OUTSOURCING

2.1 Offshore Software Outsourcing

Offshore software outsourcing is beneficial to both providers and clients. From the perspective of providers, the countries that receive outsourced projects do not have much to lose (Kim 2004). They receive payments from overseas companies for their services, and the money feeds a good part of their population, while the ICT projects serve to train their workers as the workers learn how to develop complex commercial ICT products (Kim 2004). Also, developing countries can leap over the conventional path of economic development which was observed within the late developers in the North East Asia, while creating a new pattern of development achieved by developing software industry, notably in India.

Software industry is regarded as a strategic industry to save time and cost of economic development. It is a business which has relatively low entry barriers (Heeks 1999). In this regard, offshore software outsourcing is seen as one of the fastest ways to the state's industrialization and modernization goals (Doung 2004). However, offshore outsourcing providers are also exposed to some negative aspects. Usually outsourced projects are inclined to provide software services which are relatively low-skill software coding and testing, leaving the high-skill tasks of analysis and design residing in Western hands (Heeks 1999).

From the perspective of the clients, one of the most distinctive advantages of offshore software outsourcing is cost efficiency. Traditionally, low-level tasks such as software coding and testing can be performed in less-developed countries at costs as low as ten percent of domestic ones (International IT services 2002). While saving cost, the client companies can also save time by preventing themselves from being distracted by time-consuming and less-important works. So they can pay more attention to their main businesses such as system analysis and design.

Another significant reason for outsourcing is shortage of IT expertise in developed countries. Some firms want to outsource in their own country, but the personnel available for specific tasks does not have sufficient qualifications, whereas the programmers from countries like India do have the right qualifications (Khan et al 2002). Often a US-based company may have a very clear idea about the market or have specific technological expertise, but lack the experience and expertise to implement specific software projects (Mezak and Vermeulen 2003). So those companies can find the skilled expertises in other countries. Furthermore, this shift has been accelerated by technological development and globalization. However, unexpected and hidden costs incurred by poor estimates of

the initial contract, security problem, and political instability in a provider's country may be the threats of offshore software outsourcing to the clients.

2.2 Emerging Vietnam in Offshore Software Outsourcing

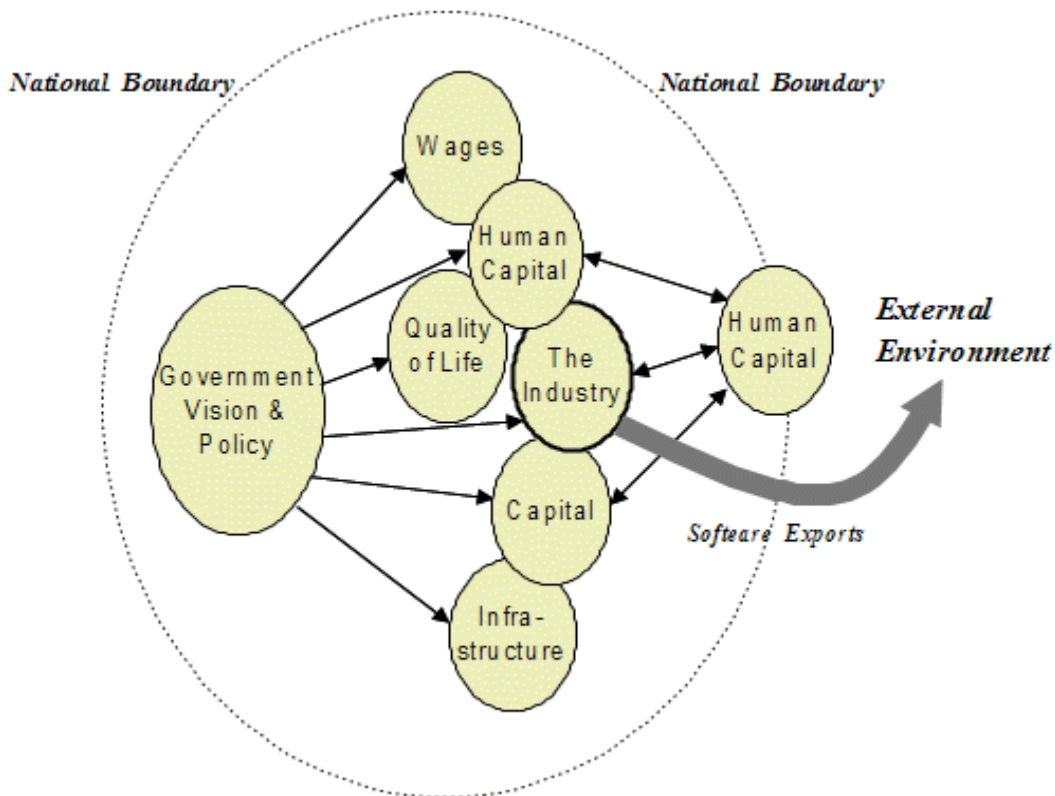
Vietnam's emergence as one of the fastest growing economies in Asia over the last two decades has been widely hailed. This has been attributed to a series of reforms, known as Doi Moi, which started in the latter part of the 1980s (Balisacan et al. 2003), so it is over 20 years since Vietnam's ruling communists abandoned collectivism and embarked on their market-based reforms (*The Economist* 2007). The main motivation for these policies was the renovation of the economic mechanism (Son and Thanh 1998), and the results of them have yielded simultaneous improvements on many fronts - ranging from GDP growth to reduction in the food poverty line (Chidamber 2003).

