Information and Communication Technology (ICT) for development of small and medium-sized exporters in East Asia: Viet Nam

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Abstract

IT has been a government priority for the social-economic development for a long time now. However, until very recently, the focus was given to IT development and application in public administration and the large corporate sector. Most of government resources for IT development and application were directed to large State-owned enterprises. Thus, SMEs and the private sector lacked critical support for the initial phase of IT application. This has a negative impact on the scope, scale and result of IT development and application for the SME sector, with the result that IT use in SMEs was very limited.

However, there have also been a number of efforts to promote IT application in SMEs and the private sector, especially from SMEs themselves, industry and trade associations (notably the Viet Nam Chamber of Commerce and Industry (VCCI)), entrepreneurs, and also some government agencies (notably the Viet Nam Trade Promotion Department (Vietrade)). Several industrial clusters have been formed, to help one another in IT application. Efforts to promote e-commerce businesses and their cooperation with government agencies have also been pursued by many SMEs. The Government of Viet Nam has ALSO recently adopted a more pro-active and specific policy toward IT development and application for SMEs, including extensive human resource development for SMEs and the allocation of financial resources for IT in the SME sector. At the same time, regulatory and institutional frameworks (such as electronic accreditation), and technical infrastructure (e.g. broadband development), for IT application are also being actively developed, by the Government and the agencies concerned. All of these efforts are expected to usher in new era for a broader and more effective application of IT for SMEs in Viet Nam in the near future.

I. Introduction

For a long time a centrally planned economy, Viet Nam was dominated by State-owned enterprises focusing on heavy industry, while SMEs, especially the private corporate sector, were not developed. Only since the mid 1980s, when reforms and an open door policy were introduced, did the SME and private sector have a chance to develop. However, SMEs and the private sector were not given fair and equal opportunities (in terms of licensing, access to credit and other resources, government support and incentives, etc.) until the late 1990s. By the end of the last century, SMEs and the private sector became an essential sector of the Viet Namese economy, providing significant contribution to GDP growth and job creation.

In the last decade, the Government of Viet Nam created numerous regulatory and institutional mechanisms for SME development. These include amendment of indiscriminate commercial bank lending policy, easier access to land use rights, the abolition of restrictive licensing requirement for the entry of SMEs into important and lucrative industrial and services sectors, equal access to government grants and financial support, etc.

IT has also been a government priority for the social-economic development for a long time now. However, until very recently, the focus was given to IT development and application in public administration and the large corporate sector. Most of government resources for IT development and application were directed to large State-owned enterprises. Thus, SMEs and the private sector lacked critical support for the initial phase of IT application. This has a negative impact on the scope, scale and result of IT development and application for the SME sector, with the result that IT use in SMEs was very limited.

However, there have also been a number of efforts to promote IT application in SMEs and the private sector, especially from SMEs themselves, industry and trade associations (notably the VCCI), entrepreneurs, and also some government agencies (notably the Vietrade). Several industrial clusters have been formed, to help one another in IT application. Efforts to promote e-commerce businesses and their cooperation with government agencies have also been pursued by many SMEs.

The Government of Viet Nam has recently adopted a more pro-active and specific policy toward IT development and application for SMEs, including extensive human resource development for SMEs and the allocation of financial resources for IT in the SME sector.

At the same time, regulatory and institutional frameworks (such as electronic accreditation), and technical infrastructure (e.g. broadband development), for IT applications, are also being actively developed, by the government and the agencies concerned. All of these efforts are expected to usher in new era for a broader and more effective application of IT for SMEs in Viet Nam in the near future.

II. Present situation of IT market and IT usage by SMEs

A. Market estimates

ICT applications are penetrating various activities such as production, service-provision, administration and management, and are becoming important components of some of Viet Nam's crucial economic sectors, such as aviation, banking, finance, insurance, tourism and telecommunication. ICT applications also help to strengthen capabilities and improve operational efficiency in various fields such as architectural design, construction, project cost estimation, mechanics, textiles, meteorology, irrigation, etc. E-commerce has assisted firms with their business activities in a number of ways. About 50% of firms have applied IT to managing production, business and services. Over 30% have connected to the Internet. A total of 10% have their own websites for domestic and international marketing and for business development. Electronic information agencies are developing and are having an increasing influence on society. Over 50% of ministries and branches and 35% of provinces and cities have set up websites. Over 20 electronic newspapers are in operation and becoming more and more efficient, making a significant contribution to providing information and to publicizing crucial issues.

1. Computer hardware and software

Viet Nam's ICT industry is growing at a rate of 25% per year. Personal computers (PCs) assembled by domestic firms shared 90% of the related market in 2002. About 20 firms assembled PCs with trademarks and the market share of these products was 25-30%. Domestically manufactured ICT products were worth about US$ 170 million and met 30-40% of domestic demand. Turnover from software products and related services was approximately US$ 75 million in 2002. As at July 2003, there were around 2,500 firms registered to operate in the IT field, of which over 400 were working in the software sector, with 8,000 employees. Several factories producing hardware, such as Fujitsu, Samsung VINA and Canon, and factories producing communication equipment, such as Hanel and Vietronic Thu Duc, contribute about US$ 1 billion to the total turnover of the hardware sector. Many software producers have focused on strengthening quality management capabilities and seeking and participating in international markets. Some software industrial parks are in the process of being developed.

Some are operating efficiently, such as Quang Trung Software Park in Ho Chi Minh City, which houses 52 firms with over 2,400 employees and trainees, about US$ 11 million of registered capital and over VND 500 billion of invested capital.

The telecommunication and Internet infrastructure is moving towards immediately applying modern and automated multiservice technologies with 100% digitization. The industry has a very high growth rate. The number of fixed telephone lines is increasing by 20-40% per year, with about 7 million subscribers and a ratio of 8.75 fixed telephone lines per 100 people. Internet services have been officially in operation since 1997. To date, the number of Internet subscribers is around 650,000 and the number of Internet users is 2.6 million, accounting for 3.2% of the total population of Viet Nam. At present, there are six Internet exchange providers (IXPs) and about 20 Internet service providers (ISPs). By the end of October 2003, telephone lines were available in 8,400 communes, representing 93.53% of the total number of communes in Viet Nam. Service charge cuts and the dismantling of the monopoly in the telecommunication field are being implemented radically. So far, the level of most service charges is equal to, or even lower than, the regional average. Six telecommunication network service providers have been licensed. A system of legal documents and strategy has been promulgated. State management in this field is more orderly, routine and efficient.

2. ICT training

In terms of ICT training, by 2002 there were 57 universities, 99 colleges, 90 government schools and 56 centres participating in ICT training. Most universities and colleges were connected to the Internet via telephone lines. About 20 universities hired their own transmission lines and had their own websites on the Internet. In 2003, 100% of high schools, universities and colleges had Internet connections. ICT training is diversified in nature. During the three years from 2000 to 2002, the requirements for enrolling IT university students and postgraduate students increased sharply by 50% and 30%, respectively. There were about 300 websites providing information and advice on education, online revision of lessons for examinations, remote training and online examinations, etc. Some remote training centres have been established. Education for second university degrees in IT has also helped to increase the number of IT experts and to improve the capability of specialized IT applications.

TABLE 1
VIET NAM'S NETWORK READINESS INDEX RANKINGS BY HARVARD

		2002-2003	2003-2004
Readiness level (2002: 74/75)		71/82	68/102
Environment		73/82	74/102
	Market	59/82	38/102
	Legal/Policies	72/82	78/102
	Foundation	78/82	92/102
Readiness		55/82	67/102
	Users	68/82	73/102
	Enterprises	63/82	74/102
	Government	43/82	52/102
Usage level		77/82	58/102
	Users	81/82	79/102
	Enterprises	77/82	53/102
	Government	66/82	50/102

Source: Centre for International Development, Harvard University, The Global Information Technology Report, 2003.

Some foreign organizations have participated in ICT training in Viet Nam, such as Japan's IT training programmes at Hanoi National University and Cisco's training programme for network experts, etc.

3. ICT penetration indicators

a)   Number of Internet users

Within 12 months (from June 2003 to May 2004), the number of Internet users in Viet Nam grew by a factor of 2.5, from 1.9 million to 4.7 million people (in fact it was triple the figure in May 2003). That was the year in which the growth rate reached a record level (the growth rates in previous years were as follows: 2000: 100%; 2001: 30%; 2002: 50%). The number of Internet subscribers also increased 2.5 times from 466,000 to 1.2 million people.

FIGURE 1
INCREASE IN INTERNET USERS, 2000-2004
(In thousands of Internet users)
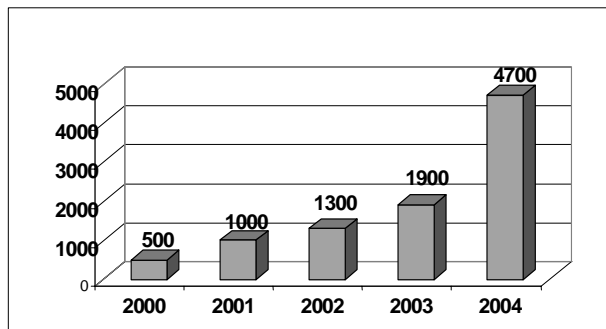
Source: MPT, Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished, 2004.

FIGURE 2
INTERNATIONAL INTERNET CONNECTION
(In Mbps)
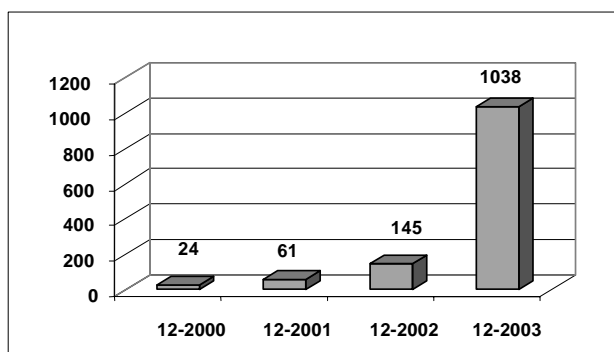
Source: MPT, Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished, 2004.

b)   Development of websites in the Viet Namese language

Along with the sharp increase in the number of Internet users, websites in the Viet Namese language are becoming an efficient tool for providing information. The number of websites in the Viet Namese language is increasing significantly. Many electronic newspapers have been launched and are receiving huge numbers of hits by Viet Namese people in both Viet Nam and abroad.

The five most important Viet Namese-language websites (in terms of the number of users and the number of hits) are ranked as follows:

TABLE 2
FIVE MOST POPULAR WEBSITES IN VIET NAM

Ranking	Website	Account	World ranking (hits)	World ranking (users)
1	Tin nhanh VnExpress	*vnexpress.net*	1 681	2 409
2	Tin tuc Viet Nam	*tintucvietnam.com*	2 981	4 730
3	Viet Nam NET	*vnn.vn*	3 552	5 602
4	Thanh nien online	*thanhnien.com.vn*	7 721	11 463
5	Tuoi tre online	*tuoitre.com.vn*	8 226	10 114

Source: MPT, Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished, 2004.
Note: These are the ranking results for all websites in the world as at 28 June 2004. Being listed in the top 10,000 is considered an achievement.

TABLE 3
AVERAGE INDICATORS FOR ICT SERVICE USAGE IN 2003

Average indicator 2003	Number of phones		Number of		GDP per capita (US$)
	Fixed/100 people	Mobile/100 people	PCs/100 people	Internet users/10,000 people	
World	18.76	21.91	9.91	1 107.08	5 383
America	34.12	33.80	28.95	2 592.71	15 633
Europe	41.00	55.40	21.44	2 373.14	12 822
Asia	13.64	15.03	4.45	647.25	2 313
Africa	3.01	6.16	1.38	147.93	663
Viet Nam	5.41	3.37	0.98 [02]	430.10	429

Source: Prepared by the author, on the basis of information provided by the International Telecommunication Union (ITU), May, 2004.

With the implementation of broadband ADSL and Wi-Fi services, the development of Internet phone services, the extension of Internet to schools all over the country and the determination to break the monopoly in service provision, there was great progress in the Internet and telecommunication in Viet Nam in 2003.

c)   Viet Nam on the world IT map

Generally speaking, Viet Nam's ranking is not encouraging at present. However, the important thing is that Viet Nam is now a name on the map of "software manufacturing and service contractors".

TABLE 4
VIET NAM ON THE WORLD IT MAP

	Indicator	Ranking			Year
		2004	**2003**	**Organization**	
1	Information Society Index (ISI)	N/A	53/53	IDC & World Time	2003
2	Infringement of Copyright Ratio	N/A	86/86	BSA	2003
3	Digital Access Index (IDA)	122/178	N/A	ITU	2004
4	E-Readiness Index	60/64	56/60	EIU	2004
5	Networking Readiness Index (NRI)	68/102	711/82	WEF	2004
6	E-government index	97/173	90/169	UNDPEPA-ASPA (10)	2003
7	Contract manufacturing of software-services	20/25	N/A	Kearney	2004
8	Telecommunication – Internet			ITU	2004
	- No. of phone lines/100 people	129/182	125/196		
	- No. of Internet users/10,000 people	82/182	126/196		
	- No. of PCs/100 people	126/182	124/196		
	- No. of mobile phones/100 people	125/182	144/196		

Source: MPT, Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished, 2004.

d)   Ranking by Networking Readiness Index-NRI (2003-2004)

Viet Nam was ranked 68th out of 102 in 2003/2004, with a score of 3.13, which was higher than the Philippines and Indonesia. Viet Nam made quite good progress in terms of ranking position and score compared with previous years. In terms of environment, readiness and usage level, Viet Nam was ranked 74th, 67th and 58th, respectively. In terms of environmental criteria, Viet Nam was ranked 38th out of 102 in market terms (this is a good record), 78th out of 102 in terms of politics and legislation, and 92nd out of 102 in terms of infrastructure. In terms of readiness criteria, Viet Nam was ranked 73rd, 74th and 52nd (good) out of 102 respectively as regards e-readiness for individuals, enterprises and the government. In terms of the usage level, Viet Nam was ranked 79th, 53rd (good), and 50th (good), out of 102 for usage level by individuals, enterprises and the government.

e)   Ranking by e-readiness-EIU index (2004)

TABLE 5
TEN COUNTRIES IN THE LOWEST RANKS, 2004

E-Readiness		Country	Score/10
2004	**2003**		
55	48	Russia	3.74
56	49	Ecuador	3.70
57	52	Iran	3.68
58	55	Nigeria	3.44
59	53	Indonesia	3.39
60	56	Viet Nam	3.35
61	58	Algeria	2.63
62	57	Pakistan	2.61
63	59	Kazakhstan	2.60
64	60	Azerbaijan	2.43

Source: MPT, Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished, 2004.

Above are the ranking results of the Economist Intelligence Unit (belonging to The Economist – United Kingdom), which were obtained on the basis of technological infrastructure, business environment, acceptance of e-commerce by enterprises and individuals, social and cultural conditions, policy and legal environment, and e-commerce support services.

Based on the criterion of the EIU index in April 2004, Viet Nam was ranked 60th out of 64 (with a score of 3.35), compared with a ranking of 56th/60 in 2002 and 2003, with scores of 2.91 and 2.96 respectively. The presence of four new countries, Estonia, Latvia, Lithuania and Slovenia, pushed Viet Nam down four grades.

f)   Ranking by e-government index

In 2003, the e-government index was calculated on the basis of the average value of three indicators, i.e. Web Measure, Telecom Index and Human Capital Index.

According to the ranking in late 2003, Viet Nam was 97th out of 173, with a score of 0.375. In the ASEAN + 3 region (ASEAN countries, Japan, China and Republic of Korea), the E-Government Index ranking was as follows:

TABLE 6
RANKING OF E-GOVERNMENT LEVEL

Countries	E-Gov Index	Ranking	
	2003	2003	2001
Singapore	0.746	12	4
Republic of Korea	0.744	13	16
Japan	0.693	18	28
The Philippines	0.574	33	69
Malaysia	0.524	43	60
Thailand	0.446	56	103
Indonesia	0.422	70	76
China	0.416	74	93
Viet Nam	**0.357**	**97**	**90**
Myanmar	0.280	126	N/A
Cambodia	0.264	134	122
Laos	0.192	149	110

Source: MOT, Report on the result of the survey of present situation of application of e-commerce in Viet Nam, Hanoi, 2003.

