



**Asia-Pacific
Economic Cooperation**

**VietSoftware International Inc.
Viet Nam**

**The Journey to Become an
International Player**

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VietSoftware International Incorporated (VSII) was a medium sized company with 200 employees. The company was established in 2006 under the Vietnamese Enterprise Law. VSII operated as a software outsourcing service provider with offshore dedicated centers for clients in Europe, Japan and the United States.

Spun off from VietSoftware, Inc. in 2006, VSII grew from a company of less than 20 people during its start-up to a company with nearly 200 people in 2011. The human resource (HR) challenge that it faced and continued to face included the high staff turnover rate, strong competition for qualified and talented staff, qualification of software developers, and the need to introduce an advanced HR system that worked in the Vietnamese context. Lack of professional interpersonal and communication skills of the staff resulted in lower work productivity. The constraints also deterred VSII from scaling up to compete with other companies that were strong at information technology or business process outsourcing (ITO/BPO). In addition, HR constraints in the Vietnamese labor market, especially in the software industry, were serious hurdles to the improvement of the competitiveness and productivity of VSII and its ability to meet the increasingly sophisticated needs of international customers. They also slowed down the integration of VSII into the global supply chain and its efforts to increase revenue.

In the past few years, VSII had been relatively successful in managing human resource challenges to maintain its growth. However, just like in the past, these constraints would continue to be a constant concern for the top management of VSII in the medium term future.

Software Industry in Viet Nam

The Viet Nam IT sector had been moving forward continuously, emerging as a key economic-technology sector of Viet Nam and contributing more and more toward its sustainable growth. Software development and services, with an average growth rate of over 30% a year both in terms of revenue and market, became the most promising economic sector of Viet Nam from 2006-2010. The software industry generated over US\$1 billion of revenue in 2010, which was four times higher than that in 2005. Likewise, software exports accounted for 35% of the total IT revenue in 2010, or five times that in 2005. The industry also attracted around 72,000 workers in over 1,000 firms, which were mainly located in big cities (Table 1).

Table 1: Statistics of Software Industry: 2008-2010

	12/2008	12/2009	12/2010
Total revenue (million US\$)	680	850	1,064
Total number of employee (persons)	57,000	64,000	71,814
Average wage (US\$/person/year)	3,600	4,093	5,123

Source: Ministry of Information and Communication

Expanding ICT infrastructure and internet penetration would continue to drive demand for IT products, software and services. Software was a highly cost-sensitive market, with 75% of software provided by lower-cost local software vendors or developers (SMEs).

However, larger Vietnamese companies would more likely buy higher-priced software from multinationals which controlled around 25% of the market.

The software industry was believed to benefit from the increasing demand from overseas market and had the potentials to be a big contributor to the economic growth in Viet Nam.

VietSoftware International Inc.