Especially, along with its economic growth, the development of ICT related industry in Vietnam is noteworthy. Vietnam, the world's twelfth most populous nation, has a rapidly growing technology sector (Gallaughner and Stoller 2004). ICT market in Vietnam in 2006 reached 1.15 billion US\$, 22.6% up, as much 3 times as the common growth of the world, 15.8% for hardware and 43.9% for software and service (HCA 2007). Among the sectors of Vietnamese ICT industry, the software outsourcing export is also showing a significant growth. Turnover of software and services in Vietnam reached 360 millions US\$ in 2006, among which 105 millions US\$ was achieved by software outsourcing, which increased by 50% (HCA 2007). Thus if Vietnam keeps this pace, the outlook of Vietnamese software industry is expected to be still brighter in the future.

2.3 The Oval Model

Before investigating the success factors of FPT software, strengths and weakness of the Vietnamese software industry are examined. To assess the sustainability of a country's software outsourcing industry and to establish the proper strategies, it is essential to understand its strengths and weaknesses. Vietnam has lots of potential to sustain in the offshore software outsourcing market in that Vietnam satisfies the basic qualifications enabling the country to actively participate in software outsourcing competition, but it also has some characteristics which have negative impacts on the development of its software industry.

To discuss the sustainability of Vietnamese software industry, we analyze it through the "oval model" suggested by Carmel (2003). The oval model contains the critical independent variables which have positive impacts on a county's software exports; namely, government vision & policy, wages, human capital, quality of life, the industry, capital, infrastructure, and linkages as shown in Figure 1 (Carmel 2003). The Vietnamese software industry, being evaluated by the oval model, qualifies the basic conditions enough to penetrate into the global market, but it does not qualify some conditions required to consolidate itself on sophisticated levels.



Source: Carmel (2003, p. 3)

Figure 1. The oval model

Vietnam qualifies the following variables suggested in the oval model. The first factor is the government's vision and policy. Many of the new software exporting nations succeeded because their government took active steps to encourage the high-tech sector in general or the software industry in specific (Carmel 2003). The degree of government support differs from country to country and market leaders such as India have enjoyed great support from their governments that has allowed the industry to progress faster (D'Cruz 2007). By far the most important factor in Vietnam's rise as a viable destination for software outsourcing is the dedication of its government to the growth of software export. The government continues to establish incentives and structures to pursue its goal of becoming a major provider of software outsourcing in the world (International IT Services 2002). The decree to build and develop the country's software industry signed by Vietnam's Prime Minister Phan Van Khai in June 2000 was one of those actions. Through the government support, the Vietnamese software companies can enjoy a variety of financial incentive packages.