B. Penetration of IT and e-commerce by SMEs

1. ICT usage in government

Implementing e-government is key to a process of sustained growth in the ICT sector. Governments can promote the widespread diffusion of ICT applications, encourage ICT use in SMEs and educational institutions and promote the idea of a knowledge economy, only if their own operations are streamlined and technology-enabled. A detailed strategy for making the governance structure technology-compatible, by introducing a series of measures to streamline procedures and operations, is therefore vital and should be undertaken by the government as a top priority. It can improve government efficiency, cost savings, transparency and openness. It can also facilitate decentralization of power and functions to lower levels of government closer to the people. E-government in Viet Nam was rated by Harvard CIT in their summary analysis as a rather low 2 out of a possible 4.

Of Viet Nam's 250,000 professional civil servants, 5,000 (2%) have PCs that are connected to CPNet, the government's civil agency network, and thus could theoretically have access to the Internet. None of the 5,000 PCs are located below the province level.

Despite the various studies done of ICT usage in Viet Nam, there is apparently no definitive data available on key indicators, such as:

- The status of paper-based, legacy, and client-server systems in the government.

- The creation of data warehouses, common data definitions, and other cross-agency efforts.

  From preliminary discussions with various departments and ministries, it appears that most systems are paper based and legacy mainframe systems were not installed. Thus there are apparently no data warehouses, nor efforts at common data definitions.

  There are rough data available on the development and status of government websites, sufficient to allow some analysis of this issue. In Viet Nam, although most of the major ministries have websites,[1] the majority are slow to load and contain limited information. A brief review of a small sample of ministry and agency websites by WBG staff revealed the following:

  - Links to other ministries and agencies, and to private sites, were generally lacking;
  - Content was not generally delivered in a segmented, "role-based" way, which has been found by other jurisdictions to be a user-friendly way of providing tailored information;
  - There is no clear central portal, although www.business.gov.vn does have links to seven ministries and agencies and has some useful content;
  - No site appears to have any interactive features or even downloadable forms that can be mailed in after having been filled out.

With this information it is possible to tentatively classify Viet Nam's national e-government development, using the functionality typology shown in fgure 3 below (originally developed by the government of Canada, but clearly applicable worldwide). This government vision for e-government development involves three sequential stages, shown in the circles below, with dramatically increasing functionality at each stage.

FIGURE 3
VISION OF THREE E-GOVERNMENT STAGES
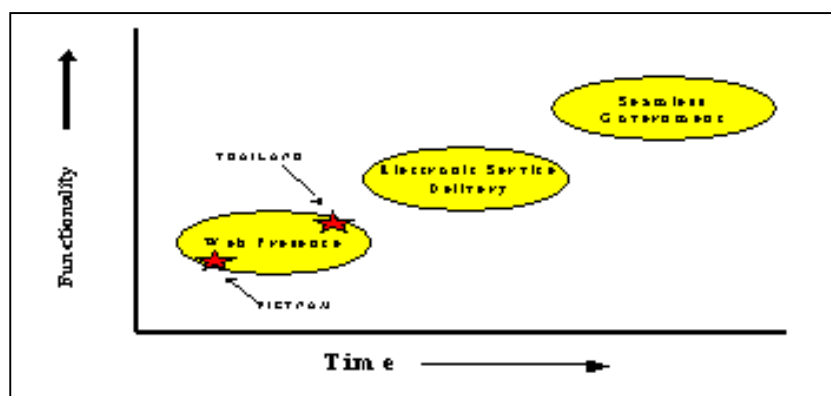
Source: Prepared by the author.

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[1] The ITU found 12 ministerial websites (ITU, 2002; OOG, 2002).

Here we see that Viet Nam is probably in the lower left region of the "web presence" stage, characterized by limited content, no clear central portal, few links between agencies, and zero to low interactivity.

At the local level in Viet Nam, the major e-government effort to date is in Ho Chi Minh City, where the city administration has launched CityWeb (www.hochiminhcity.gov.vn), as part of a five-year e-government master plan. The site reportedly covers investment opportunities, tax information, construction information, tax forms, and legal requirements. In a very progressive move, the site solicits comments from businesses in a "Talk with the Enterprises" section. City officials will then post responses to the corporate input.[2]

One of the latest developments in Ho Chi Minh City e-government efforts is the application for and granting of investment licenses through this web. This is still in its experimental phase, but promises to be a major development towards online government services.

2. Usage of computers by small, private SMEs

In 2002, the VCCI conducted a survey on the usage of computers in small enterprises, most of which had fewer than 50 employees. According to the survey results, computers were used rather commonly in surveyed firms (91.6%). Of these, 48.7% had fewer than three computers. However, their purposes for using computers were just typing, accounting management, Internet access and e-mailing. Few used computers for other purposes, especially training. They had not made full use of computer applications in supporting and managing their research and product development (see the table 7). Nevertheless, with quite a high proportion of computer-using firms, it could be said that infrastructure is already available for organizing training courses on financial/accounting software and management information systems, and remote training.

TABLE 7
PURPOSES OF COMPUTER USAGE AMONG SMALL PRIVATE SMES, 2002
(In percentages)

Purposes	%
Typing	85.4
Accounting	78.4
E-mailing	54.1
Internet access	48.5
Inventory management	20.9
Graphic design	19.9
Business management	15.5
Budgeting	10.3
Other purposes	6.9
Software design/programming	4.6
Training	1.2

Source: Viet Nam Chamber of Commerce and Industry (VCCI), Report of the Survey of the Application of Information Technology at Enterprises, Hanoi, 2002.

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[2]   Viet Nam Investment Review, May 13, 2002.

3. Situation of IT application in State-owned and relatively large SMEs

Due to easier access to finance and greater human and other resources, the larger SMEs (those with over 100 employees) have more experience with IT development and application. The following is the result of a survey of 44 such enterprises in early 2004.

In general, most are aware of the importance of information technologies in their business development and management. Eighty-six per cent of surveyed firms applied IT in their business and management, while only 14% had not taken advantage of IT.

There were several reasons why these enterprises did not use IT: unavailability of specialized staff (33%); dependence on parent companies' decisions (16%), and financial difficulties (16%). It can be said that most of them did not lay down suitable policies for attracting qualified staff and did not invest enough funding into promoting IT applications.

a)   IT personnel and organization

Only 27% of surveyed firms had arranged positions for IT management on their management board. This means that a large majority (73%) of them did not appoint officials specializing in IT issues. These firms were mainly the ones that did not apply IT in their management. Although some firms operated well, with significant growth rates, the lack of a fundamental method of implementation meant that there was still no position available in their organization for making direct decisions on an IT application plan.

Whereas in 16% of surveyed enterprises, there were no specific plans for IT applications up to 2007, plans were on the table in 84% enterprises. However, such plans tended to focus mainly on purchasing and upgrading existing equipment. There was no evidence to show that the plans were aimed basically at changing their management, production and business activities on the basis of information technologies.

Thirty-six per cent of surveyed firms did not have a department specializing in IT, while 64% already had one. These proportions show that the level of IT application in State-owned and larger SMEs is still low. Many of them found it was not really necessary to establish such a department. In addition, the lack of specific plans for IT application in the firms also had some influence on these proportions.

b)   IT infrastructure

Eighty per cent of firms operated in a networking environment. Twenty per cent did not establish network connections. Among the former, 49% used Local Area Networks (LANs), 3% exploited the benefits of Wide Area Networks (WANs) and 3% were connected using other network architectures.

Servers were found in 52% of firms. Fourteen per cent, 15%, 7% and 7% of surveyed enterprises used file servers, printer servers, database servers and application servers, respectively.

Most enterprises (73%) took advantage of transmission lines, while 27% did not. Of the firms, which exploited transmission lines, 52% shared dial-up lines, 13% had leased lines, 26% used ADSL and 10% relied on others.

As regards transmission costs, 34% of surveyed enterprises found it reasonable, while 26% said the price was high. According to 12% of firms, the cost they had to pay for using the transmission line was too high.

Specialized software programmes were not used commonly or efficiently in corporate governance. They were often designed to support different activities in business management, such as finance and accounting, personnel, salary, fixed assets, inventories, purchase and sales, etc. Users assessed such applications differently. A very small proportion of users felt satisfied with the specialized software (see the table 8).

TABLE 8
ASSESSMENT OF SOFTWARE FOR BUSINESS MANAGEMENT
(In percentages)

	Satisfied	Not very satisfied	Not satisfied
Finance and accounting	7	57	3
Personnel	5	10	
Salary	5	25	
Fixed assets	5	10	
Inventories	5	7	
Purchase	5	5	
Sales	5	23	
Production	3	5	
Client	3	7	
Project	3	7	
Interactive operation	3	5	
Control of production process			3
Others		3	

Source: Present situation of Application of information technology in State-owned enterprises, Viet Nam Software Association (VINASA), Hanoi, unpublished, 2003.

Nearly three quarters (73%) of the firms surveyed had taken advantage of the Internet for their business development. They accessed the Internet for various purposes. However, the most popular purposes were e-mail (100%) and information collection (94%). Twenty-five per cent used the Internet for normal communications, 16% for selling products, 34% for connecting with affiliates, and 16% for connecting with suppliers.

In a modern economy, a company's own website is considered an efficient tool for business introduction and sales promotion. Nearly half (43%) of the firms surveyed were aware of its importance and had set up websites of their own, while 57% had not. Own websites were used for various purposes, including advertising (28%), service provision (16%), product sales (20%), information exchange (16%) and others (20%).

Among the manufacturers surveyed, only 16% offered and sold their products through network service providers, while 84% did not.

Regarding the efficiency of applying the Internet in business, 3% of enterprises were considered to have exploited the Internet very efficiently, 41% efficiently, and 10% inefficiently. The level of efficiency it brought to 28% of enterprises was evaluated as moderate.

Investment by firms in IT, especially hardware, software, and services and training, fell year on year during the period 2001 to 2003. As can be seen in the table below, 2001 was the year with the largest investment in IT.

TABLE 9
CURRENT INVESTMENT IN IT BY STATE-OWNED SMES
(In thousands of U.S. dollars)

Field of investment	2001	2002	2003
Hardware	89	46	59
Software & services	11	6	5
Training	11	2	2
Total	**93**	**51**	**63**

Source: Present situation of Application of information technology in State-owned enterprises, Viet Nam Software Association (VINASA), Hanoi, unpublished, 2003.

On the supply side, 30% of firms used hardware products from domestic suppliers. Twenty-one per cent contacted domestic IT firms for software and services. Only 3% used IT products provided by both domestic and foreign suppliers. In the field of training, domestic IT training service providers attracted 12% of enterprises.

They chose IT products on the basis of their experience (14%), quality of products (21%), price (25%), prestige of providers (14%), policies (3%) and other reasons (3%).

c)   Assessment of IT goods/services, and government policy

The survey also received responses from surveyed firms regarding the price of IT equipment. Thirty-four per cent regarded it as reasonable. Forty-eight per cent said it was high and the remaining 18% said it was too high.

Concerning the cost of training, more than half of respondents said that the cost of IT training was high, while 21% found it reasonable. According to 7% of respondents, the cost was too high. A very small proportion (3%) thought it was low.

With regard to the cost of business management software, 21% of enterprises thought it was reasonable. Over half (55%) said it was high, and 11% thought it was too high.

Similarly, more than half of enterprises (55%) had the general feeling that the cost of IT consulting services was high. Ten per cent said it was too high. Nineteen per cent found it reasonable, and a few (3%) thought it was low.

The cost of Internet access was no exception. Fifty per cent of firms answered that it was high. Eighteen per cent found it too high and 14% thought it reasonable.

When asked to evaluate the capabilities of Viet Namese IT firms, 35% of surveyed enterprises felt satisfied with their services, 43% said that domestic IT firms did not have the capabilities to meet their demands, and 7% assessed their capabilities as low.

Regarding the government's policies, in the opinion of 66% of the firms surveyed, the government had no specific policies. According to 10% of firms, existing policies were not good, while 7% thought the policies were good.

The ratios of total IT investment by enterprises compared with their total turnover in 2002 and 2003 were 0.07% and 0.06% respectively. Taking the turnover for 2003 as the base value, this ratio is estimated for the years from 2004 to 2006 as follows: 2004-0.04%; 2005-0.09%; and 2006-0.09%.

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d)   Future plans

As far as future plans for the next three years were concerned, there were plans for IT application in 95% of firms. Ninety per cent agreed with the recommendation that separate policies should be implemented for promoting IT application in their organizations. Only 10% did not agree with this. With regard to organization, 79% planned to set up a specialized IT department. Twenty-one per cent of firms had no plans to set up such a department. With respect to training, most enterprises had plans for training staff in the use of basic office IT applications (82%), exploiting the Internet (79%), and promoting e-commerce (75%). Only 14% had plans for training staff in the use of specialized software.

Regarding plans for infrastructure improvement, 95% of enterprises planned to install new computers and 89% planned to connect to the Internet. In terms of transmission lines, the structure of transmission lines to be used by enterprises is expected to change significantly. The proportion of users of dial-up lines, leased lines, ADSL and others should be 16%, 5%, 36% and 43% respectively.

There were plans for applying IT in business management on the table in a number of enterprises. The percentage of firms planning to use finance/accounting software was 73%; personnel management-36%; salary monitoring-53%; fixed assets and inventory management-57% and 30%, respectively; purchasing-25%; sales-25%; production-16%; client management-41%; project management-21%; interactive operation-10%; production process control-14%; and others-10%.

Five percent of firms did not have any plans to access the Internet, while 95% want to apply or retain their existing Internet connections. With regard to intended use, 66% of firms plan to connect to the Internet for normal communication; 28% for selling products; 21% for connecting to affiliates; 46% for collecting information; 48% for connecting to suppliers; and 3% for other purposes.

Establishment of their own websites was the aim of 86% of surveyed firms. Their reasons for using own websites were: to advertise their organizations and products/services (32%); to provide services (12%); to sell products (23%); and to exchange information (41%). The remaining 14% of surveyed firms did not have any plans for owning websites in the coming three years.

Regarding offering and selling products through service providers on the Internet, the proportion of firms that planned to do so was almost the same as those that did not: 34% compared with 32%.

Aware of the importance of corporate management software, more than half (55%) of the firms surveyed had drawn up plans for investing in such software, while 7% had not. The percentage of firms that planned to spend less than VND 50 million on investing in such software was 32%; VND 50-100 million: 12%; VND 100-200 million: 3%; and VND 200-500 million: 3%.

Firms' plans for investing in hardware and training over the next three years were as follows:

TABLE 10
PLANNED INVESTMENT IN IT BY STATE-OWNED SMES
(In thousands of U.S. dollars)

Field of investment	2004	2005	2006
Hardware	48	59	62
Training	12	14	13
Total	**60**	**81**	**75**

Source: Present situation of Application of information technology in State-owned enterprises, Viet Nam Software Association (VINASA), Hanoi, unpublished, 2003.

There is no doubt that, in general, information technologies bring firms significant efficiency. Productivity increased in 50% of firms. Thirty-four percent and 41% of firms respectively said that their product quality and competitiveness had improved thanks to the application of IT. Other results were reported by 3% of firms. Nevertheless, 3% derived no benefits from applying IT.

4. SMEs and e-commerce

At the policy level, although there have been several e-commerce related initiatives,[3] there is scant market research on e-commerce or business adoption of ICTs (MOT, 2003). Most activities so far appear to be road maps for planning, or segmented initiatives at the development stage, rather than systematic and successful implementation efforts.

The ICT infrastructure level in Viet Nam is still too low at present to develop a real e-commerce environment. Of the 700,000 PCs in use in Viet Nam in 2002, 75% belonged to government offices and State-owned companies (ITC, 2002).[4] Four years (1997-2001) after Viet Nam was connected to the Internet, about one third of the SMEs had Internet connections.

SME awareness of e-commerce is high but the level varies among the different types of SME. However, few SMEs really know how to find market information or partner information on the Internet using e-commerce sites. Even fewer advertise, market and eventually sell their products online.[5]

In 2003, there was a comprehensive survey of e-commerce application among medium size enterprises. The result of the survey is summarized below (MOT, 2003):

a)   Awareness of e-commerce

- 100% of surveyed enterprises were aware of the importance of e-commerce in their production and business activities.
- 79% agreed with the benefits that e-commerce would bring, including: expanding existing channels for approaching clients; attracting new customers; improving customer satisfaction; and increasing turnover, profits and their operational efficiency. This shows that most enterprises are clearly aware of the benefits of e-commerce.