Overview

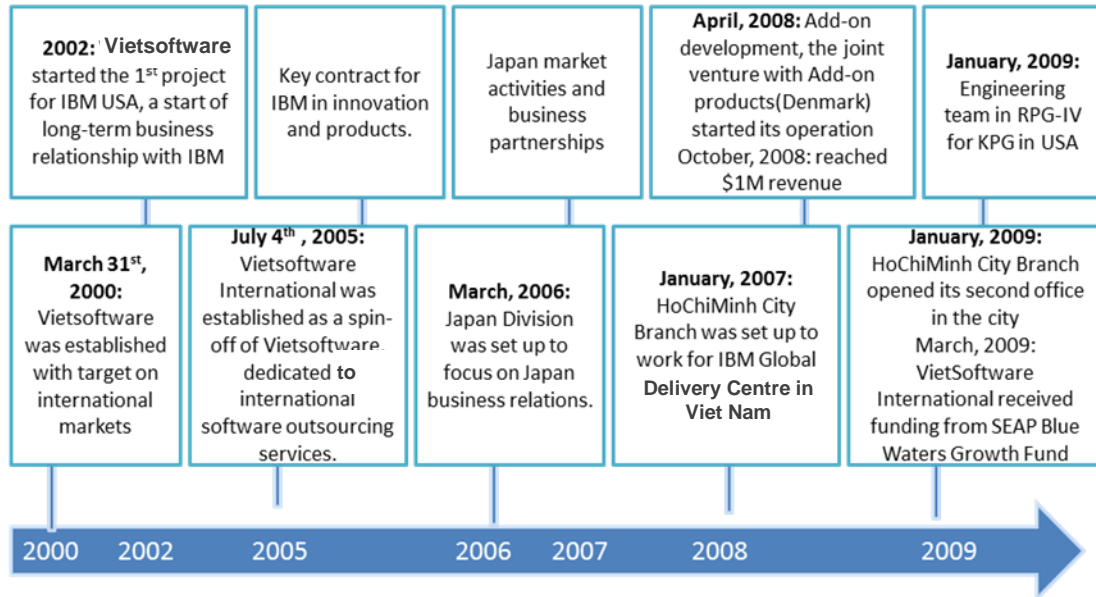


VietSoftware International Incorporated (VSII) was a medium-sized software development and outsourcing company in Viet Nam. The company operated as a software outsourcing service provider with offshore dedicated centers for clients in Europe, Japan and the United States. In 2011, its revenue reached US\$ 1.8 million as compared with US\$ 1.5 million in 2010.

In 2002, VSII started its first project for IBM USA, marking the beginning of a successful long-term business relationship with IBM. The VSII management worked very closely with the IBM team in Hanoi and Ho Chi Minh City to ensure that its software developers met IBM's expectations on quality, delivery time and cost savings. VSII had strong technical capabilities in some key skills areas that IBM required, and showed flexibility in meeting the requirements for work locations and scheduling. It recently completed a successful transition of work to an IBM managed off-shore Delivery Center at the VSII main location in Hanoi.

Since 2006, the company has expanded rapidly its operations and markets. A Japan Division was set up in 2006 and the Ho Chi Minh City Branch was set up in 2007 to work for IBM Global Delivery Center in Viet Nam. In 2008, VSII co-founded Add-On Development, a joint venture with a Danish partner, Add-On Products (Figure 1). In 2009, VSII's HCM City Branch opened a second office in the city. In 2010, VSII partnered with TIBCO and Novell Inc. It started its long-term partnership with HarveyNash and established a BPO company in Danang (VBPO) in the same year.

Figure 1: Milestones of VSII



Source: VietSoftware International, Inc.

VSII's Vision and Mission

The CEO and management team understood the customers' business challenges as well as their technical needs. This solid grounding in business issues made VSII a particularly valuable collaborative partner (often contributing more than just technical expertise) especially because it worked with a select group of high-level customers. It rapidly built a reputation for quality work at a very competitive price.



The vision of VSII was “*to become a world-class software outsourcing service provider.*” In order to realize its vision, VSII set its mission to provide high quality software outsourcing services in the most cost effective manner via collaboration and partnership. This mission was to be achieved by the following business strategies:

1. Fast turnaround, high quality, low price

VSII accomplished this with a unique combination of business-savvy management, a remarkable depth of technical expertise, and a lean, agile organizational structure that could respond rapidly to changing customer needs. The cost of labor and production in Viet Nam was relatively low, thus allowing VSII to provide world-class technical capability at competitive low prices.

2. Adaptation

VSII adapted to the way partners worked such that it became an extension of its partners' team. The company's internal processes were well-defined and had been developed with the express purpose of being easily adaptable to customer needs. VSII

dedicated the resources necessary to learn their partners' technologies and methodologies, becoming a virtual extension of their teams.

3. Lean, agile organization

The CEO and management team believed that the challenges partners or customers faced could change on a daily basis; thus, VSII structured the company to be responsive to customer's needs. There were no extraneous layers of management.

4. Reliable infrastructure

VSII built a reliable technical infrastructure to ensure that it could deliver to customers all over the world 24 hours a day, 365 days of the year. At the same time, it made sure that it had a stable workforce to minimize any disruptions due to employee turnover.