The second variable in which the Vietnamese software industry qualifies is low wages. The clients are basically looking for offshore software providers to increase its cost efficiency. One of the most critical aspects to be a successful outsourcer should be provision of the low labor cost. According to Carmel and Agarwal (2002), more than 90 percent of the firms in their study stated they were outsourcing offshore, at least in part, to save money. Vietnam's low labor cost makes it competitive in the market, since wage is even lower than one in India and China, which have benefited from its low wages of software engineers. However, the salaries in these countries have been continuously growing - salaries in India are growing at 11.5% per year, while those in China are growing at 7.5% per year (NewswireToday 2006). Thus Vietnam may have chance to penetrate into the market taking advantage of its lower cost if it maintains a certain level of service quality. Low wages do not guarantee success, but the fact that Vietnam can provide the engineers at a lower cost than India and China may be

attractive to overseas clients, and give them a motivation to consider Vietnam as their destination, instead of India or China.

The third variable is human capital and quality of working life. What client firms are looking for are not just skills, but innovative software human capital residing in clusters typified by higher quality of life (Carmel 2003). Vietnam also seems to respond to this condition. There are software parks located in big cities like Ho Chi Minh City and Hanoi, which provide favorable conditions attractive to talented human resources and multinational firms.

The fourth is infrastructure, which is a weak aspect for Vietnam's software industry. There are also several factors discouraging the development of software industry in Vietnam. The offshore outsourcing industry is highly dependent on good telecommunication infrastructure, and telecommunications and the Internet are viewed by the government as a basic infrastructure in which software industry develops (D'Cruz 2007, Doung 2004). The government tries to actively adopt the strategies and plans for the development of telecommunication infrastructure.

However, Vietnam's infrastructure is regarded as an obstacle in the software industry. Since the Internet was introduced to Vietnam in November 1997, the number of Internet users has been increasing rapidly, recording around 17.5 million Internet users as of September 2007, which consists of 20.6% of the population (Internet World Stats 2007). But the cost of using calls and the Internet in Vietnam is higher than neighboring countries, while the quality of infrastructure is still low, which may make the business environment of the Vietnamese software companies unfavorable. In addition, as still Vietnam is suffering from severe poverty, the level of infrastructure enjoyed by the majority of people is questionable. Strict controls on the flow of information can be another discouraging factor for the Vietnamese software companies. Thus, the tension between the openness of the Internet and its potential for positive economic impact is often at odds with the long-standing censorship of the current regime (Gallaughier and Stoller 2004).

The fifth one is software industry itself. One problem can be seen in the characteristics of the Vietnamese software industry. Although Vietnam is enjoying a positive cluster effect incurred by its software parks, many of Vietnamese software firms are small and unsophisticated. It is noticeable that the companies with personnel under 50 people were around 80%, and only 20% companies achieved international standard certificates including ISO and CMMI in 2005 (Hong 2005). Vietnam is just starting to enter this market, and lacks experienced managers at all levels of the process from top management to junior project managers. Thus, companies considering outsourcing to Vietnam should look for partners with experienced management teams that have potentially even worked for larger corporations or on large scale projects in the US or Europe (International IT Services 2002).

The sixth aspect is capital. Insufficient access to capital is another barrier of the sustainability of Vietnam's software industry. Even though multi-lateral sources of investment is clearly a positive factor for fueling growth of Vietnamese companies for the foreseeable future, Vietnam's financial market is still in its infancy (Chidamber 2003).

The seventh is linkage. In terms of linkages, Carmel (2003) includes not only diaspora linkages, but also linguistic linkages. Vietnam enjoys fairly good diaspora linkage that consists of overseas Vietnamese named as "Viet Kieu" who left the home country during the Vietnam War and settled down in other countries, mainly in the US. Some of them are engaged in ICT business, and they can be a good source of investments into the Vietnamese ICT industry. The Vietnamese government actively responds to it by providing various incentives to pull them into its software businesses. However, good linguistic linkage is not the case of Vietnamese software companies. It is controversial whether or not foreign language skill, especially English, is the critical factor influencing software industry as long as providing high quality of work seems to be more critical for software companies to survive in the highly competitive market. Naturally, not every software engineer on a project needs to speak English. When there are more people within the team who can speak English, there is likely to be a high level communications and understanding so as to have lower transaction costs (Gallaughier and Stoller 2004,

International IT Services 2002). Poor English speaking skill of Vietnamese engineers can be a barrier to the sustainability of software industry in Vietnam.