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[3]   Some of the initiatives include: 14 projects launched by the Ministry of Trade, driven by the IT Master Plan; an Oracle effort in Da Nang to set up an e-marketplace; an effort between the FPT software house and a United States firm to create services similar to MeetChina.com; a study by IDRC of Canada on obstacles to e-commerce for SMEs; various software parks, training and publicity initiatives.

[4]   This figure seems rather high in view of the information obtained from the Office of the Government; clearly more definitive surveys are needed.

[5]   For example: <B2vn.com>; <Yes.com.vn>; <vietnamtourism.com>.

- 96% of surveyed enterprises said that e-commerce would help them to increase distribution channels. Eighty-five percent wanted to develop their image through e-commerce. This means that most enterprises have clear and appropriate objectives when participating in e-commerce. Only a few participate in e-commerce.

b)   Readiness level of e-commerce participation by enterprises

- Seventy-eight percent of surveyed enterprises had defined products/services for e-commerce participation.
- They had selected target clients for their products/services. This shows that they still obey marketing principles when participating in e-commerce (selecting and deciding on products, prices, markets and promotion of trading transactions).
- The proportion of enterprises that had selected technologies and arranged for staff to participate in e-commerce is rather low (33% and 41%). This proves that firms encounter trouble or difficulties in human resource and technology terms.
- The results of the survey also show that most enterprises have been using technical equipment required for e-commerce application such as computers, Internet connections, LANs, etc. This means they can equip themselves with the basic facilities necessary for e-commerce participation.
- Only one third of firms had arranged for staff to monitor the application of e-commerce; 61% had plans to train staff in this method of trading. However, they had not invested adequate funding in training.
- Organizing for conducting efficient e-commerce participation is another consideration. A reasonable proportion of the enterprises surveyed had a fairly good organizational structure for e-commerce. Usually e-commerce projects have close links with sales departments and should be placed under the direction of their IT managers.
- Enterprises did not pay much attention to e-commerce, since they allocated a budget to it as an expense for business expansion and trade promotion.

The table below provides information on the type of e-commerce ICT adopters.

TABLE 11
E-COMMERCE READINESS OF SMES IN VIET NAM BY TYPE OF ADOPTER

Type of adopter:	Innovators	Adopters	Latecomers
SMEs	ISPs	Some companies in the service sector (tourism/travel, hotel, entertainment, beauty care, etc.), the trading sector (import/export activities) and manufacturing (e.g. garments, textiles, handicrafts, leather and embroidery).	The remaining SMEs
Characteristics	They have rapidly understood the potential contribution of e-commerce	They are likely to be aware of the contribution that e-business practices can make to the company, but are perhaps not fully convinced of its relevance to them. This group will provide the threshold needed for e-commerce and is likely to constitute the largest market for any initiatives that may be implemented in the context of e-commerce in Viet Nam.	They have little idea about e-commerce and don't have any plans for e-commerce.

Source: Prepared by the author on the basis of International Trade Centre (ITC), "Viet Nam E-Trade Bridge" Geneva, January 2002.

c)   Current situation of e-commerce application

- A significant proportion of enterprises (46%) had participated in e-commerce. However, the rest seemed uninterested in e-commerce. Only 9% and 24% of the firms surveyed planned to participate in e-commerce in the coming six and 24 months, respectively. Eleven percent were still in two minds and a lot did not answer.

- Those that had participated in e-commerce were more interested in the business-to-business (B2B) form of e-commerce (76% compared with 57% for the business-to-consumer (B2C) form). This shows that the B2B form in Viet Nam brings more benefits to enterprises.

- Most forms of information exchange in e-commerce had been applied, such as e-mail (93%), EDI (electronic data interchange) and XML (extensible mark-up language). Fifty-four percent of surveyed enterprises had their own websites. Types of goods and delivery were diversified from tangible to digitized goods, and were delivered on the networks. This shows that e-commerce has been applied widely, although it has not yet become popular.

- Most enterprises had to stop at payment. This is because the legal framework for online payment is still lacking. They merely introduced their products and themselves through networks. Payment had to be made by traditional methods.

- Only 13% of firms used specialized software when participating in e-commerce, e.g. inventory management, client management and personnel management. This shows that software programmes may be too expensive for their financial means, or are not widely available on the Viet Namese market.

III. SME development in IT renovation

A. Overview of the relative importance of SMEs in the overall economy

In recent years, in line with the renovation policy set by the government, with positive support from foreign countries and international organizations, the private economic sector, including SMEs, has been booming throughout the country, providing a major contribution to the country's economic development, mobilizing social resources into production and business activities, creating more employment and improving livelihoods for people.

Decree No. 90/2001 ND-CP laying down regulations on development support for SMEs, defines SMEs as independent businesses and production establishments that have registered their business under the current legislation, with registered capital of less than 10 billion VND (equivalent to approximately US$ 0.7 million) or an average of fewer than 300 employees. The statistics indicate that almost 99% of all private enterprises are SMEs. Of all business activities engaged in by SMEs, 42% are involved in trade and repair activities; 35% in manufacturing; 10% in construction; 4.4% in hotel and catering; 3.3% in transportation and communication; and 2% in property and business services (UNIDO, 2000). SMEs constitute a substantial majority of the total number of enterprises engaged in all fields, ranging from a low of 10% in construction, to 62% in electricity, gas and water; 72% in finance and credit; 78% in transportation and communication; 86% in manufacturing; 84% in mining; 84% in hotel and catering; 88% in education and training; 93% in trade and repair and 94% in R&D (UNIDO, 2000).

The renovation process led to impressive development and growth in the economy, to which SMEs partly contributed. According to the SME Department in VCCI, key economic indicators in 2002 showed great achievements, as illustrated below:[6]

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[6]   These statistics were officially collected by the SME Department of VCCI.

TABLE 12
KEY ECONOMIC INDICATORS IN 2002

GDP at market price	(*billions US$*)	33.80
GDP	(*billions US$*)	35.40
Real GDP growth	(*%*)	7.04
Consumer price inflation	(*average-%*)	3.90
Export of goods	(*millions US$*)	16 553
Import of goods	(*millions US$*)	16 778

Source: General Office of Statistics, Annual Statistics of 2002, Hanoi, 2003.

TABLE 13
GDP STRUCTURE BY ECONOMIC SECTOR
(In percentages)

State and public sector:	39
Foreign investment enterprises	19
Domestic private sectors:	42

Source: Prepared by the author.

TABLE 14
CAPITAL INVESTED IN THE NATIONAL ECONOMY (2002)
(In millions of U.S. dollars and percentages)

	Millions US$	%
Total invested capital	**11 275**	**100**
Domestic private sector	3 250	28.8
State sector	5 900	52.3
Foreign investment sector	2 125	18.8

Source: General Office of Statistics, Annual Statistics of 2002, Hanoi, 2003.

TABLE 15
JOB CREATION (2001)

	Jobs for people over the age of 15	%
Total	**37 676 000**	**100**
Created by private sector	33 553 000	89.0
– of which, by household businesses	26 048	69.1
State sector	94 400	10.0
Foreign investment sector	354 000	1.0

Source: General Office of Statistics, Annual Statistics of 2002, Hanoi, 2003.

Since the Law on Enterprises was issued in 2000, business start-ups have been increasing rapidly, with an average of 1,600 new companies per month. In 2002, private enterprises contributed nearly 30% of total new investment. Private industrial output increased by 19.2% in 2000, 20.3% in 2001 and 19.3% in 2002. Employment growth is reported to be about 30% per year.

In 2003, the growth rate of the industrial sector was 16% compared with 2002, the highest rate in the past three years, in which the State sector achieved 12.4%; the private sector achieved 18.7%; and the foreign investment sector achieved 18.3%. As at April 2004, industrial production was reportedly growing at 15.4% over with the same period in 2003, when the growth rate was 12.6%; the private sector achieved a growth rate of 21.4%; the foreign investment sector achieved a rate of 14.1%. These are considered to be the highest sustainable growth rates compared to the previous year.

As there are no comprehensive statistics regarding SMEs, we can use the indicators in the table below to gain an idea of the performance of SMEs (since most private enterprises are SMEs):

TABLE 16
MAJOR INDICATORS ON ENTERPRISES

	Major indicators		Total	Type of ownership		
				State-owned	Private	Enterprises with foreign investment capital
1	Percentage of enterprises	(%)	100	8.50	87.80	3.70
2	Percentage of employees	(%)	100	48.50	36.60	14.90
	– Average number of employees in one enterprise	(#)	74	421	31	299
3	Ratio of capital source	(%)	100	62.10	16.50	21.40
	– Average capital of one enterprise	(millions US$)	1 438	10 438	0.25	8 375
4	Average fixed asset per employee	(millions US$)	7 438	8 563	2 688	15 438
5	Revenue percentage	(%)	100	51.30	30.10	18.60
	– Per employee	(thousands US$)	16 250	17 190	13 375	20 438
6	Ratio of profit-making enterprises	(%)	75.10	83.00	73.60	46.50
	– Average profit per enterprise	(millions US$)	1.55	6.50	0.17	34.50
	– Income compared with revenue	(%)	6.00	4.70	1.90	16.40
7	Ratio of contribution to GDP	(%)	100	57.50	16.50	26.00
8	Ratio of contribution to the State budget	(%)	100	52.60	10.80	36.60
	– Amount paid to the State budget compared with revenue		9.04	9.27	3.25	17.75
9	Rate of return	(%)				
	– On business capital		4.32	2.90	2.31	9.99
	– On revenue		5.13	4.18	1.50	13.61

Source: Nguyen Ngoc Tuan, Development of different economic sectors, Viet Nam Investment Review, No. 79, May 2004.

While it is recognized that the authorities now consider SMEs to be important, further reforms are still needed to support SME development in Viet Nam. The reasons are, partly, that the Law on Enterprises and other relevant legal documents have so far merely simplified the complicated procedures for the registration, establishment and operation of enterprises, which does not address the various emerging issues for enterprises. It is recognized that further reforms of SME policies should place more emphasis on supporting existing SMEs, primarily by enhancing effective management skills and technological capability for their continuing operation, rather than placing too much emphasis on financial support, even for weak businesses. As a result, the Law on Enterprises has led to this sharp increase in the number of new enterprises.

B. Case studies on usage of e-commerce and supply chain management (SCM) in selected industries

In the context of open markets and development of the global digital economy, enterprises face significant challenges in international competition and export market development.

Wise and strategic use of information and communication technologies can give SMEs the competitive edge they need to survive in this demanding environment. In Viet Nam, despite the infrastructure constraints, a number of SMEs are already leading the way. Initiatives are under way to improve the national environment for e-commerce and to provide support and encouragement to enterprises taking advantage of this new way of doing business.

However, many SMEs are still unaware or reluctant to take advantage of e-commerce for many reasons.

The case studies in this report focus on the websites designed, operated and managed by two of Viet Nam's trade-facilitation organizations: VCCI and Vietrade, which comes under the authority of the Ministry of Trade (MOT).

1. VCCI and its website

a)   VCCI-functions, tasks and organization

VCCI is a non-governmental organization, representing Viet Nam's entire business community. Its aim is to speed up the country's socio-economic development and to promote economic, commercial and technological cooperation between Viet Nam and other countries in the world. It is also a non-profit organization operating with financial autonomy. However, it may get financial support from the State budget for selected projects of major importance. It has a head office in Hanoi and representation offices and branches in other major cities in Viet Nam. It also has representation offices in a number of foreign countries.

(i)   Specifically, VCCI has following functions:

- To represent the Viet Namese business community in promoting and protecting their lawful and legitimate interests in domestic and international relations.
- To promote the development of, and cooperation amongst, business entities; to assist them in trade, investment, economic and technological cooperation, etc., for enterprises inside and outside Viet Nam.

(ii)   The tasks in the VCCI Statutes are as follows:

- To collect and study the opinions of enterprises, to reflect, make recommendations and advise the State on legal matters and economic policies, in order to improve Viet Nam's business environment.
- To participate in the development and implementation of the strategy for socio-economic development and international economic integration; to participate in conferences and missions for economic and trade negotiations in line with State regulations.
- To facilitate forums, dialogue and meetings between enterprises and government agencies, between enterprises and representatives of employees and other relevant domestic and foreign organizations, in order to exchange information and views on matters relating to the business environment.

- To conduct activities to protect the legitimate interests of enterprises in domestic and international relations.

- To organize promotion and encouragement activities for business enterprises regarding the strict observance of laws, improvement of social accountability, good business ethics and culture and sound working relations, environmental protection, and participation in other social activities in line with VCCI's objectives.

- To conduct activities to develop, promote and enhance the reputation of Viet Nam's enterprises, entrepreneurs and commodities; to promote business support services; to assist businesses in developing trade and investment relations in Viet Nam and abroad through such means as: matchmaking, partner search, providing information, guidance and consultancy to businesses; organizing studies, market research, seminars, conferences, trade fairs, exhibitions, advertising and other promotion activities.

- To organize appropriate training activities geared to developing human resources for business enterprises, to help entrepreneurs enhance their knowledge, management skills and business capacity.

- To help with the registration and protection of intellectual property and technology transfer in Viet Nam and abroad.

- To issue Certificates of Origin for Viet Namese export commodities and certify other necessary commercial documents, and cases of force majeure.

- To help domestic and foreign business enterprises to settle differences and disputes through negotiation, mediation or arbitration, performing a general average adjustment, if requested.

- To conduct any other activities assigned by the Viet Namese State or other organizations.

(iii) In terms of organization:

VCCI management bodies consist of the General Assembly of member representatives (GA), the Executive Committee (EC), the Standing Committee (SC), and the Control Committee (CC).

- **General Assembly (GA)**

The GA is the supreme body of VCCI. It comprises representatives elected by regional conventions, with the number and composition prescribed by the Executive Committee in proportion to the membership for each region.

- **Executive Committee (EC)**

The EC is the body elected by the GA to direct all VCCI activities in the intervening periods between two GA sessions. The GA decides the number of EC members and at least three-quarters of them are representatives of official VCCI members.

- **Standing Committee (SC)**

The SC is the permanent body of the EC and is directly responsible for managing VCCI departments and organizations. The SC reports to the EC on the implementation of its work and tasks. The rules applicable to the SC are laid down by the EC.

- **Control Committee**

The CC consists of a number of EC members appointed by the EC for a term of five years. The CC elects the Head of the Committee to direct its operations. The CC controls the status of representatives to the GA and the implementation of GA resolutions. The rules applicable to the CC are laid down by the EC.

(iv) *Specialized committees*

Under these bodies, there are specialized committees, professional departments, local branches, representation offices and organizations affiliated to VCCI. Below is a more detailed description of the departments whose operation has a direct impact on the Viet Namese business environment in general, and enterprises in particular.

- **International Relations Department**

  - Functions:
    Advising the SC in international relations activities, such as trade promotion, investment and international economic integration in support of enterprises.

  - Main tasks:
    - To advise the SC and to conduct trade promotion, investment and sponsoring activities; to support the Viet Namese business community in international economic integration; to strengthen international business cooperation for enterprises; to research and establish a database on international and regional markets.
    - To advise on, and create and deploy, Economic Forums between Viet Nam and other major economic regions; to participate in trade negotiation delegations and bilateral/multilateral economic cooperation committees.
    - To act as the leading body in supervising the implementation of agreements between VCCI and foreign partners; to act as the contact point in liaising with foreign firms and foreign business associations which participate in VCCI activities, to support Viet Namese enterprises in doing business overseas.
    - To help protect the legal rights of enterprises in economic and commercial arrangements with foreign partners.
    - To manage and implement some business support projects/programmes.
    - To assist the SC and advise other VCCI departments in international relations; to act as the secretary for Marketing Committee of the Board of Directors.

- **Members and Training Department**

  - Functions:
    Advising the Standing Committee; managing and developing members; providing training and support for firms' development.

  - Main tasks:
    - To advise the SC on establishing and implementing member development and support strategies.
    - To gather firms' opinions through forums, dialogue and meetings between them and State authorities and other related bodies; to study legal regulations and policies, to reflect and make recommendations on improving Viet Nam's business environment.
    - To take the necessary steps to protect the members' legal rights in international economic cooperation.
    - To support enterprises in complying with laws and to improve their social responsibilities and business ethics and culture.
    - To participate in improving the capabilities of Viet Nam's business associations.

- · To act as the lead body in organizing training courses to develop human resources for enterprises.
- · To participate in other trade promotion and investment activities.

- **Legislation Department**

  - Functions:
    Giving advice to the SC, involvement in legislative activities, disseminating laws and policies relating to the business environment; and managing the issuance of Certificates of Origin for export goods as authorized by the government.