People in VSII

Along with the expansion of the market and capital, VSII simultaneously scaled up its human resources from 19 developers in 2006 to 100 in 2007, and 200 by 2011.

VSII was managed by a group of leaders with sound academic background in information technology and long track records in successful software development businesses. The top leaders of VSII were all educated in reputable universities in Viet Nam and in other economies such as Australia, Belarus and Russia. They included Mr Le Xuan Hai, the Chairman and Chief Executive Officer; Dr Tran Luong Son who was in charge of Global Strategic Development; Ms Nguyen Hong Hanh, the Chief Financial Officer and Vice General Director of VSII; and Mr Nguyen Thanh Tung, the Vice General Director and Management Board Member. Before joining VSII, some of them held important management positions for big multinational companies.

Core Business

Since its establishment, VSII has quickly moved from simple and low-end software services to higher end services and proprietary products which included both software and services. As of 2012, the main business of VSII was to provide Software Project Outsourcing Services (independently implemented software projects) and to work as an Offshore Dedicated Center (ODC) for clients where VSII staff worked as an extension of the client's team.

Typical Software Outsourcing Services tasks included:

- a. Software development: proprietary product development; Internet business applications; Java/J2EE, Microsoft.Net and SharePoint, PHP, Flex-based, Embedded Software and Real-time OS programming and development services.
- b. Migration and maintenance: application and data migration service; porting of legacy applications to new technology platforms (SOA, web based, distributed), migration of C/C++ code to embedded systems; maintenance of existing databases and applications.
- c. Software testing services: full range of test services for various types of applications using advanced test methodologies and tools.

- d. Website development and graphic design: website design and development; professional website content update and editing.

HRM Issues and Approaches

Human Resources Constraints Facing VSII

The supply of human resources for the software industry was in severe shortage and the qualification of employees and professionals were limited. Like in many other software companies in Viet Nam, new recruits of VSII were found to be better at academic knowledge than practical and applied skills and expertise. The educational system in Viet Nam was partly to be blamed for this condition.

The qualification of engineers and workers was lower than that set by international standards. Major constraints included the low level of command of English, and lack of interpersonal and communication and other soft skills. These were brought about by the lack of emphasis given to training in these skills by vocational schools or universities in Viet Nam. As a result, most of the university and college graduates were not equipped with these critically needed soft skills. Lack of work discipline was also a serious issue facing VSII.

The competition among software firms for human resources was fierce. SMEs like VSII were always at a disadvantage to big multinational companies. Competitor companies, both domestic and international, often resorted to malpractices to lure talented staff and professionals from VSII. As a result, the attrition rate in the industry was as high as 20%.¹ Developers and professionals in the software industry often hopped from one company to another. This unsound practice was one of the factors that contributed to the lowering of the productivity of the software industry in general and of VSII in particular.

Effects of the HR Constraints on VSII

These human resource constraints slowed down the integration of VSII into the global supply chain. Though VSII had made some progress in this respect, the company was still in the early stage of integrating into the global supply chain, and had not been able to climb up to the higher level of the supply chain. As shown in Figure 2, VSII was still in the first stage of the value chain (i.e., providing services (ITO/ BTO) to foreign clients) where profit margin was much lower. From the low-end service level, VSII was scaling up (the largest circle) and making an effort to develop the critical mass (in terms of volume and expertise and technical capacity) and integrate into higher end services. However, the proportion of the services at the higher level of the value added chain was limited (small circles). It was not able to provide proprietary services and products or those that promised higher profit margin for a software company.

¹ According to Mr Chu Tien Dung, President of Ho Chi Minh City Informatics Association (*The Saigon Economic Times*, 26 July 2012).

Figure 2: Moving up in the Value Chain by VSII



Source: VietSoftware International, Inc.

Lack of professional interpersonal and communication skills resulted in lower work productivity. An internal survey by VSII showed that ineffective communication was one of the key reasons that prevented VSII from getting a high level of orders from clients and generating revenue and sales. Lack of communication skills also hindered VSII engineers and development staff from correctly identifying the needs of clients and addressing such needs, thus prolonging the time needed to respond to clients' service order.