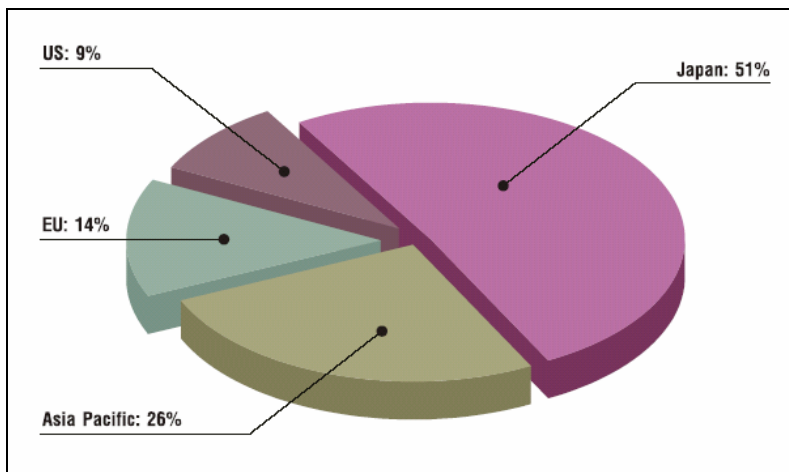
To sum up, the Vietnamese software industry fits more or less to the oval model, as it is capable to provide the products and staffs that are accepted in the international market. The problem is that the services provided by Vietnamese software companies are known to be unreliable and unstable. Since they don't have enough experience in the field and their employees are not fully trained to work in such a sophisticated level, the clients hesitate to do business with Vietnamese software companies. They are required to have more managerial knowledge and experiences. Also the small size of software companies is problematic, as they don't meet the level of international standards. Even though Vietnam has successfully stepped into the market, its sustainability may not be assured yet unless Vietnam polishes its skill and move up to the value chain.

3 FPT SOFTWARE

3.1 Company Profile

FPT Software, an affiliate of the Corporation for Financing and Promoting Technology (FPT), is one of the fastest growing software outsourcing companies in Vietnam (VietNamNet Bridge 2007). Originally it started as a software division of FPT Corporation in 1989, and launched software outsourcing business in 1999 (FPT Software 2007a).

As it kept expanding its businesses and partners, it was officially registered as FPT Software in 2003, and became FPT Software joint-stock company in 2004 (FPT Software 2007a). The revenue of FPT Software has been growing sharply, recording 9.3 million US\$ in 2005 and 16.5 million US\$ in 2006 (FPT Software 2007a), and it was reported that the revenue for 2007 would be about 30 million US\$. Its biggest clients are Japanese companies, since 51% of its revenue comes from Japan, followed by Asia Pacific (26%), EU (14%), and US (9%) as shown in Figure 2.



Source: FPT Software (2007a)

Figure 2. Revenue by Market of FPT Software

Vietnam is rapidly emerging as one of the top choices for Japanese ICT businesses in software outsourcing after India and China, and the Vietnam Software Association forecasts Vietnam's export of software products to Japan could reach about 350 million US\$ by 2010 (*Asia Times* 2006). FPT Software is at the head of the movement, and it has gained a foothold in Japan which is a large, stable and profitable market worth around 3 billion US\$ annually (MacCana and Sang 2007). FPT Software's growing is remarkable; its nine-month net profit reported in October in 2007 was nearly doubled comparing to the last year, being helped by the country's fast-growing telecommunication sector (FPT Software 2007a).