  - Main tasks:
    - · To participate in commenting on and drafting legal documents; to organize the implementation of, or participate in, projects relating to the business legal environment.
    - · To organize conferences and workshops on legal issues; to advise on the implementation of, disseminate and provide, legal documents; to publish legal documents.
    - · To carry out activities to protect the rights and legitimate interests of Viet Namese enterprises at home and abroad.
    - · To grant Certificates of Origin (C/O) to enterprises; to provide advice, information and training on C/O; to manage the granting of C/O within the VCCI system; to coordinate with relevant authorities the investigation and prevention of commercial fraud through C/O.

- **SME Promotion Centre**

  - Functions:
    Advising the SC in trade promotion, carrying out trade promotion and support activities for SMEs in Viet Nam.

  - Main tasks:
    - · To collect, study and organize forums and meetings on SME related issues, to advise the State on the business environment, policies and mechanisms and to speed up the development of SMEs.
    - · To cooperate with other VCCI departments, functional authorities, and national and international development organizations to promote trade and provide business development activities for SMEs, such as: training, consultancy, information provision, market development and access to capital.
    - · To create a network to link together providers of SME business development services.
    - · To ensure gender equality in the development of SMEs.

b)   Some major support activities for SMEs

The SME sector in Viet Nam is still very young and has little experience of conducting business activities. Therefore, promoting the development of SMEs has been given the highest priority amongst VCCI's political tasks.

In 1994, VCCI established a centre specializing in assisting SMEs. Support services for SMEs focus mainly on training, marketing assistance, information provision and consultancy.

(i)   Training

In terms of training, VCCI focuses on management skills; use of technologies; improving competitiveness; disseminating new laws and government policies, and guidance on their implementation, etc. Training courses are often short and geared to the business conditions of SMEs. VCCI often defrays part of the fees for SMEs to participate in training courses. In 2003, the VCCI system held 449 short, medium and long-term training courses involving 19,010 participating enterprises. VCCI programmes and projects also participate in training. For example, the Market Development for Farm Produce project organized 10 training courses on developing and exporting farm products for 1,500 participating enterprises in many Viet Namese localities; the Improvement of Management Capabilities project held 150 training courses.

(ii)   Marketing assistance

VCCI assists SMEs by conducting various marketing activities, such as: (a) providing SMEs with a marketing planning service; (b) supporting SMEs in the regular display of their products in showrooms; (c) sponsoring SMEs for stand rental fees and assisting them in organizing joint stands at large trade fairs; (d) supporting the organization of SME Weeks; (e) organizing overseas market exploration missions in order to improve SME export potential. In 2003, VCCI organized about 259 business trips abroad for 4,500 participating enterprises for market investigation and partner search. At the same time, VCCI hosted nearly 600 international missions to Viet Nam involving over 11,000 business people to explore this market and seek cooperation opportunities. A total of 190 seminars, forums and meetings between Viet Namese and foreign enterprises were held.

(iii)   Information provision

Information is provided to SMEs at a preferential fee that can cover part of the direct costs for collecting information. SMEs can access information on business opportunities, business partners, markets and technologies. Additionally, in order to prepare for penetrating foreign markets and participating in international business, SMEs can obtain useful information and knowledge from such VCCI publications as "Trading in the EU Market", "Exporting to the US Market", etc. In order to help Viet Namese enterprises to penetrate the Chinese market through Lao Cai market, VCCI has coordinated with the People's Committee of Lao Cai Province to establish a website to provide necessary information on the South-West market of China.

(iv)   Consultancy

The VCCI SME Promotion Centre is always ready to provide SMEs with advice on business, legal issues and technology, etc. A team of specialists in various fields is registered at the Centre. They are willing to share with SMEs their business experience and skills, such as management, accounting standardization, technology and input selection, material analysis, etc.

In addition, SMEs may get help from the Centre in accessing financial sources and writing business plans.

c)   Vnemart: the e-trade floor of VCCI for the business community

In an attempt to promote trading for enterprises, VCCI has designed an electronic portal-www.vnemart.com (hereafter referred to as "Vnemart"). Vnemart was launched in late 2002 to help build a bridge between Viet Namese enterprises and the international business community via the Internet. Vnemart is the first national e-commerce portal where users can conduct the whole transaction online. The portal is designed to assist Viet Namese and foreign businesses in gaining more market knowledge and understanding of legal and regulatory frameworks and business practices in each country and to seek trading partners and opportunities. The portal is an

efficient tool for Viet Namese enterprises to develop and expand overseas export markets and for international business people to obtain information about Viet Namese products, services and suppliers, and eventually promoting and facilitating e-commerce transactions.

With 10,000 visits to Vnemart a day, it is becoming more and more attractive to business communities in Viet Nam and abroad.

(i)   Functions of Vnemart

Vnemart acts as:

- An exhibition centre for Viet Namese goods and services on the Internet. It helps significantly to reduce marketing and trading expenses for enterprises and to improve accessibility to Viet Namese goods and services.
- A trade transaction centre. It helps enterprises to seek counterparts and products and to conduct online transactions. In the future, enterprises will be able to conclude contracts and make payments on line.
- An information support centre. This centre provides enterprises with updated information on markets, prices, partners, economic and legal information and international market profiles.
- An enterprise-training centre. It provides and consults information on business management, policies, regulations and international trade customs to help enhance the competitiveness of Viet Namese enterprises.
- An enterprise forum. It supports enterprises in sharing experiences and discussing matters of concern.

(ii)   Services on Vnemart

Vnemart is well designed to enable firms to easily access:

- **Core services:**
  · Product display and introduction.
  · Online marketing and advertising.
  · Online transaction and negotiation support.
  · Transaction information monitoring.
  · Customer relationship management (for suppliers).

- **Support services:**
  · Web mail.
  · E-catalogue.
  · E-commerce consulting.
  · Training and consulting.
  · Legal and policy document provision.
  · Market and specialized information provision.
  · Foreign trade instructions.
  · Certificate of authorization (CA).
  · Technical support services.

Furthermore, in the future, when there are sufficient legal regulations, Vnemart will provide online payment services, consulting and other electronic services relating to forwarding, transport, insurance, distribution, etc.

(iii)   Vnemart's technical solution

The system has been built using a tree structure for the server. Web server, commerce/application and database servers can be separate on the nodes.

- **The system's hardware and software configuration is as follows:**

  - One RS6000 H70 server with an AIX UNIX Version 4.0 operating system for web/application server.
  - One Netfinity 7100 server with Redhat Linux 6.0 operating system for database server.

- **Security: the system is protected by different security levels:**

  - Web and database servers inside a firewall.
  - SSL (secure socket layer) encryption on the communication line.
  - Required username and password to access the website or database. Both hardware and software are frequently backed up on the database server.
  - Hardware: mirror hard disks and hot swap capability to fix problems.
  - Software: daily backup at a fixed time. If any breakdown occurs, data is lost only for the duration of the breakdown. There is a dual backup at hardware and software levels.
  - In addition, the system performs off-line storage periodically on web and database servers to CD or hard disks.

Vnemart bought the secure site services of Verisign, the world leader in certification authentication, to guarantee the system's security level. This enables enterprises and users to be confident when they exchange or update information.

Vnemart also bought a technical solution for managing the website from a German company. Vnemart has no right to modify the source code. This makes it very difficult for Vnemart to change items on the website. If Vnemart wants to make a change, it has to be accepted by the German company. This prevents Vnemart from developing other solutions in the future, such as online payment (in cooperation with the Industrial and Commercial Bank).

Vnemart is planning to redesign its technical solution. Vnemart staff is developing the new solution jointly with foreign consultants.

(iv) Membership

A firm that wants to become a member of Vnemart merely has to send its registration to Vnemart's office via any means of communication, such as fax, e-mail, courier, etc.

There are two types of Vnemart membership, VIP Members and Basic Members (see table 17):

- VIP Members are allowed to advertise themselves and establish their own showrooms and transaction offices on the website. In order to become a VIP Members, a firm must have legal status, must have passed the VCCI training courses on registration procedures and exploiting the website and fall into the industrial sub-sector categories already available on Vnemart. Firms in other sub-sectors that want to become VIP Members and showcase their products have to wait until the website infrastructure is ready to accept them.

- Basic Members are only permitted to post their offers to sell or demands for buying products/services on the website. Basic Members are not required to attend the above training courses or operate in the above sub-sectors.

There is no discrimination between members that are SMEs and large-scale enterprises. They have the same opportunities and obligations when participating in the network. However, at present, Vnemart gives priority to export-orientated firms.

TABLE 17
RIGHTS OF VIP AND BASIC MEMBERS OF VNEMART

Services (rights of members)	Basic members	VIP members
Open showrooms to introduce firms and products	Only basic information is shown in the section where enterprises introduce themselves	All necessary information may be displayed: overview of enterprises, business information, products, contact addresses
Offering products	Yes	Yes
Viewing offers of products	Yes	Yes
Detailing offers of products	Restricted (no display of e-mail, web and visiting addresses)	No restrictions
Number of offers	Max. 5 offers/ month permitted	No limitation
Administration (revising, re-uploading, removing/buying/selling offers)	Yes	Yes
Offering products with their photos	No	Yes
Registering to receive offers of products from certain partners	Yes	Yes
Involvement in transactions (receiving and sending letters of transaction)	Yes	Yes
Managing documents	Yes	Yes
Showing information in member's profile	Yes	Yes
Sending purchase orders to targeted sellers	Yes	Yes
Making inquiries to sellers about products offered for sale	Yes	Yes
Using inquiry form	Yes	Yes
Showing company logos on the company list and product catalogue pages	Fees required	Free of charge for 4 days/month
Provision of 6MB e-mail boxes	No	Yes
Accessing the list of importers throughout the world	No	Yes
Accessing the database of Viet Namese and international commercial law	No	Yes
Keeping own accounts of the shops/showrooms on the Internet	No	Yes

Source: Interview with Viet Nam Chamber of Commerce and Industry (VCCI), 2004.

Vnemart Members have an obligation to ensure that any information provided to and uploaded on Vnemart's website is truthful, up-to-date and accurate. Vnemart has the right to remove any material or information at its sole discretion, which might be unlawful, inappropriate or contrary to its stipulations. Vnemart membership may be suspended or terminated if:

(a) the member is found in breach of Vnemart's rules or has engaged in a fraudulent activity in connection with the use of Vnemart's website, or (b) membership has not been activated or the account provided remains inactive for three consecutive months.

Since Vnemart acts only as the facilitator of transactions among its members, it does not take any responsibility for the quality, safety and legality of the products/services offered for sale, or the failure of any processes in the transactions conducted by the members through the website.

(v)   Operational results of Vnemart

The controlling body of Vnemart is VCCI, which has carried out many activities to attract website members and visitors. In coordination with various business associations, VCCI has organized more than 10 seminars to introduce this website and its advantages to enterprises in Viet Nam. VCCI has also provided about 30 training courses to firms registering to advertise and showcase their products on Vnemart.

Initially, during the pilot implementation phase, the site showcased close to 1,800 handicrafts produced by 27 selected firms. About 95% of these companies were small and unable to introduce their products onto the international market. They were selected from about 200 enterprises on the basis of their export volume and their willingness and readiness to participate in e-commerce.

In February 2004, Vnemart's services were expanded to include eight more sub-sectors, making a total of nine sub-sectors, including handicrafts, textiles and garments, leather and shoemaking, agricultural products, aquatic products, electronics and mechanics, foodstuffs, chemicals and plastics, and construction materials. At that time the number of members was 648, of which 128 were firms in foreign countries such as America, Europe, Japan, China, Republic of Korea and India. There were 2,714 products showcased on the website. As a result, many members concluded commercial contracts worth hundreds of thousands of US dollars. They included Van Nam, Artex Saigon, Mitex, Hamico, and Barotex Viet Nam. The number of enterprises applying for VIP and Basic Membership increased to over 1,000 and 1,500 respectively, including more than 500 foreign firms throughout the world.

Four months later, the statistics were even more impressive. By June 2004, the number of members had increased to 910, including 225 foreign members on various continents. Pharmaceuticals became the tenth sub-sector participating in Vnemart. A total of 2,848 types of product in all ten sub-sectors were showcased, with 250 transactions. With about 10,000 visits to Vnemart per day, Vnemart has become one of the top 225,000 websites in terms of attracting visitors.

TABLE 18
SOME OF THE MAIN OPERATIONAL RESULTS OF VNEMART
SINCE ITS ESTABLISHMENT
(In number of)

Period	Participating sub-sectors	Official members	Products showcased on the website
Late 2002	1[a]	27	1 800
February 2004	9	648	2 714
June 2004	10	910	2 848

Source: Interview with Viet Nam Chamber of Commerce and Industry (VCCI), 2004.
[a] For pilot implementation.

The above achievements have been obtained with the strong support of government ministries, agencies and organizations that are pooling their efforts with VCCI to promote and develop e-commerce in Viet Nam. They also act as members of the Vnemart Advisory Board. They are:

- Ministries:
  - Ministry of Culture and Information
  - Ministry of Trade
  - Ministry of Agriculture and Rural Development
  - Ministry of Finance
  - Ministry of Planning and Investment
  - Ministry of Science, Technology and Environment
  - Ministry of Foreign Affairs
  - Post and Telecommunication Ministry

- Agencies:
  - General Statistical Office
  - General Department of Viet Nam Customs
  - Viet Nam Airlines
  - Viet Nam National Tourism Administration

- Organizations:
  - Telecommunication Association
  - Viet Nam Electronics Business Association
  - Viet Nam Software Association
  - Viet Nam Association for Information Processing

(vi)   Structure of Vnemart clients

As mentioned above, Vnemart clients come from various countries and various industrial sub-sectors, such as handicrafts, textiles, leather and shoes, aquatic products, etc. The number of Viet Namese firms operating in the handicraft sub-sector account for approximately 77%, textiles 5%, leather and shoes 3%, and others 15%.

FIGURE 4
CLIENT STRUCTURE BY SUB-SECTOR
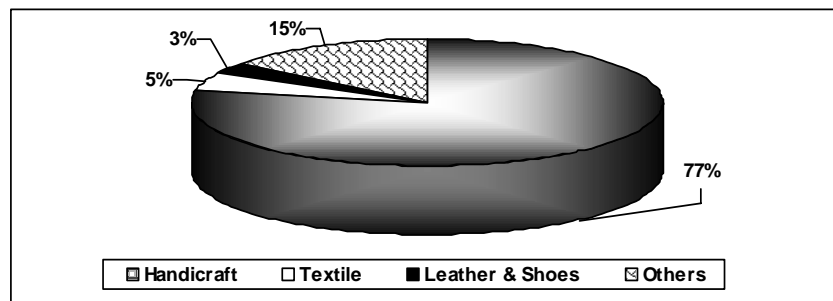
Source: Prepared by the author.

In terms of ownership, most Viet Namese members of Vnemart are limited liability companies and State-owned enterprises (SOEs), which account for 44% and 32% respectively. Joint stock and private enterprises are also active participants on the website, accounting for approximately 8% of the total. Only 3% of Viet Namese members are joint ventures with foreign companies. Cooperatives share over 3%.

FIGURE 5
CLIENT STRUCTURE BY FORM OF OWNERSHIP
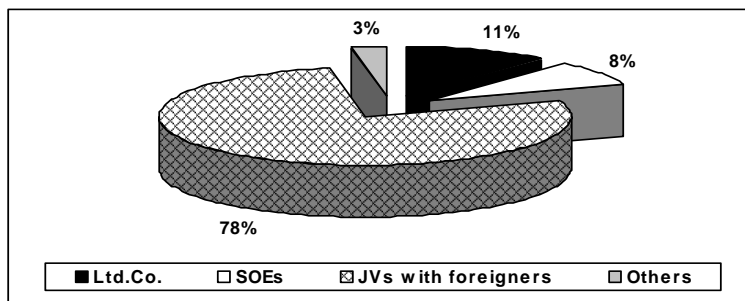
Source: Prepared by the author.

In terms of scale, small and medium sized enterprises with limited financial capability are wise to take advantage of the website to introduce themselves, advertise their products and seek clients. Sixty-five percent of Viet Namese members are SMEs. The remaining 35% are large enterprises, including SOEs and joint-venture companies.