Human resource constraints were among the factors which required VSII to spend a huge amount of resources or to create a comparative advantage over other software companies in Viet Nam. The constraints also deterred VSII from scaling up to compete with other strong ITO/BPO companies.

Strategy and Actions by VSII

Strategic Human Resource Planning



VSII recognized the need for a system of recruiting and developing human resources in the fastest way in order that it could grow sustainably and respond quickly and efficiently to client needs. VSII applied a forward-looking HR development program and made it one of the key pillars of company growth. It followed the Capability Maturity Model Integration 3 (CMMi-3) standards for resource planning. CMMI was a framework of industry best practices for improving the management, development, and maintenance of products and services. CMMI was developed by the Carnegie Mellon Software Engineering Institute (SEI), a federally funded research and development center. Benefits of using the CMMI included reduced cost and higher productivity, quality and customer satisfaction. Level 3 confirmed compliance in 18 process areas spanning management, engineering, and support activities.

Inasmuch as CMMI was a set of best practices developed in the western context, it had been a challenge for VSII to apply it. There was slow response at the beginning as it required everybody to change the way they worked. However, VSII was very persistent in applying the system and made some adjustments, for example, on management practice of services. The internal business procedures were adjusted to suit international best practices. By so doing, VSII was able to handle all the resource planning and management requirements according to specifications required by clients. Over the years, VSSI had built a strong pool of technical professionals with the help of the CMMI framework.

HR Policy of VietSoftware International

The recruitment policy was also changed such that VSII adopted a more flexible policy in recruiting staff instead of sourcing them from formal job service companies or centres. Recruitment was no longer focused on university graduates and post graduates from domestic and international schools, but also on student graduates from applied training centers and vocational training schools. VSII also recruited those who started their own business but failed. This was a unique feature of VSII's recruitment policies. According to the HR manager of VSII, failed business starters had a strong determination to do new things, to innovate and to venture into something new. This was exactly what VSII needed; the company repeatedly emphasized the value of creating a favorable work environment for the innovative, venture-taking instinct of these people. The company also set up a referral system in which senior level or junior level staff could recommend good potential candidates to the HR section. A fair and transparent recruitment system was put in place. Its multi-layered recruitment process included personal interviews, aptitude tests and sometimes small assignments to qualify candidates.

On the job training and coaching was intensively used by VSII. Special focus was placed on soft skills and IT, and management according to PMF PMP Crestcom standard.

In addition to offering a competitive salary package, the remuneration system of VSII included incentives for those who demonstrated the values which the company appreciated the most such as integrity, work performance, loyalty and commitment and client satisfaction. These factors were included in staff performance evaluation sheet with concrete measurable indicators (e.g., number of years working in VSII, number of complaints received from clients or other partners, number of innovation and good ideas which were adopted in VSII). Salary increase and bonus were also based on the achievement of indicators in the staff performance evaluation sheet. The shift to performance-based salary and remuneration gave a boost to the average staff productivity.

VSII Recruiting Philosophy

- *Select the right people for the right place ahead of time.*
- *People are capital and staff is member of the company.*
- *The members share the vision and profit of business.*
- *Ideal hiring criteria are a combination of morality and qualification.*

The current computer-based HRM information system is being developed in order to track the performance of staff and their motivation. Though VSII was a software development company, it had been a challenge for VSII to develop or customize the HRM software. As explained by VSII senior management, the difficulty was in how to combine best practices in HR management from more advanced economies in Europe, Japan and the US with the culture and business practices in Viet Nam. The development of efficient and modern HRM software that was applicable to the context of VSII was one of management's top priorities.

It should also be noted that some of the HR programmes by VSII did not work and faced resistance or lukewarm response from the employees. For example, the Loyalty Commitment Program (LCP) was introduced in 2009 but for a few years, not many members participated since it took a long time before participants could touch the bonus. The programme was not well communicated to the staff either. Starting from 2011, the HR Department has made considerable effort in re-introducing the LCP to existing

members as well as introducing it to successful candidates. Little by little, the LCP was being accepted by company members.