As the holding company of FPT software, Hanoi-based FPT Corporation, the third-largest company on the Ho Chi Minh Stock Exchange said in a statement that its January-September profit rose to 564.46 billion Dong (34.92 million US\$) from 295.17 billion Dong a year earlier (Reuters 2007). Likewise, the revenue and the staff of FPT Software are by and large doubled year after year shown in Figures 2 and 3. It is partly the result of high quality of FPT Software's products and services along with the international standards; it is the Microsoft Gold-certificated Partner and the winner of CMMI 5, ISO 9001:2000, ISO 27001:2005 and BS7799-2:2002 certificates (VietnamNet Bridge 2007).

FPT Software is famous for its thick skilled labor pool. It currently possesses the largest pool of software engineers in Vietnam. The number of its staffs has significantly increased during the past several years. It was only 350 in 2003 (FPT Software 2007a), but it has recruited its 2000th employee in 2007 (VietnamNet Bridge 2007). Aiming at global expansion, FPT software plans to recruit 5,000 employees by the end of 2008 to serve the markets of Japan, the US, Europe, Asia and the Pacific (VietnamNet Bridge 2007).

FPT Software provides software services such as software development and maintenance, ERP implementation, quality assurance test, migration to Microsoft platform, embedded systems and others for overseas markets (FPT Software 2007a), and the major client companies include IBM branches located in Japan, Singapore, US, France, and Singapore, Hitachi Group, Nissan, Panasonic, Sanyo Group, Ambient Consulting, Agilis Solutions, and so on (FPT Software 2007a).

Its 2000 employees are working in five facilities located in Hanoi (66%), Da Nang (10%), Ho Chi Minh City (20%), Japan, Singapore and Malaysia (VietnamNet Bridge 2007, FPT Software 2007a). It established FPT Software Japan, Ltd. in 2005 so that it became the first Vietnamese company to invest in Japan (FPT Software 2007a, ETRO 2005). According to Vietnamese authorities, Vietnamese businesses have invested in Japan by way of joint ventures and private capital, but the FPT investment is the first time that 100% of the capital has been provided by a single Vietnamese company (JETRO 2005). Newly established offices in Japan will help to push up revenues from outsourcing for leading companies such as NTT group, IBM Japan, Unisys, and Hitachi.

Maintaining favorable conditions between the Vietnamese and Japanese governments (MacCana and Sang 2007) will be one of the key factors for continuous growth of FPT Software. FPT Software also opened a software outsourcing branch in Singapore to manage its Asia-Pacific operations in 2005. Called FPT Software Asia Pacific Pte Ltd, it is 100-percent owned by FPT Software. The Singapore arm has been responsible for business development for software outsourcing projects around Asia Pacific. Since the clients from Asia Pacific accounted for as much as one-quarter of its revenue, it realized that market is worth investing more in, besides Japan, UK and US. The opening of Singapore office not only affirms the important role that Asia Markets play in its growth strategy, but also allows it to get closer to its clients in the region and to serve them better. This expansion is also part of FPT's global integration strategy, following the opening of FPT Software Japan Ltd in Tokyo in November 2005 (Hong 2005).

Corporate Name	FPT Software Joint Stock Company (A subsidiary of FPT Corporation)
Headquarters	HITC Building, Xuan Thuy, Cau Glay, Hanoi, Vietnam.
Subsidiaries	FPT Software Japan Ltd. FPT Software Asia Pacific Pte. Ltd.

Employees	1800 (as of March, 2007)
Chairman	Truong Gia Binh
CEO & Managing Director	Nguyen Thanh Nam
Website	www.fpt-soft.com
Services	Development, Maintenance, Migration Services, Quality Assurance Test, Business Process Outsourcing, ERP Implementation, Embedded Systems Development, etc.