FIGURE 6
CLIENT STRUCTURE BY SCALE OF BUSINESS
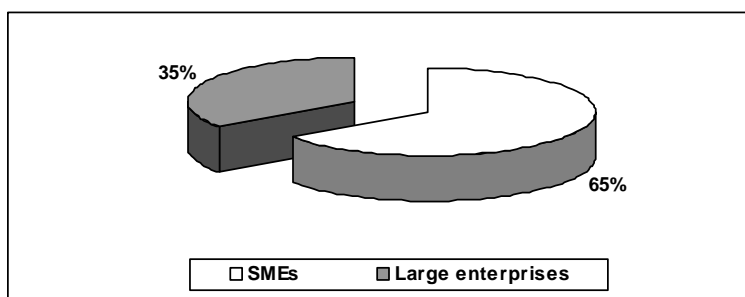
Source: Prepared by the author.

(vii)   Financing for Vnemart's operation and members' financial obligations

Vnemart's operation is now financed from the State budget and by VCCI. In order to encourage and support enterprises to participate in the network, Vnemart provides free services for the first two years of operation. This means that participants in the website do not have to pay any registration or membership fee until the end of 2004. However, depending on the level of financing by business associations and VCCI, they may have to pay fees for attending the related seminars and training courses. These fees, if any, are required merely to cover organization costs.

(viii)   Main findings

- **Vnemart is becoming Viet Nam's busiest electronic market**

Thanks to the VCCI publicity campaign to introduce Vnemart, and the provision of training courses to end-users themselves, enterprises realize the benefits of the website and feel confident in participating in it. More and more firms are registering to become Vnemart members and seek opportunities for new partners and clients. In early June 2004, a total of around 2,500 enterprises had applied for Vnemart VIP and Basic Membership. This figure is much higher than the total number of 1,086 enterprises listed on the website of the Viet Nam Trade Promotion Agency.

- **Vnemart brings convenience to website visitors**

Vnemart is well designed and organized for ease of use. For example, if searchers want to find key information about a company, they need only click on the name of the company from the list of members. Each company profile is enclosed, with pictures and product offerings. An offering always provides basic and specific contents, such as unit, packing, delivery time, supply capability, sample condition, name of manufacturer, discount conditions, etc. This way of showcasing and offering products helps buyers to make decisions faster. Additionally, visitors to the website also have the convenience of being able to shop as though they were in a real supermarket. When they decide to select a product from a showcase, they merely need to click "Add to basket" and continue with other showcases or stop there and click "Inquire now" or "Contact us" to order the product or negotiate with the producer (see figure 7).

FIGURE 7
A VNEMART WEBPAGE
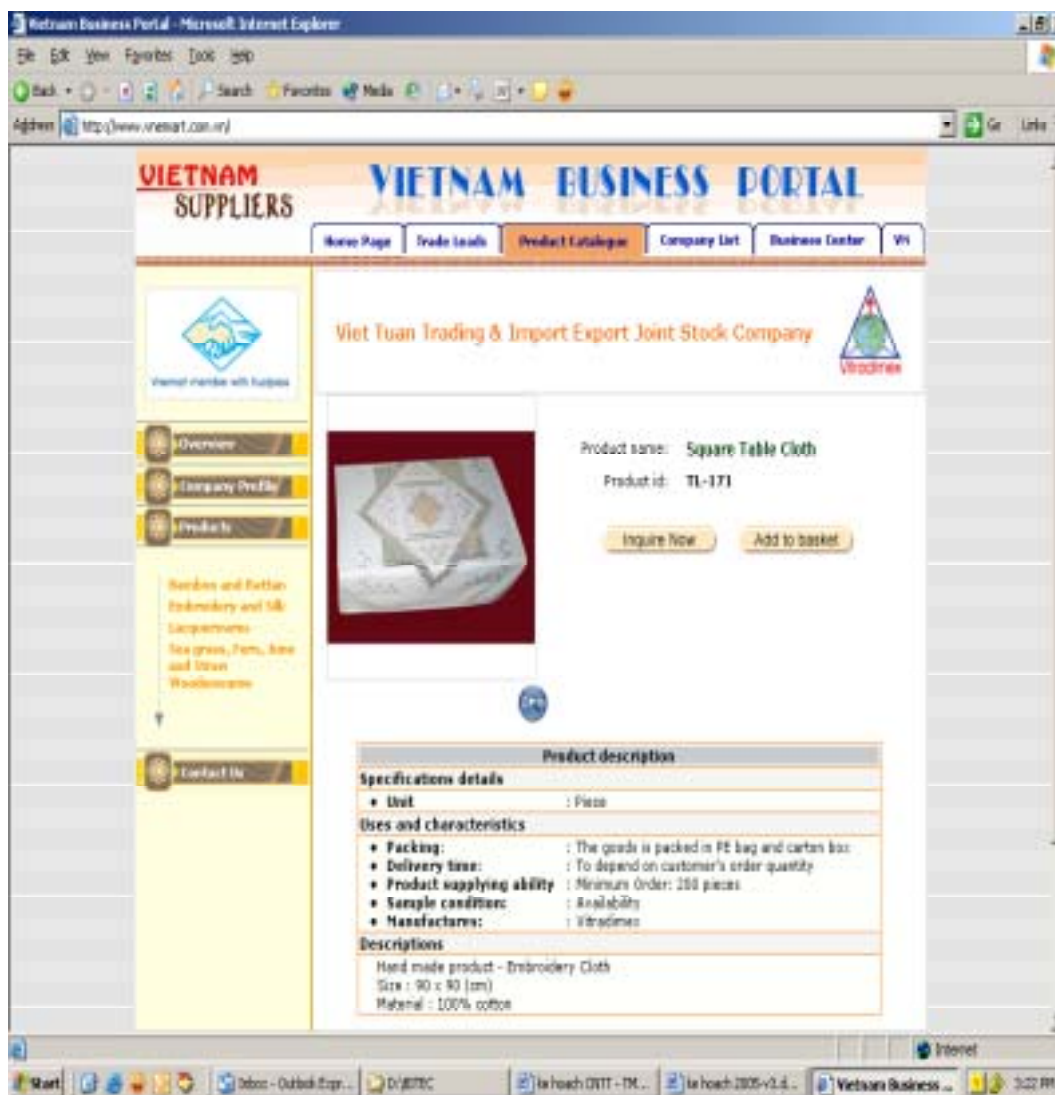
Source: Prepared by the author.

- **Vnemart has not been able to provide comprehensive services**

Despite the convenience and benefits brought to clients, Vnemart's services are still limited. Due to the lack of a legal framework, Vnemart has not been able to let its clients complete the entire transaction through the network. Electronic documents and electronic signatures have not been legally recognized. The implementation of online payment services is impossible at the moment.

- **Many SMEs encounter problems when participating in the network**

The most common problem is to do with poor infrastructure. According to a report by the International Trade Centre in 2002, of the 700,000 PCs currently in use in Viet Nam, 75% belong to government offices and State-owned companies. About one third of SMEs have Internet connections. However, a large proportion of them still use dial-up technology for accessing the Internet, as ADSL technology is not widely used. Therefore, the efficiency of using the Internet in general and e-commerce transactions in particular is somewhat limited.

In addition to the common problem mentioned above, enterprises have to satisfy a number of requirements to enable their products to be showcased electronically. For example, they must pass a VCCI training course, which cannot be organized for individual firms immediately they apply for website membership. Such courses are only held for groups of enterprises in coordination with the relevant business association. This means that firms may have to wait for quite some time to advertise on the website.

(ix)   Future business plan

In order to satisfy the increasing demand for e-commerce applications in business development, in 2004 VCCI will boost the programme for assisting Viet Namese and foreign firms to participate in its electronic trading floor through the following specific activities:

- According to the plan, VCCI will cooperate with 12 Viet Namese provinces/ cities and eight business associations to assist enterprises in accessing e-commerce, by locality and industrial sub-sector. Specifically:
  - Establishing e-trade floors of provinces/associations.
  - Equipping enterprises with knowledge and skills in e-commerce.
  - Studying and analysing each targeted market to provide more valuable information on trade promotion and investment.
- In 2004/2005, VCCI will assist 7,000 enterprises in different Viet Namese sub-sectors to access e-commerce services.
- VCCI will launch a marketing campaign in foreign markets through each country's system of chambers of commerce and industry and the system of commercial sections of Viet Namese embassies and VCCI associates in each targeted market.
- The technical infrastructure system will be upgraded to give better support for the operation of its e-trade floor.

(x)   Recommendations for further development

- As accessing and conducting transactions on Vnemart require modern information technology systems in the member enterprises, they themselves should develop their human resources to master information technology (IT) to ensure their readiness to participate in the website. For enterprises with limited financial capabilities, business associations should assist them by providing them with financial aid, free training or the necessary IT equipment.

- Viet Nam is in the process of negotiating access to the World Trade Organization (WTO) by 2005, at which time the Viet Namese economy would be completely integrated into the world economy and Viet Namese enterprises would face stiffer competition from international rivals. Therefore, apart from its other trade promotion activities, Vnemart should help enterprises to improve their competitiveness by expanding the number of VIP members so that more enterprises will have the opportunity to advertise themselves, seek partners and consume their products using this low-cost system.

- A specific schedule for upgrading the website and developing Vnemart's human resources should be mapped out to ensure that Vnemart is ready to expand its services when the Electronic Transaction Law is promulgated.

- On the government side, a consistent and adequate legal framework should be made available to enable e-trade service providers such as VCCI to provide the full range of online services for complete commercial transactions. In this respect, the Electronic Transaction Law currently being drafted should be quickly promulgated, and should provide SMEs and enterprises in general with the opportunity to make their comments and inputs.

2. Vietrade and its website www.vietrade.gov.vn

a)   Vietrade-main activities and organization:

Vietrade is a government agency, which comes under the Ministry of Trade's authority. It has been in operation for nearly four years now and is responsible for the management, coordination and development of trade and related investment promotion activities in Viet Nam.

Its job is to coordinate with local and foreign trade promotion organizations to assist Viet Namese and foreign enterprises in their business development.

(i)   *Main activities:*

- Managing and monitoring activities relating to trade promotion, as stipulated by law.
- Making recommendations to the government on policies and measures to promote business support activities.
- Developing infrastructure for trade promotion.
- Acting as the driving force in national trade promotion activities:
  - Assisting and providing guidelines for provincial/city trade departments and trade promotion organizations to organize trade promotion activities.
  - Providing enterprises with relevant business information.
  - Providing consulting services and implementing technical assistance projects.
  - Developing e-commerce capabilities in the Viet Namese business community.
  - Helping Viet Namese and foreign enterprises to seek customers, partners and business opportunities by organizing business trips to foreign countries, meetings with partners and commercial transactions, etc.
  - Helping Viet Namese enterprises to participate in foreign trade fairs.
  - Providing training on the organization of trade promotion and business cooperation activities.
  - Assisting foreign firms to develop their business in Viet Nam.
  - Organizing the implementation of commercial television programmes on Viet Nam Television.
- International cooperation on commercial development

(ii)   *Organization:*

Vietrade is organized into four departments: Department of Business Support and Trade Promotion, Department of International Cooperation, Department of Information and E-Commerce, and General Administrative Department. Vietrade also has a representation office in Ho Chi Minh City. Their functions and tasks are as follows:

- **Department of Business Support and Trade Promotion Management:**

  - To act as the State regulator in trade promotion: examining application dossiers and issuing licenses to enterprises to implement trade promotion programmes in accordance with the Commercial Law.
  - To organize, guide and assist enterprises in participating in trade fairs.
  - To comment on policies and guide trade promotion activities.
  - To develop the trade promotion network by: assisting provincial trade departments in trade promotion; establishing and running local trade promotion centres to formulate the nationwide trade promotion network step-by-step. This system assists enterprises directly to improve their business capability and to develop products for consumption and export.
  - To organize training to improve trade promotion capabilities; to organize workshops and seminars to provide information and knowledge.
  - To organize business trips to foreign countries for enterprises to research markets and visit trade fairs, etc.

- **Department of International Cooperation:**

  - To study and formulate policies, measures and plans for trade promotion.
  - To participate in bilateral and multilateral seminars and conferences and to host international delegations.
  - To map out and implement the national focal trade promotion programmes.
  - To arrange international delegations and to join with senior officials of MOT and Vietrade in receiving them.
  - To attend relevant seminars and conferences held in Viet Nam by international organizations, ministries and associations, etc.

- **Department of Information and E-Commerce**

  - To edit and publish publications on export markets:
    Introducing Viet Nam; economic policies; introducing Viet Namese enterprises and products; business skills and trade promotion activities. These publications are distributed to the business community through embassies, economic and trade promotion organizations inside and outside Viet Nam, seminars, business delegations, etc.

  - To advise and provide information to enterprises:
    Maintaining, daily updating and publicizing the Vietrade website to domestic and foreign business communities; maintaining and improving the quality of the Weekly Trade Promotion Bulletins which are distributed to readers through e-mails; exploiting, processing and providing direct and indirect advice and assistance with information on the economy, trade, investment, business and cooperation opportunities for enterprises; introducing and improving the service quality of the Vietrade commercial information library and database.

- To apply and develop e-commerce:
  Using Vietrade training courses to help disseminate basic concepts of e-commerce and IT applications in doing business; advising and assisting enterprises on participation in domestic e-commerce programmes; working with specialized IT and e-commerce entities and seeking their cooperation to improve IT and e-commerce applications for enterprises; deploying the B2B network to assist enterprises in applying e-commerce.

- To apply IT in trade promotion activities:
  Developing an internal webpage to allow Vietrade departments to share information and views on professional operations quickly; upgrading the Vietrade website to meet the requirements of IT applications in trade promotion activities; running training courses on "IT Applications in Doing Business" to assist enterprises in exporting products; creating the national trade promotion network to link the websites of Viet Nam's trade promotion centres.

- **General Administrative Department**

  - To manage Vietrade's material facilities.
  - To take care of financial, accounting and personnel issues.
  - To manage showroom centres in foreign countries, such as America and Dubai.

- **Representation office in Ho Chi Minh City**

  - To coordinate with the Vietrade office in Hanoi to organize relevant activities in Ho Chi Minh City under the instructions of Vietrade leaders.

(iii)   Vietrade's main operational results in 2003:

- Participated in reviewing and commenting on the Commercial Law; participated in drafting the Competition Law, the amended Decree on Fining Administrative Breaches and guidance for trade promotion.

- Established and developed the system of Viet Namese trade promotion organizations. To date, trade promotion organizations have been set up in 38 provinces and cities. Three showroom centres for Viet Namese products have been put into operation in the United States, Russia and Dubai.

- Provided Viet Namese enterprises with regular information on markets, partners and business opportunities through public media such as Commerce, Market Bulletin and the Vietrade website (www.vietrade.gov.vn) and through the system of provincial/city trade promotion organizations; published a number of publications, including Viet Namese Products and Business Villages and Way to Contracting, etc.; provided direct advice and information to hundreds of firms on exporting and commercial issues, business opportunities and potential partners, etc.; contributed various reports and news on domestic and international trading.

- Created the website (www.vietrade.gov.vn) to introduce enterprises and provide them with information on markets, partners and legal regulations. So far, over 1,000 Viet Namese firms have been introduced on this website. The website interface has been upgraded to give it a more professional appearance and the information is updated daily; assisted some local trade promotion centres in developing IT applications and e-commerce; participated in disseminating basic e-commerce definitions to enterprises.

- Organized two training courses on trade promotion for Ca Mau and Can Tho Departments of Trade and enterprises in those localities; organized two seminars, the Seminar on Enhancing the Efficiency of Exporting Viet Namese Textiles and Garment Products and the ASEAN Seminar on Selection of Best Fashion Designs.

- Assisted enterprises in participating in six foreign trade fairs and exhibitions.

- Coordinated with foreign trade promotion organizations to arrange direct meetings between 10 international business delegations and Viet Namese enterprises.

- Appraised 229 projects from 26 entities in connection with national trade promotion programmes, of which 182 projects were selected with VND 150.154 billion proposed for financing from the State budget.

b)   The website www.vietrade.gov.vn

In response to the government's policy on trade promotion and e-commerce development, in August 2001 Vietrade designed the website www.vietrade.gov.vn with the original objective of providing the Viet Namese business community with commercial information.

(i)   Function:

The main function of the website is to provide information relating to:

- Legal documents
  Firms can review legal stipulations or policies relating to trade, especially foreign trade such as import, export, duties and quotas, etc.

- Business opportunities
  Here visitors to the website can find demands for buying or selling specific products.

- Trade fairs
  This item provides information on all trade fairs to be held during the year. Information on a particular trade fair always includes the opening and closing times, content, location organizer and addresses for participant registration.