HR Practices as Contributor to the Build up of Corporate Culture at VSII

The senior management of VSII disclosed that one of the best practices they adopted in HR management was to create a culture in which the staff were not seen as employees but members of VSII — a bigger family of all of the staff. This policy was integrated into all pronouncements of the company and permeated all activities and businesses of VSII. For example, at outdoors meetings, corporate cultural events, the term, “VSII family” rather than company has been used more often. Family values were encouraged and promoted. Company gifts were provided to VSII staff’s newborn babies who were referred to as the future generation of VSII. These pronouncements and gestures enabled VSII to create a culture in which people were bonded to each other by cultural and traditional values, in addition to corporate or contractual obligation.



The company adopted a participatory approach in charting the company’s directions. The directors, line managers and team leaders were encouraged to participate in strategic planning and in communicating VSII’s strategy to every company member.

VSII used the Services Execution Management system named Whizible SEM™ to manage projects, processes and interactions between teams. It also applied a strict Quality Management System (QMS) that included policy, processes, procedures, and customizing guidelines for software development as well as for organization management; CMMI level 3 compliant standards; and quality instruments--QA plan, defect reports, etc. All the staff members were trained and required to use the system. VSII also introduced the ISO system in its management processes wherein human resource was an important part, both as an area of focus of the system and as implementer. The management of VSII believed that these would help to remarkably improve the company’s productivity and customer satisfaction.

Innovation and creativeness were strongly encouraged. An incentive system was crafted in which any good idea for a new product, new process or new market opportunity was adequately rewarded. Personal innovation and creativeness were important criteria used for personal performance evaluation. Company members were given enough room and flexibility to test new ideas in new services and products and new management style, in the context of existing company policies. VSII formed evaluation panels to determine the practicality and applicability of new ideas. It also provided the opportunity and resource for scaling up ideas that were tested successfully. An idea that failed the tests was not seen as a personal failure of the proponent who was encouraged to continue looking for new ideas. As a whole, VSII’s HR policy reflected the importance that the company placed on building a culture in which risk taking was encouraged.

As part of its effort to build the corporate culture among its staff, an internal bulletin entitled *Konnect!* came out on a periodic basis. The bulletin aimed to connect all members of the companies to become a strong team with a common goal and vision. The bulletin also helped the employees to have a fuller picture of the company. It was an

important tool to communicate VSII's policy, commend talented staff, and praise innovations, new ideas and examples of successful innovation and projects.

Team building activities were also organized to promote teamwork. Company retreats were held for the staff every two years and overseas vacations were organized for employee of the year (VSII called it "top-gun" tour).



VSII Team Building

VSII had a strong policy to promote corporate social responsibility which was widely communicated to the staff. It developed programs and policies supportive of its overall development strategy to strengthen its corporate culture such as the fight against HIV/AIDS workshop, promoting social values, and participating in charitable activities. This enhanced VSII's attraction as a decent workplace and good employer.



An HIV/AIDS Workshop held by the VSII

VSII also established a trade union as required under Vietnamese law and strictly complied with all relevant labor law regulations. All employees had official work contracts that included social and health insurance benefits.

VSII encouraged women workers and developers which resulted in a VSII workforce composed of 30% women and 70% men. This proportion of women workers was relatively high, compared to that of other companies in the industry.

Programme Results and Impact on HR

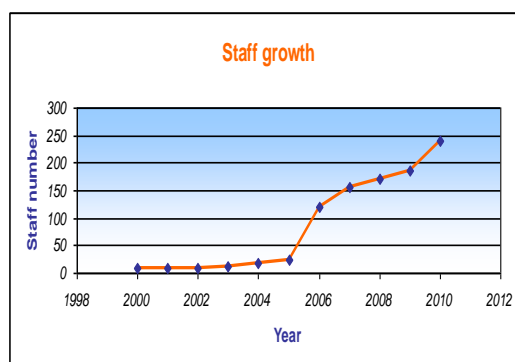
Because of the gradual introduction of new HR policies and practices in the last few years, the long-term impact of these policies still remained to be seen. However, there had been positive and encouraging results. VSII managed to grow despite the global economic downturn and the slowdown of the Vietnamese economy. Its growth was on track and was still in line with the business strategy formulated at its establishment. Mr Le Xuan Hai, CEO of VSII concluded that "the improved HR policy is obviously one of

the most important factors that enabled VSII to weather the on-going global economic downturn and to integrate deeper into the international market...”