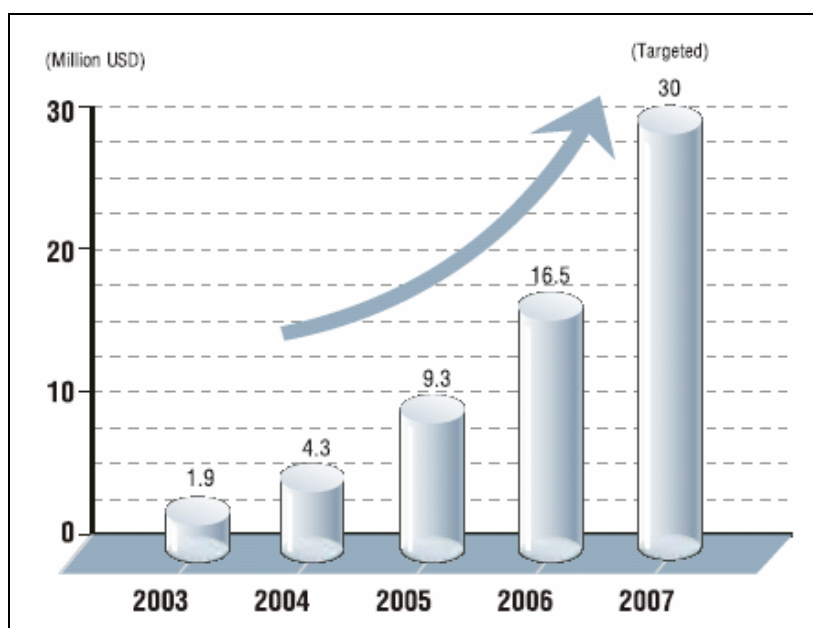
Source: FPT Software (2007a)

Table 1. Corporate Data

ERP	Complete life cycle implementation with Microsoft Dynamics Development services: Add-ones, report development, customization, modification Integration service with SAP Netweaver (BI, XI, BP, NW application server) Upgrading and migration for SAP: upgrading to my SAP ERP 2005 Maintenance and support from dedicated call centers	
QA Test	Integration/Systems testing Performance testing Compatibility testing Configuration testing Functional testing User acceptance testing Product assurance and on-going release testing Usability review	
Migration	Infrastructure migration	Server side mailbox migration Co-existence assurance Desktop roll-out & user readiness (Change management)
	Application migration	High-level analysis and ball-park Application migration (reverse engineering, development, UAT, deployment, data migration) Roll-out (training, data migration, support)

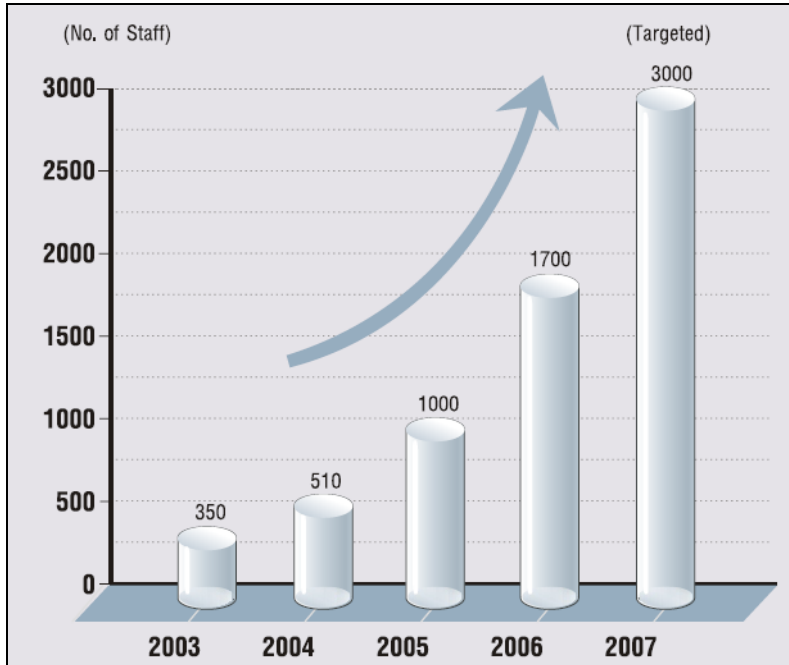
Source: FPT Software (2007a)

Table 2. Services Provided by FPT Software



Source: FPT Software (2007a)

Figure 3. Revenue Growth of FPT Software



Source: FPT Software (2007a)