- Business directory
  When clicking this item, business people can easily search for target firms by selecting a particular industrial sub-sector, particular city or type of enterprise. Information on a specific firm includes name of firm, visiting address, telephone numbers, fax numbers, e-mail address and product names.

- Commercial news (events) at home and abroad
  The website provides information on prices and the situation in domestic and foreign markets, relevant articles selected from newspapers, commercial events, etc.

- Publications of Vietrade
  Through this item enterprises are able to access Vietrade publications online without wasting time getting hard copies via mail.

- E-commerce
  Visitors to this page can access information about the E-Trade Bridge for SMEs-Viet Nam. This is part of an international initiative by the International Trade Centre to address the realities of e-facilitated commerce by developing solutions to maximize the opportunities and minimize the risks of trading internationally in the digital age.

- ▪ Consultation
  By just clicking on this item, business people and website visitors in general can get interesting and useful information on trade-related issues, such as the definition of trademarks and their uses in competition, ways in which enterprises can protect their trademarks in domestic and foreign markets, etc.

- ▪ Useful addresses
  This allows visitors easily to search for addresses to contact functional organizations for guidance, consultation or registration to participate in trade events, etc.

(ii)   Technical solution

Vietrade has hired one FPT Corporation server to host the website and database. The server configuration is IBM Netfinity 7000, PentiumPro 2 CPU, HDD 30GB, 512 MB Ram.

The Agency updates information on the website daily through a web-based interface. The website was designed as a dynamic site using the popular programming language ASP (active server page) and SQL Server 2000 database software.

As the website is hosted by the FPT Corporation, one of the best Internet exchange providers in Viet Nam (IXP), access the website is quite fast even when logging on from outside Viet Nam.

However, the search engine inside the website database is not yet adequate, particularly when users want to search the trade fair and exhibition or enterprises list.

Vietrade is an agency operating with annual government funding to support the business community, so gets no fees for its activities. There is no advertising service for enterprises on this website. Enterprises can contact Vietrade directly to introduce themselves through the business directory item on the website.

In the near future, Vietrade needs to improve and enhance some items as follows:

- ▪ To improve the structure of the database and search engine to make it easy for users to find information.
- ▪ To upgrade the server with a faster CPU and larger hard disk because the database is expected to grow steadily from day to day.

(iii)   Operational results:

Due to its limited budget, Vietrade has not organized any public seminars to introduce the network to the business community. Vietrade merely takes advantage of its other events to publicize the website.

The website was set up in August 2001. A lot of enterprises have accessed the website to search for information on markets, partners and legal provisions, etc. The website receives about 300,000 visits a month. Up to now, 1,086 enterprises have registered to be listed on the "Business Directory" page.

The website interface has been upgraded and made more professional to turn it into an efficient information tool for the business community.

The Vietrade website is coordinated closely with the websites www.mot.gov.vn and www.vinanet.com.vn, which are operated by the Ministry of Trade's E-Commerce Department and Commercial Information Centre respectively.

In order to provide enterprises with a better trade promotion service, MOT has recently reorganized and assigned specific tasks to units in charge of providing information, including the E-commerce Department, the Commercial Information Centre (CIC) and Vietrade.

The information provided is divided into two types: (a) information on long and medium-term macro issues, which is handled by the E-Commerce Department, and (b) information on markets and prices, which are handled by CIC and Vietrade.

The E-Commerce Department uses the www.mot.gov.vn website as the main tool for providing information on Viet Nam's policies, legal regulations and international commitments in such fields as trading, e-commerce and economic integration. This website is the official MOT portal, which covers information sourced from the government, ministries, commercial counsellors, and international organizations and forums in which Viet Nam is a member or counterpart. It is anticipated that, in 2004, this website will be a useful source for enterprises and authorities, where macro information, economic analysis and forecasting are enhanced.

CIC provides information on Viet Namese and international markets and changes in prices every hour and every day to serve businesses and consumers.

With its www.vietrade.gov.vn website, Vietrade focuses on providing instructive information and training on trade promotion techniques and skills to enable enterprises to advertise their products in foreign markets and to seek partners. Every month, Vietrade reports to the E-Commerce Department on the information provision situation.

(iv)   Client structure:

Most participants in the website are Viet Namese enterprises. Of the 1,086 firms listed in the website, 843 firms are in the garment and textile sub-sector, 152 are in the aquatic and marine products sub-sector, and 91 are in the leather and shoemaking sub-sector, accounting for 78%, 14% and 8% respectively.
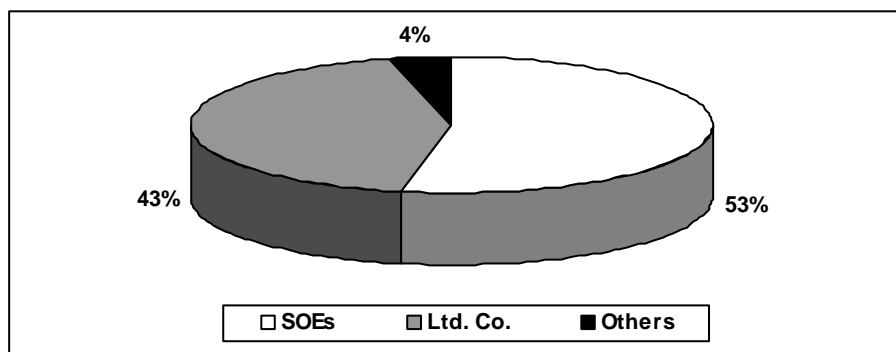
FIGURE 8
CLIENT STRUCTURE BY INDUSTRIAL SUB-SECTOR
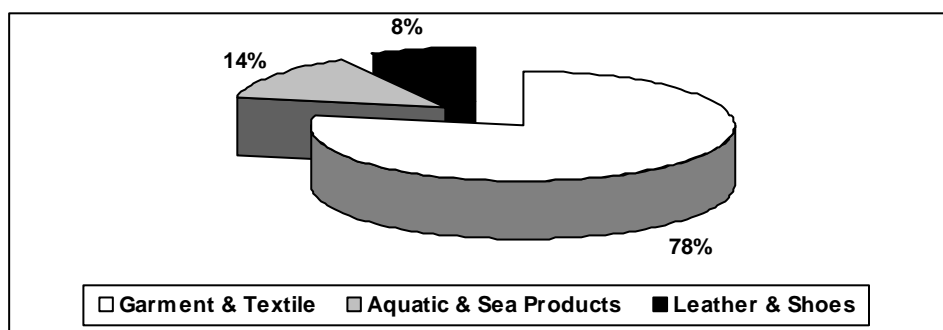
Source: Prepared by the author.

In terms of ownership, more than half (53%) of the network participants are State-owned enterprises. They consist of 576 firms from the above three sub-sectors. There are 466 limited liability companies, accounting for 43% of the total. Other forms of enterprise, such as holding companies, private and joint-venture enterprises account for only 4% of the total.
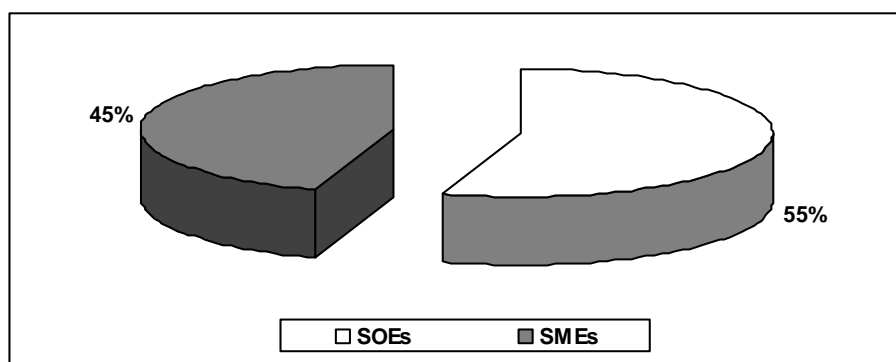
FIGURE 9
CLIENT STRUCTURE BY FORM OF OWNERSHIP

Source: Prepared by the author.

With regard to the size of network participants, unlike Vnemart (the VCCI portal), the Vietrade website attracts larger enterprises. They account for 55% of the total, while SMEs account for 45%.

FIGURE 10
CLIENT STRUCTURE BY FORM OF OWNERSHIP

Source: Prepared by the author.

(v)   Financial sources:

As participation in the website is free of charge, its operation is financed entirely by the State budget.

(vi)   Main findings:

- With regard to the original objective, the website is fairly successful as the Ministry of Trade's main tool and official portal for providing commercial information, especially information announced by Viet Nam's government agencies, embassies, international organizations and forums in which Viet Nam is a member or counterpart.

- The website gives quite a good daily service, providing and updating information on commercial events, trade-related legal regulations and requests for buying and selling, etc.

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- ▪ The website also meets the demand of enterprises for listing on the website. However, the only information that searchers can find about particular manufacturers is company names, their telephone numbers/addresses and the names of their products. No product exhibitions or showcases are found on the website. Nor are there any specific product descriptions or offers (see figure 11). Therefore, no real e-trade floor has been developed on the website.

(vii)   Future business plan:

Under the programme for boosting the trademarks of Viet Namese goods, a national trademark project has been submitted to, and is awaiting a response from, the government. Under this project, Vietrade plans to take advantage of the Internet to open a Question and Answer page on the national trademark programme and to organize an electronic exhibition of trademarks.

FIGURE 11
PART OF A PAGE EXTRACTED FROM THE WEBSITE "VIETRADE.GOV.VN"

Source: Prepared by the author.

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(viii)   Recommendations:

- As mentioned above, due to the shortage of funding, website services are very limited. At the moment, the website simply focuses on providing business information free of charge. In order to expand and improve these services, more financial and technical resources are required.

- A large-scale campaign should be launched to publicize the benefits of e-commerce in general and the website in particular. Regular training courses should be organized on the application of information and communication technologies and e-commerce to business.

- The website should be designed to become a real e-trade floor, especially for export products. Specifically, product e-catalogues or showrooms should be available. Product descriptions should be detailed and accompanied by specific sales offers. Other Internet transaction tools should also be developed or made ready for application when the legal framework allows, e.g. online payment and certificates of authorization, etc.

- In order to improve its role as a government trade promotion portal, in addition to providing adequate and updated commercial information, as mentioned above, the website managers should strengthen the orientation of participating firms, especially SMEs, towards target markets and competitive products/services, etc. Online question and answers should also be promoted so that enterprises can obtain the necessary information directly and immediately before they carry out specific transactions or penetrate specific markets.

IV. Government policies designed for SMEs, IT, and international trade

A. IT policies in the Viet Nam's overall development strategy

1. Current IT policies

During the past few years, Viet Nam has issued a number of policy and regulatory documents to promote IT. The underlying policies for IT development were laid down in Resolution No. 58-CT/TW of the Politburo of the Communist Party of Viet Nam (the ruling party), issued on 17 October 2000 on speeding up the development and application of IT for industrialization and modernization.

Subsequently, during the 2001-2002 period, the government prepared and issued several documents on action plans and measures to implement the resolution, notably the following three documents:

- Prime Ministerial Decision: 112/2001/QD-TTg
  approving the project on the computerization of public administration.

- Prime Ministerial Decision: 33/2002/QD-TTg
  approving the master plan for Internet development.

- Prime Ministerial Decision: 95/2002/QD-TTg
  approving the Master plan for IT application and development in Viet Nam up to the year 2005.

The Decision is a most comprehensive and ambitious document. The main contents of the Decision are as follows:

a) Main objectives:

- Level and efficiency of IT application in Viet Nam should be equal to those of other countries in the region. In Hanoi and Ho Chi Minh City alone, the advanced level is targeted.

- The telecommunication and Internet infrastructure should be modernized, with broadband, high-speed and high quality, to provide consumers with diversified services at the same average prices as those of other countries in the region. By 2005, all provinces and cities should be interconnected by optical cables. The number of Internet users should account for 4-5% of Viet Nam's total population.

b)   Main implementation measures:

- Promoting IT application in prioritized areas: (i) socio-economic sectors that play a key role in improving the competitiveness of the economy and businesses for promoting industrialization and rural development; (ii) national security and defence; and (iii) public administration.
- Telecommunication and Internet: By 2005, the communication networks of ministries, central agencies and provincial and district governments are to be connected to the Wide Area Network of the Central Government and the Internet. Most officials in these units should be able to master applications on the Internet for their professional activities. The Internet should be applied in e-government development. The national information highway should be established. Broadband services, such as optical cables, wireless broadband and satellite information, should be provided to households

2. Policies and strategies for future development

The long-term strategy for developing the ICT sector is set out in the Strategy for Development of the ICT Sector up to the Year 2010, adopted by the government in 2002. The main thrust of the Strategy is as follows:

a)   Objectives to the year 2010

By 2010, Viet Nam should be at a moderate level of ICT development and application in the ASEAN region, by:

- **Applying ICT in all fields including the economy, society, education, health care, rural development, security and national defence, etc.**

  Applying ICT extensively in design, automating production lines, and modernizing traditional industries, ensuring that 50% of enterprises carry out management, supply, marketing and business transactions through networks to improve their competitiveness and integration capability.

  Building a modern e-government that would operate transparently and efficiently, and be able to provide basic services to people all over the country. Developing e-commerce widely to improve the efficiency of the national economy, competitiveness and the capacity for international integration. Between 25% and 30% of all economic transactions should be carried out electronically. The value of e-commerce transactions should be ten times higher than in 2002. Regular transactions amongst State bodies, between the State and enterprises and between the State and the public should be carried out through networks.

  Applying ICT extensively in all fields, including the economy, society, education, health care, rural development, security and national defence, to speed up the renovation process and improve productivity, product quality, competitiveness and international integration.

  Total investment in ICT application and development should account for 2.5% of GDP.

- **The ICT industry should grow at a rate of 25-30% per year**

  With a target growth rate of 25-30% per year, the ICT industry should become a key sector of the national economy, with total turnover of about US$ 6-7 billion, accounting for about 5-8% of GDP. Personal computers, handphones and some software products bearing Viet Namese trademarks should be able to dominate domestic markets and penetrate foreign ones.

- **The national communication highway should be basically complete, meeting the information exchange demands of society as a whole**

  Providing broadband services at an acceptable cost to all districts and a number of communes in the country. The telecommunication and Internet infrastructure should meet four basic user requirements: various access options (mobile, fixed) and suitable services in relation to demand and income levels; ease of use, safe and secure communication; affordable charges, broadband and high speed; compliance with international standards.

  Density of telephone lines (fixed and mobile), throughout Viet Nam should be, 26-27 lines per 100 people (30-40 lines per 100 people in Hanoi and Ho Chi Minh City). Density of mobile phones alone should be, 15 phones per 100 people. An average of more than 60% of households should have telephone lines. In cities, each household should have at least one telephone line. Internet services should be provided to all universities and high schools in the country. Average density of Internet subscribers should be, 8.4 subscribers/100 people (40% of whom are broadband subscribers). Around 40% of people should use Internet services. The average density of personal computers should be 10 per 100 people.

- **Professionalizing ICT human resources, doubling the 2002 productivity figure for ICT, and universalizing ICT applications**

  Developing the professional ICT human resources, which should have sufficient qualifications and capabilities, mastery of modern technologies and confidence in economic management. Such human resources should be structured logically in order to satisfy the demands of domestic and certain foreign markets in a regular and timely fashion. Improving awareness, and popularizing knowledge and skills in the use of ICT applications and services, for society as a whole.

  Providing professional training courses in accordance with international standards at the main ICT faculties. Ensuring that 20% of graduates from such faculties have enough qualifications and command of foreign languages to participate in the international ICT labour market.

  Productivity in the ICT industry should be double that of 2002 and reach a fairly good level in the ASEAN region: the targets are 150 telephone lines per unit of labour in telecoms services and an annual turnover of US$ 19,000 per unit of labour in the field of software production.

  Universalizing knowledge and skills in using ICT applications and services for most officials, staff and students, 70% of learners at vocational and high schools, and 50% of secondary school pupils.

b)   Objectives to the year 2005

By 2005, Viet Nam should reach a moderate level of ICT development and application in the ASEAN region, by:

- **Promoting and expanding ICT applications in the economic, social, national security and defence fields**

  Applying ICT to designing and automating production activities and innovating to increase the value of traditional industrial products.