The VSII management was very confident that the company would meet its target to increase revenue by 30% a year and profit by 20% a year in the next three years.

Its HR policies improved its overall productivity and performance. The billable rate of VSII increased from 65% in 2011 to 85% in 2012. The human resource capacity use rate increased from an alarmingly low 38% in 2007-2008 to 78% in 2012.² These were encouraging indicators for VSII and emphasized the importance of improving HR management practices in the company.

Figure 3: Staff Growth in VSII: 1998-2012



The HR practices adopted by VSII enabled VSII to maintain an acceptable attrition rate of 12% as of 2012. The rate was much lower than the industry average of 20%. VSII was increasingly becoming a desirable workplace for young job seekers in the software industry in Viet Nam. As illustrated in Figure 3, its policies enabled VSII to increase the number of staff significantly between 2005 and 2010, despite the strong competition from other companies wanting to augment their workforce.

The global economic turmoil had adverse impact on all the business sectors in Viet Nam. According to the Ministry of Planning and Investment, more than 60,000 businesses or 15% of the total enterprise population had to close businesses in 2011 and 2012. This difficult business environment imposed negative impact on VSII. However, the company was able to minimize the losses in the peak year of the economic crisis in 2010 and 2011, without having to lay off staff and reduce employee benefit packages. The VSII management was confident that the difficult time might be over and VSII would make profit in 2012. Much of this achievement could be attributed to the improved HR system which VSII had been trying to achieve in the last few years.

The improved technical expertise, English language skills and sales skills of its staff on which VSII invested considerable resources, brought about positive business results. Improvement in the quality of staff and human resource led to the decision by SEAF Blue Waters Growth Fund (a venture capital fund) to provide a 5-year financial assistance in the form of mezzanine funding of US\$1.25 million to VSII in 2009. Confidence among investors in the growth potential and the human resource capacity of the company was also boosted. As a result, investors kept putting in more money, enabling VSII to increase its capital by 25% from US\$ 400,000 in 2006 to US\$500,000 in

² Human resource capacity use rate is a measure of the efficiency of human resource usage. It is the number of billable headcounts (or billable man-months) divided by the number of production headcounts.

2010. With a stronger human and capital resource base, VSII founded a VBPO in Da Nang and was planning to open an office in Japan. It was also venturing into new IT businesses, and new investments and merger and acquisition (M&A).

VSII broadened its ITO market share in Viet Nam to an estimated 1% in 2010 and aimed to double this to 2% in 2015. As previously mentioned, it has expanded into new markets such as Australia, Europe, Japan and the US. Its improved expertise and skills enabled it to move higher, though still at a modest level, in the value chain.

Looking Forward to the Future

Human resource management is both a science and art. It is a challenging task for any company. VietSoftware International had been developing and testing various HR management policies and practices to make them most suitable to the Vietnamese context. It had been a continuous “trial and error” process (e.g., the loyalty programme, the customization of the performance-based remuneration system) which had resulted in good and better practices adopted and reflected in VSII official HR policies.

The formulation and adoption of the HR policy of VSII also reflected its risk taking business culture. People were encouraged to come up with new ideas and test them, resulting in the adoption of the most applicable ideas by the company.

VSII however would still have to face the HR challenges which the company was able to manage relatively well in the last few years. The problem of high staff turnover rate, strong competition for qualified and talented staff, qualification of software developers, well-functioning internal HR system, lack of professional interpersonal and communication skills, would still haunt managers in the Vietnamese software industry, at least in the years to come. On top of all these, there would be new challenges that the industry would have to confront, such as the issue of intellectual property, the protection of intellectual assets of the company and knowledge management. These issues would obviously have to be addressed by VSII as it expands further and moves up higher in the value chain.