Figure 4. Staff Growth of FPT Software

Asia Pacific	EU	Japan	US
Chartered Semiconductor Manufacturing IBM Singapore P&G Vietnam Unilever Vietnam	Harvey Nash IBM Benelux IBM France	Argo 21 Hitachi Group HP Japan IBM Japan JIP Mizuho Trust Systems Nihon Unisys Solutions Nissan Nissen Panasonic	Ambient Consulting Agilis Solutions Bluekey Services IBM USA

Source: FPT Software (2007a)

Table 3. Clients of FPT Software

3.2 Key Success Factors

The key success factors of FPT Software, compared to other software outsourcing companies in Vietnam, are high reliability of its products and services based on high quality workforce and good management. Being a fast-growing ICT company and the largest software company of Vietnam, FPT Software creates reputation and belief for its customers and investors (Quyên 2007).

Firstly, the reliability is represented by its compliances with international standard certificates. As FPT Software specialists get more than 300 international certificates of first-rate ICT companies including HP, IBM, Cisco, Microsoft, Oracle, SAP, etc, the operations of FPT Software are also known to comply with international standard quality systems, notably, CMMI level 5 and ISO 9001:2000 standards. It also follows strict information security and non-disclosure procedures in accordance with ISO 27001:2005, the upgraded version of BS 7799, to protect the intellectual property of the clients (FPT Software 2007a, Quyen 2007).

However, many enterprises in Vietnam have yet to upgrade management qualifications (Hong 2005). Since only about 20% of software enterprises possess the international quality certifications (Hong 2005), FPT Software's compliance with the international standard quality systems is a salient trait. Furthermore, FPT Software maintains well-organized quality management processes through required software tools and communication infrastructure (FPT Software 2007b).

Secondly, the reliability of software products and services comes from skilled workers including programmers. FPT Software possesses a large pool of competitive labor forces having graduated from well-known universities in Vietnam and provides organized training course within the company (FPT Software 2007a). People at FPT Software are known as hard-working, creative, humorous and full of brilliant ideas. And FPT Software is considered as the house of young talents and of international-standard programmers in Vietnam (FPT Software 2007a). They have been trained professionally in Vietnamese and international universities and 90% of the staffs have graduated from the three most highly regarded ICT universities in Vietnam (Quyen 2007, FPT Software 2007a). Also they are trained regularly and have long-time experience (Quyen 2007).

After entering FPT Software, they are trained by the company in the step-by-step process, from orientation courses to management training (FPT Software 2007a). FPT Corporation has also established the training institute called FPT University, in which 1300 students are enrolled in 2007. Lectures are offered in both English and Japanese, and the University is cooperating with major private firms and universities, including IBM, Microsoft, Kyushu Institute of Technology, and Keio University (FPT Software 2007b). With the University, FPT software has an efficient way to recruit top students with tailored skills and knowledge to meet their requirements (MacCana and Sang 2007).

Furthermore, FPT Software and Microsoft signed a three-year Strategic Alliance Agreement in 2006, utilizing training materials and methodology from Microsoft. Since the ICT industry relies heavily on the quality of human resources, FPT software will have the opportunity to further expand its reach with the Asia Pacific clients, with Microsoft certified training skills and knowledge (MacCana and Sang, 2007). Thus, while the majority of software firms in Vietnam possess less than 50 employees (Hong 2005), and many of Vietnamese workforces lack experiences and professional knowledge of sophisticated level, the talented human resources are clearly the differentiation FPT Software made for its current success.

The staff members are also fluent in foreign languages; for instance, eighty percent of the whole staff is able to speak English fluently (FPT Software 2007a). It is still controversial whether or not foreign language speaking skill is decisive in a software exporting company's competitiveness, but it is undeniable that language skills can contribute in a way. English is the most widely-used language at FPT Software, and the company promotes further development of the language skills of staffs even after entering the company, by updating the TOEFL scores of the staffs every three month and by providing a number of English training courses (FPT Software 2007a).

As Japanese clients occupy more than half of the whole revenue of the company, Japanese speaking skill is also required to the staffs of FPT Software. About 1,200 FPT staff members can speak Japanese, even though the level of Japanese speaking ability varies. FPT is establishing teams of developers and testers who communicate with customers in Japanese and it is also offering many Japanese training courses within the company. Some of the staffs are also fluent in French (FPT Software 2007a).