  Efficiently implementing projects to computerize State administrative management, the operation of the Communist Party and the National Assembly in line with stated objectives, contents and schedules. Completing the first phase of e-government development. Most central and provincial governments should have websites to inform the public about legal regulations, policies and management mechanisms. Fifty percent of basic services should be computerized and forms of public access to the Internet should be heavily developed.

  Deploying projects for ICT applications in key socio-economic sectors, especially finance, banking, taxation, customs, tourism, aviation and maritime transportation. Focusing on projects to develop e-government, e-commerce and industrial modernization, and projects for establishing information system in ministries and branches. Continuing the efficient establishment and exploitation of national databases. Developing information websites for enterprises and individuals to exchange opinions and carry out transactions on the website.

  Ten percent of transactions by economic sector should be carried out electronically. The total value of e-commerce transactions should be double the 2002 figure.

- **The ICT industry should continue growing fast; PCs assembled in Viet Nam should basically satisfy domestic demand**

  The ICT industry should become a key economic sector, with the annual average growth rate of 25-30%. The software industry should grow at 35%. The total turnover of the ICT industry should be US$ 2 billion. Good quality, competitively priced PCs bearing Viet Namese trademarks should satisfy 90% of domestic demand and be exported.

- **Improving the quality of, and popularizing, telecommunication services; narrowing the gap between rural and urban areas**

  All Viet Namese provinces and cities should be connected to the Internet by broadband optical cables. Hanoi, Ho Chi Minh City and some other big provinces/cities should have optical internal transmission networks.

  Density of telephone lines (fixed and mobile), throughout the country should be, around 13 lines per 100 people. The density of mobile phones should be 6 per 100 people. The average density of Internet subscribers should be 1.6 per 100 people (7.5% of whom should be broadband subscribers). The proportion of Internet users should be 7.5%. The average density of PCs should be 2.6 per 100 people.

- **Human resources should meet the requirements for ICT development and application**

  The State should send approximately 300 students to other countries for regular education (university and postgraduate education), plus 500 experts and officials for short-term study tours to countries and regions with a developed ICT industry.

  About 50% of State officials should undertake courses of basic IT training to be able to use computers in their work.

  In 2005, the productivity of the telecommunication industry should be 100 telephone lines per unit of labour and average annual turnover in the software industry about US$ 10,000 per unit of labour.

B. Policies to support SMEs

According to the Social-Economic Development Strategy up to 2010, the private sector, including SMEs, is an important component of the national economy. Developing the private economy is a long-term strategic issue in line with developing the socialist-oriented multisectoral economy, contributing to the successful realization of industrialization and modernization and increasing the internal strength and capacity of the nation in progress towards international integration. It states that the State assists and creates conducive conditions for economic entities to set up business and operate in both urban and rural areas, and encourages all types of voluntary joint businesses or partnerships and cooperation. The State also creates favourable conditions for policy, the legal framework and the social-psychological environment to ensure the widespread development of the private sector in production and business branches not prohibited by law.

1. Legal framework

Regarding the legal framework and policy, Viet Nam has issued a number of Laws governing businesses, including SMEs, such as the Private Enterprise Law (1990), the Company Law (1990), the Law on Encouragement of Domestic Investment (1994), the State-owned Enterprises Law (1995) and the Law on Cooperation. However, such laws did not take into proper consideration SME characteristics and requirements. Therefore, after much discussion and experimentation, an Enterprise Law was passed in 2000, providing a more favourable environment for SMEs, especially private ones.

On this basis, a number of other documents were issued on the regulatory and policy framework for SMEs, e.g. Directive number 27/2003/CT-TTg of 11 December 2003 by the Prime Minister on several issues, including hastening the implementation of the Enterprises Law, promoting SME development; and establishing an SME promotion council.

2. Institutional set-up for the SME sector

As the government has identified the important roles of the SME sector, a comprehensive institutional framework to support the sector has been consistently established:

(a)   At government level, the SME Development Encouragement Council is responsible for providing advice to the Prime Minister on SME development promotion policies and mechanisms. This is a consultative, advisory body, with representatives from the relevant ministries, which is chaired by the Minister of Planning and Investment; the permanent Secretary of the Council is the Director of the SME Development Department. Other Council representatives are gathered from ministries, VCCI, the People's Committees of Hanoi, Ho Chi Minh City, Hai Phong and Da Nang and several experts in the economic, science, technology and training fields. The Council's operational costs are allocated under the operational costs of the SME Development Department.

(b)   At ministerial level, the Ministry of Planning and Investment (MPI) is responsible for coordination with other ministries, as well as with Local Peoples' Committees, in supporting SMEs. The SME Development Department has been established under the authority of the MPI, to assist the Minister in performing State management functions to promote SMEs. The MPI Minister stipulates the detailed responsibilities, powers and organizational structure of this body.

(c)   Technical Assistance Centres for SMEs in Hanoi, Danang, Ho Chi Minh City and Haiphong have been established under the authority of the SME Development Department. They are the public service units responsible for advising the SME Department.

(d)   SME promotion at provincial/municipal level: this is mainly the task of the Planning and Investment Departments of the Local People's Committees to:

- Direct SME promotion activities, develop and/or participate in drafting legal documents guiding the implementation of government regulations; coordinate, provide guidelines and oversee the implementation of support programmes following approval.
- Prepare half-yearly reports to the MPI to summarize SME development and SME problems that need solving.
- Collaborate with relevant agencies and organizations to perform SME promotion activities within the area.

(e)   SME support organizations: other public/private organizations are quasi-public organizations, including non-governmental organizations, which can greatly benefit SMEs and the private sector as a whole (VCCI, Viet Nam Cooperatives Alliance, Rural Industrial Enterprises Association, and others).

3. Specific policies on SMEs

The first ever comprehensive policy document on SMEs is Decree No. 90/2001/ND-CP, under which SMEs will benefit from many State support programmes. Such programmes will be allocated in the annual plans and five-year plans, as decided by the Prime Minister or the Chairmen of the People's Committees, based on the priority guidelines for socio-economic development.

Support programmes focus mainly on the following issues:

a)   Investment promotion

Of all the regulations on the legal framework of the private sector, including SMEs, the Enterprise Law is the most important instrument governing all SME activities. When it came into effect in 2000, it abolished many onerous requirements of the previous legislation, including replacing a complicated licensing system and registration process for new companies with a simpler system. It also reversed the former regime where companies were allowed to do government-specified activities, to a new regime that allows companies to engage in all activities "not prohibited by law". Furthermore, in accordance with the Enterprise Law, requirements on the legal capital needed to establish entities were abolished, and legal capital will now be required for only a few specific business operations.

Regarding the institutional aspect, under current regulations the licensing/registration process has been significantly simplified. Except for a few special activities, which must be approved by the Prime Minister, the Local People's Committees at provincial level have been given authority to issue business licenses for enterprises (issued directly by the Planning and Investment Departments). Moreover, after the promulgation of Decree No. 29 on the Promotion of Domestic Investment in 1995, the "relevant authority" responsible for receiving and processing business registration applications became the People's Committee, as the single authority for resolving such a procedure, replacing the previous complicated system.

Decree No. 90/2001/ND-CP also lays down details regarding the financial aspects, stating that the government shall: (i) support investment by applying financial and credit measures for a certain period to SMEs investing in a number of industries, including traditional ones, and in encouraged localities, and (ii) the government shall encourage financial institutions, enterprises and legal entities to contribute their investment capital to SMEs. One practical step was to establish the Credit Guaranty Fund for SMEs. The mechanism of this process is that the

Ministry of Finance shall chair and collaborate with some of the agencies concerned to develop proposals for the organization and operational regulations of the Credit Guaranty Fund for SMEs to be submitted to the Prime Minister for a decision.

In terms of production premises, based on the socio-economic development of the localities and the land-use plans approved by the Prime Minister in such places, (i) the Chairmen of the Provincial People's Committees shall assist SMEs in obtaining appropriate production premises; (ii) guide the use of land reserves and implement encouragement policies to develop industrial zones and land-sites for SMEs in order to make sure they have premises for their businesses. SMEs shall be eligible for encouragement policies in terms of land lease, re-lease, collateral and mortgages, and other rights on their land-use rights under the current regulations.

b)   Trade facilitation

Together with the renovation process, trade liberalization and facilitation are the most important changes in the economy. Trade liberalization has progressed since the Commercial Law was enacted in 1998. Liberalization is also being promoted through membership of a number of international organizations, such as AFTA. Viet Nam is now in the process of negotiation to become a full member of WTO. The government's most significant moves to facilitate trade-related activities have been to:

- Diversify the forms of business by allowing many legal entities with different organizational forms to establish and operate.
- Reduce the restrictions on access to some business sectors, such as telecommunications, pharmaceuticals, etc., which were traditionally given to large SOEs or specially ranked enterprises.
- Abolish quantitative restrictions in the form of quotas and reduce customs procedures.
- Gradually introduce fairer treatment between SOEs and non State-owned enterprises regarding access to official credit loans.

c)   Export Promotion

Under the regulations of Decree No. 57/1998/ND-CP, all entities are entitled and eligible to carry out direct export activities, after registration of the Export Code with the competent authorities, whereas under the previous regulations, only certain entities were allowed to do so.

In accordance with Decree No. 90/2001/CP-ND, the State shall encourage SMEs to increase their exports and to create favourable conditions for SMEs to develop cooperation and links with foreign companies/organizations and to expand export markets in goods and services. Through export promotion support programmes, the State shall partially subsidize costs for SMEs involved in studies, research, cooperation exchanges, participation in trade fairs, product exhibitions and introductions, to be carried out both in Viet Nam and abroad. Such subsidies shall be financed by the Export Support Fund, which was established in accordance with Prime Ministerial Decision No. 195 (27 September 1999). In September 2001, the Export Support Credit Fund was established and was incorporated into the Development Assistance Fund. This fund will work to expand exports and to make export products more competitive.

However, in practice, SMEs still face some hurdles, which seem to hinder their export progress:

(i)   The existence of the complicated quotas system. Many SMEs have to buy quotas from SOEs at a very high commission, with the result that many SMEs face difficulties in accessing the export market.

(ii)   Shortage of proper export finance: the main form of export assistance provided by the Export Support Fund is for primary products. Hence, such assistance seems to be concentrated on the agricultural sector, whilst other sectors fall outside its scope. At present there is no effective support finance for non-agricultural SMEs. Even if a customer is found and selected to purchase goods from Viet Nam, no effective export credit and trade insurance system has been available.

d)   Training

As part of SME support programmes, human resource training is considered as one of most important State policies. Decision No. 143/2004/QD-TTg of 10 August 2004 approving the Human Resources Training Programme for the period of 2004-2008, sets out the programme's objectives as: (i) the general objective to promote and create favourable conditions for SMEs to strengthen their competitiveness; to develop a system of supported and developed services providers, especially human resource consulting and training services and management; (ii) the specific objective to provide the necessary knowledge for SMEs managers and to improve managerial capability. This programme is to be implemented over a five-year period from 2004 until 2008, and is to be implemented as follows:

- Drafting some basic training books.
- Opening 18 courses of lecturer training for 540 groups of people.
- Opening 3,598 training courses for SMEs, individuals and organizations, attended by around 107,670 groups of people.

The total estimated cost of this programme during the period five-year period is VND 119.4 billion (approximately US$ 7.5 million). Based on the programme's annual schedule of operations, the Ministry of Planning and Investment will make the annual cost estimate as part of the estimated State budget in compliance with the Laws on the State Budget.

In conclusion, conceptually speaking, SME support policies were consistently established and expected to provide an efficient scheme for supporting SMEs. However, in practice, there is still some poor coordination between the bodies concerned, as well as functional shortcomings, which have led to unsatisfactory results.

C. Special measures to correct the 'digital divide' among companies

- **Human resources**
  - To create the legal framework for the socialization of ICT training and training ICT specialists in English.
  - To allow the establishment of ICT training centres with 100% foreign investment.
  - To induce and create favourable conditions for international universities to provide ICT training in Viet Nam.
  - To apply policies for attracting good foreign ICT specialists to Viet Nam to participate in ICT training.
  - To encourage Viet Namese universities to provide ICT training in English and to hire foreign teachers for this purpose.
  - To diversify forms of ICT training.

- To encourage enterprises in all economic sectors to open ICT training centres to boost ICT training capability and improve people's knowledge and skills in using ICT applications.
- To improve the system for evaluating the quality of ICT training in accordance with international standards.
- To re-evaluate all ICT training centres at all levels in accordance with the standardized evaluation system. On that basis, to classify and find suitable solutions for each centre (abolition, upgrading, development).
- To organize the issuing to ICT training centres of Viet Namese and international certification of ICT training quality.
- To select people from among those working in the ICT field who have good prospects and are able to satisfy the educational and foreign language requirements to do research or undertake postgraduate training in technology, economics and international law in Viet Nam and abroad, to become leading senior specialists in ICT and ICT management.

D. E-government aimed at SMEs and trade promotion

1. Overall strategy/structure of e- government

a) Viet Nam's e-government is to be established in four phases:

Phase 1 (2004-2005): Presence

- Most central and provincial authorities should have established websites to provide information on legal regulations, mechanisms and policies under their management.
- Central and provincial governments should apply ICT to improving their operational efficiency by using software programmes to manage documents, personnel, finance, accounting and e-mails.
- Computerizing basic administrative services.
- Developing public Internet access points so that everybody can communicate through it and exploit government information.

Phase 2 (2206-2010): Interaction

- Most central and provincial authorities should upgrade their websites into electronic portals so that most basic administrative services would be provided online.
- Thirty percent of city households should be able to access the Internet and government services. Citizens and enterprises should be able to communicate with the government electronically (e.g. commenting on draft legal regulations and participating in opinion polls and forums).

Phase 3 (2011-2015): Transaction

- All organs of the Communist Party, the State, the National Assembly and the government should apply online transactions with enterprises and citizens. One hundred percent of basic public administrative services should be provided online.
- Information from these bodies should be managed and shared through the Internet by individual users in accordance with different levels of confidence.
- Forty percent of city households should be able to access the Internet and public administrative services of the government. Citizens and enterprises should be able to participate in electronic transactions and forums.
- Most people should be able to access the Internet at public Internet access points.

Phase 4 (after 2015): Integration

- Public administrative services should be provided online and constantly through one authority.
- Most government procurement activities should be carried out via the Internet.
- State public administration activities should be reformed completely.
- Fifty percent of households in Viet Nam should be able to access the Internet and government services in their own homes.
- Most people should have convenient access to the Internet, be able to participate in transactions, forums, elections and monitoring of the government's activities.

b) Creating favourable conditions for e-commerce development and ICT application

TABLE 19
LEVELS OF E-COMMERCE PARTICIPATION BY SOME GOVERNMENT AGENCIES

	Support content	Agencies	Situation – Evaluation
1	General legal environment for e-commerce	Ministry of Trade (MOT)	• Submitted the draft ordinance on e-commerce to the government in August 2003. • As planned, the ordinance on e-commerce and its implementing regulations will be issued in 2004. • Creating the legal framework for the development of e-commerce.
2	Certificates of Authorization (CA) system	Ministry of Posts and Telematics (MPT) & Cryptographic Committee of the Government (CCG)	• The MPT drafted and submitted to the Prime Minister the Project of State Management on Electronic Certification of Authority (CA). The CCG has also studied the fundamental CA technologies, but the main functions of CA management have not been determined yet. • As planned, the Decree on CA Management will be issued by the end of 2004. • Some commercial banks are building their own CA systems and issuing e-signatures for their clients. However, the legality of such systems is not assured.
3	E-payment	State Bank of Viet Nam (SBV)	• Governmental Decree 44/ND-CP of 21 March 2002 recognizes the legality of e-signatures and e-documents in banking operations. This facilitates the development of inter-bank e-payment systems with the participation of commercial banks. Interbank clearing orders are recognized as legal. However, the operation of these systems has not been efficient. • There has not been any legal framework for e-payment systems with the participation of enterprises and consumers.
4	E-tax declaration	Ministry of Finance (MOF)	• The General Taxation Department is implementing a pilot project on e-tax declaration. • The Tax Department of Ho Chi Minh City is testing an online tax declaration.
5	E-custom	Ministry of Finance (MOF)	• There has been a project for establishing an online customs declaration system. However, this system is still in its pilot implementation phase • Assistance to enterprises with customs declaration is impossible at present. • The Customs Department of Ho Chi Minh City is testing the system for receiving customs declarations and tax payment documents.

Source: MOT, Report on the result of the survey of present situation of application of e-commerce in Viet Nam, Hanoi, 2003.