FPT Software has been successful in the field, because it has provided the high quality service at a flexible cost, and built trust with the clients. It has qualified engineers who graduated from top universities and have been trained step by step through the programs provided by the company.

Vietnam cannot be the best option of foreign clients partly due to its weak intellectual property protection and poor managerial competencies. Nevertheless FPT Software has overcome that limitation by following strict information security and non-disclosure procedures. Its staffs are able to communicate in various languages, which has resulted in not only saving transaction costs but also building familiarity with the clients who could be reluctant to work with companies from the countries of different culture and languages. As a consequence, FPT Software could attract the clients by lowering perceived barriers and strengthening reliability.

4 CONCLUDING REMARKS

What are the strategies that Vietnamese software companies should take for future sustainability in the market? Since Vietnam satisfies some basic requirements from the oval model for becoming a competitive software export country, it is important to build up trust with clients by improving the quality of services, lowering the level of concerns some clients have on the quality, and moving up along the value chain.

If we see the case of FPT software, it is successful not only because it provides service at lower costs, but also because it has successfully built trust with its clients. To overcome the problem of low service quality, the company offers internal training courses for technical and language skills, and meets international standard quality systems in terms of both quality and protection of intellectual property right.

However Vietnam is still the developing country where democratic political environment hasn't been consolidated and which lacks infrastructure and domestic market. This unreliability and lack of trust can make its current and potential clients hesitate to start business in Vietnam.

Trust is considered as one of the most important factors for successfully managing software outsourcing relationships and such trust can be realized through a company's credibility, capability, and performance (Nguyen et al. 2006). What is required for sustainable development in offshore software outsourcing is to meet the international standards, which may be an important step and efficient way to consolidate trust with its clients. There have already been various trials in Vietnam to make itself an active participant in the global software market. The government of Vietnam has been trying to integrate Vietnam into the world economy through joining bilateral agreements and WTO (Ta 2006).

Some of Vietnamese software companies have achieved the CMMI certification or are aiming to achieve it. But still Vietnamese companies need to quickly build up reputation for being able to develop quality software by following rigorous and systematic processes (Nguyen et al. 2006), and also should develop frameworks to properly protect intellectual property and solve a piracy problem. Building trust with clients by levelling up its products and services to a higher professional level, and by maturing talented but inexperienced workforces, should be the next task to the Vietnamese offshore software outsourcing for sustainable development.

Vietnam has appeared as a new entrant in the world offshore software outsourcing market. Despite poverty and its politically undemocratic and closed society, Vietnam has become a startling participant with its strong competitiveness in ICT industry. The government of Vietnam sees software export as a good opportunity for its economic development, and is providing various incentives to attract foreign firms and construct the favorable environment for the software industry.

However, there is also a voice that worries about sustainable development of Vietnamese offshore software outsourcing. Competition will get more intense, as the offshore software outsourcing market is also seen as an opportunity to other developing countries. Especially the Philippine is regarded much more competitive than Vietnam in software outsourcing because of English language competency and strong relationship with the USA. Thus, to remain firm in the market, Vietnamese software companies should polish the quality of its service and seek innovation, not just relying on its low cost and large pool of youthful workforce.

In addition, we have to point out the weak regime of intellectual property protection in Vietnam as well, although it is not directly influencing to FPT Software, but indirectly significant in that Vietnam's society as a whole might have a 'negative state image'. In this perspective, this paper suggests how the Vietnamese software companies can overcome their limitations and be a major player in the world offshore software outsourcing market by examining the case of FPT Software. Quality management processes at FPT Software can be a good model for other Vietnamese software companies which would like to expand their businesses and work with big multinational high-tech firms.

The limitation of this paper is that the findings come from only one success case. Therefore, further study is required to investigate other success cases found in Vietnam, and to find commonalities among them. Then such findings will help us to understand the factors required to be sustainable for offshore software outsourcing not only in Vietnam, but also in other developing countries.

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