In order to create favourable conditions for e-commerce development and ICT application, the Law on Electronic Transaction of Viet Nam should be adopted by the National Assembly of Viet Nam in 2007. The system of legal documents, mechanisms and policies relating to ICT, in line with international common practice and Viet Nam's special conditions, should be basically complete by 2010.

ICT users should be divided into two kinds: those obliged to use ICT and those encouraged to use it. The State should issue specific stipulations and criteria for those that are obliged to use ICT (such as officials and students), in order to force them to learn and gain enough knowledge and skills for ICT application. Where the use of ICT is not compulsory, the State should have policies to encourage people to use ICT.

TABLE 20
A NUMBER OF PROJECTS IMPLEMENTED BY GOVERNMENT AGENCIES

|	Projects	Content/Objectives of Projects	Remarks & Evaluation
1	"Techniques of e-commerce", by E-commerce Committee (MOT)	• The Project studied basic technical aspects of e-commerce through coordination amongst related ministries and branches such as MPT, Ministry of Police (MOP), Ministry of Justice (MOJ), and CCG.	• The general report on the Project has been published extensively as a reference work on technical aspects of e-commerce.
2	"Viet Nam-Japan Online Trading Transactions Station", by the Viet Nam Trade Promotion Agency (MOT) and the Japan Trade Promotion Agency	• Pilot trading through the network amongst 19 Viet Namese enterprises and Japanese firms (consumers) • The total cost of the Project was about US$ 100,000. The Project operated for four months (preparation time was six months). All participating enterprises received orders from Japanese partners. However, the value of these orders was not large (no more than a few thousand dollars).	• This is only a pilot project to assist enterprises to approach transactions via networks. Therefore contract values are small and the duration of the project is short (from June 2001-May 2002) • Enterprises have received government assistance to participate in such transactions.
3	"E-trade Floor", by the Viet Nam Chamber of Commerce & Industry (VCCI), the Viet Nam Bank for Commerce and Industry (ICB), and VDC Company	• Providing information on: buying and selling offers, products and producers • Providing services such as accessing, free searches for legal documents; advertising and introducing products; online negotiation; consulting on e-commerce and foreign trade skills • E-payment service: To be implemented in cooperation with the ICB.- Certification of Authority (CA): To be implemented in coordination with VDC and by using Verisign technology. However, the fee for this service is rather high (7-7.5% of the transaction value).	• The Project has been implemented for over two years. The firms initially selected for pilot implementation are those familiar with online transactions, so they are able to participate in e-commerce • Advantages of the website: participating firms are really potential e-traders; online payment is possible with the support of the ICB; security of online transactions is ensured through the CA service of VDC • Disadvantages of the website: The online payment and CA services rely solely on the prestige of ICB and VDC. They have not been assured in terms of legality. Their fees are probably high, so it would be difficult to attract the widespread participation of enterprises and consumers.

Source: MOT, Report on the result of the survey of present situation of application of e-commerce in Viet Nam, Hanoi, 2003.

c)   E-commerce structure

E-commerce is often cross sectoral and cross-border, and its successful development depends to a large extent on solutions based on policy coordination between stakeholder constituencies, in both the public and private sectors, and between countries. Strategic agenda items to facilitate e-commerce thus include e-commerce related laws, regulations and policies, affordable and high-quality telecommunication services and hardware, software to support e-commerce, and promotion and incubation mechanisms for SMEs to integrate e-commerce into their business models.

In accordance with the Master Plan for ICT Development of Viet Nam, the key elements and their linkages with e-commerce are illustrated in the figure below.

FIGURE 12
E-COMMERCE AGENDA FOR VIET NAM
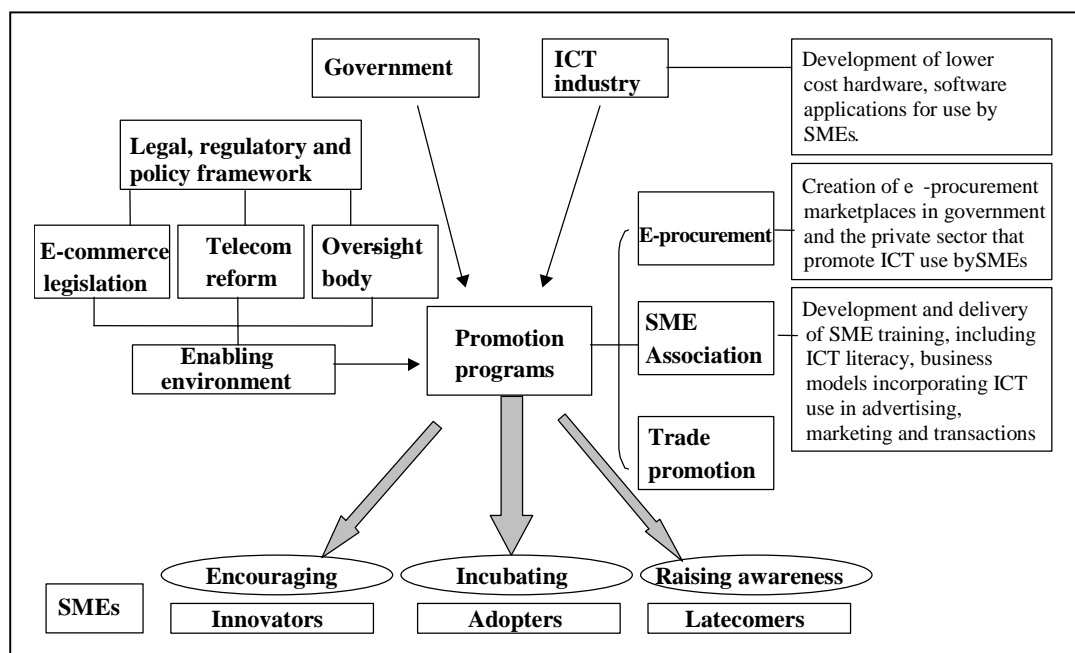
Source: World Bank, Accelerating E-readiness in Viet Nam: Information and Communication Technologies for Development, draft for discussion, 2003.

Detailed elements of a strategic agenda in this area include:

·   Development and delivery of ICT training, for SMEs.
·   Creation of e-procurement marketplaces in government and the private sector, that heavily utilize SMEs.
·   Support for associations active in the SME ICT area.
·   Support and government encouragement of the spread of cyber *cafés*.
·   Development of lower cost PCs for use by SMEs.
·   Designing and establishing an appropriate oversight body to review and regulate Certification Authorities.

·   Studying and implementing ways to increase credit card use in the private sector (and possibly in government).

·   Commissioning studies on the use of computers in private business, and on the size of the e-commerce market.

·   Supporting private associations active in this area, including associations of ISPs; of IXPs; persons active in the Internet; computer professionals; etc.

E. Institutional issues

1. Regulatory and institutional set-up

a)   Legal environment

-   The government should issue legal stipulations relating to contract execution and online payment as soon as possible so that these important in e-commerce services can be provided.

-   Other legal stipulations may be drafted and completed later during the process of extensive implementation of e-commerce in Viet Nam.

b)   Policies

-   VAT on e-commerce transactions should be exempted or reduced by 50%.

-   The government should finance the operation of e-commerce websites as a trade promotion support measure for enterprises.

-   Investments and business transactions in e-commerce and e-commerce support services should be regarded as venture investments and should be provided with preferential credit interest rates, tax rates and others.

-   Preferential policies should be applied to organizations and enterprises participating in e-commerce training.

2. Technical and telecommunication infrastructure

•   The government should continue directing relevant ministries and branches to take measures to increase the speed of transmission lines, especially to widen them at Internet portals.

•   Internet access fees should be further reduced, especially in remote areas.

•   The government should encourage individuals or direct the relevant ministries and branches to request entities under their management to produce e-commerce support software based on Open Source Software (OSS).

a)   Guidelines for the Internet and the telecommunication network

Viet Nam's Internet and telecommunication networks should be developed to make them advanced, efficient, safe and reliable and cover all areas of Viet Nam. The national information superhighway should be established with high capacity and high speed on the basis of combining technologies, telecommunication and information services and propaganda.

Viet Nam's Internet and telecommunication network should be developed into the Next Generation Network (NGN) in order to provide fast and diverse services, in line with the trend for combining voice and non-voice services and fixed and mobile services as a basis for applying and developing IT, e-commerce and e-government.

Viet Nam's Internet and telecommunication network should be built according to the following basic principles:

- The Internet and telecommunication network should have one infrastructure based on packet switching technology.
- The network should have a simple architecture with a minimum number of packet classes; the network architecture should not be dependent on administrative borders or the operating system. It should be easy to increase the network's capacity with high flexibility, usability and wide broadband to ensure service quality and information security.
- The network should have open interfaces that allow the creation and exploitation of various services to adapt to the open environment and serious competition.
- The network should provide all kinds of services (voice, data, video and multimedia) to meet all demands for new services. These services should be based on diversified transmission technologies: real time, non-real time, different speeds, different service quality, point-to-point and point-to-multipoint transmission, propaganda, dialogue, conferencing, etc.
- Service provision functions are separated from transmission functions to ensure that new services can be developed independently from the development of the network infrastructure.
- The interaction and links between existing networks (PSTN, mobile, Internet, etc.) should be developed and incorporated into NGN.
- The access network should go over to broadband step by step, using xDSL and Wi-Fi technologies, optic cables and electricity lines.

For users, Viet Nam's Internet and telecommunication network should satisfy the following requirements:

- Services are convenient without any restrictions.
- Terminal equipment has high multiservice integrity.
- The same system of numbering and naming is used.
- Different structures for fee calculation are available, depending on service quality.

For service operators and providers, Viet Nam's Internet and telecommunication network should satisfy the following requirements:

- The investment cost should be reasonable with the maximum possibility of sharing the same Internet and telecommunication infrastructure.
- It should provide open interface and network resources for other service operators and providers.
- It should support the area-switching option.

b)   Guidelines for the development of Internet and telecommunication services

- To heavily develop and diversify Internet and telecommunication services based on a national information network with an advanced infrastructure, in order to provide users with high-quality, safe and secure services at a cost lower or equivalent to the average cost of others in the ASEAN + 3 region.

- To give priority to the development of mobile communication to speed up the universalization of telecommunication and Internet services.
- To expand broadband multiservices to all Viet Namese provinces, with popular services such as multimedia paging, video on request, online entertainment, remote education and healthcare, remote working and e-commerce.
- To develop methods of public information provision, such as information kiosks, stations for providing information on request and video libraries.
- By 2005, to ensure that 100% of communes are supplied with telephone services; to extend Internet services to most universities, colleges, institutes and hospitals.
- To encourage the strong development of public Internet points, Internet cafés, etc.
- To increase the number of Internet subscribers and users as quickly as possible.

3. Financial issues

To mobilize and use financial sources efficiently, attracting foreign investment, especially from transnational companies that commit to long-term business in Viet Nam.

The State has policies for IT investment using the State budget and the capital of domestic and foreign enterprises in all economic sectors that participate in ICT investment and development. The total annual investment in ICT applications and development accounts for 2.5% of GDP, with the capital from the State budget accounting for 1% of GDP.

a)   Domestic capital

- To strengthen the reform of corporate management and create favourable conditions for enterprises to operate efficiently and increase capital accumulation for reinvestment.
- To equitize enterprises to attract capital from all economic sectors.
- To provide preferential treatment for enterprises which participate in the development of ICT services.

b)   Foreign capital

- To radically exploit foreign capital sources; to encourage foreign direct investment, especially in the ICT industry.
- To use part of ODA capital for ICT development, especially in rural, remote and island areas.
- To introduce preferential policies to encourage transnational firms to establish factories for manufacturing ICT products and doing long-term business in Viet Nam.
- To apply special preferential policies to those that transfer technologies to Viet Namese companies.
- To take effective measures to reduce the infringement of software copyright to less than 90% in 2005.
- To establish favourable conditions for foreign consulting firms in the ICT field to operate in Viet Nam in order to create and boost demand for ICT applications in production and businesses.
- To study how to amend the implementing decree of the Law on Foreign Investment to allow other forms of foreign investment in addition to business cooperation contracts, to encourage foreign investment in the telecommunication market.

4. Developing human resources for ICT industry

- To create the legal framework for the socialization of ICT training and training ICT specialists in English.
- To allow the establishment of ICT training centres with 100% foreign investment.
- To induce and create favourable conditions for international universities to provide ICT training in Viet Nam.
- To apply policies for attracting good foreign ICT specialists to Viet Nam to participate in ICT training.
- To encourage Viet Namese universities to provide ICT training in English and to hire foreign teachers for this purpose.
- To diversify forms of ICT training.
- To encourage enterprises in all economic sectors to open ICT training centres to boost ICT training capability and improve people's knowledge and skills in using ICT applications.
- To improve the system for evaluating the quality of ICT training in accordance with international standards.
- To re-evaluate all ICT training centres at all levels in accordance with the standardized evaluation system. On that basis, to classify and find suitable solutions for each centre (abolition, upgrading, development).
- To organize the issuing to ICT training centres of Viet Namese and international certification of ICT training quality.
- To select people from among those working in the ICT field who have good prospects and are able to satisfy the educational and foreign language requirements to do research or undertake postgraduate training in technology, economics and international law in Viet Nam and abroad, to become leading senior specialists in ICT and ICT management.

5. Developing the research and development (R&D) system

- To assist with and enhance the R&D capabilities of ICT research units.
- To continue the implementation of scientific research into ICT at the State level to settle, major scientific and technological issues, and to create internal resources to promote ICT applications and development.
- To implement OSS software development programmes to settle the copyright problem and to create momentum for software products bearing Viet Namese trademarks.

6. Improving the support environment for ICT development and application, step by step

- To promulgate the system of legal provisions for ICT application and development, including: the Law on Information Technology, provisions concerning electronic certification of authority, e-transactions and e-payment.
- To study and formulate the law on intellectual property rights, policies relating to computer software copyright, and trademark protection regimes for Viet Namese IT products.
- To promote healthy competition in the Internet and telecommunication markets; to create favourable conditions for new providers of telecommunication services.
- To discriminate clearly between business operations and non-profit activities in the telecommunication field; to complete the separation between the post and telecommunication business in post and telecommunication service companies.
- To promulgate legal anti-monopoly regulations in the field of telecommunications and mechanisms for reselling services.

7. Main programmes and priority projects

- Some of the main programmes in the near future are:

    - A programme to promote ICT applications.
    - A programme to develop the ICT industry.
    - A programme to develop Internet and telecommunication infrastructure.
    - A programme to develop ICT human resources.

- Priority projects:

Priority projects are those to be implemented with the assistance from and direct management of State bodies to create the impetus and act as a catalyst for the strong development and application of ICT in Viet Nam:

    - A project for one million low-priced PCs for the community.
    - A computer literacy project for 20 million people.
    - A project for training 1,000 senior officials in charge of ICT.
    - A project for electronic identity cards for everybody.
    - A project for 50% of enterprises to apply ICT to improve competitiveness.
    - A project for 100% of high schools to use the Internet.
    - A project for digitizing 50% of State documents.
    - A project for one million non-profit websites to supply public information.
    - A project for 50% of public administrative services to be provided online.
    - A project for 30,000 ICT experts.

V. Regional networks

- **Existing regional networks or websites**

There have been quite a few regional networks or websites in which Viet Nam is an active member. Following, are some of most active and prominent ones.

TABLE 21
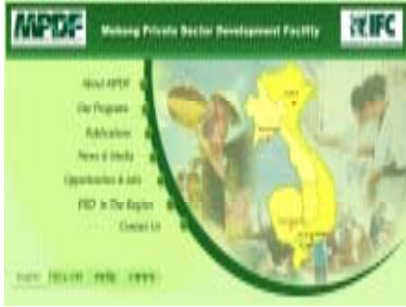**ICT-AIDED BUSINESS SERVICES FOR VIET NAM'S SMES: MAJOR PROVIDERS**

	Provider/Website, Profile	Purpose	Developer	Member countries	Stage	Accessi-bility	Language
1	http://www.mpdf.org/index.jsp	To support and accelerate the development of productive, locally-owned, private sector SMEs	Mekong Project Development Facility (MPDF), the World Bank	Viet Nam, Lao, Cambodia	Full-fledged	Free and fee-based	English, Viet Namese, Cambodian, Laos
	Web-based service provided:·	• Business information • Company advisory assistance • Business development program • Business enabling environment					
2	Global: **http://www.1000ventures.com** Regional: **http://www.technology4sme.com**	- To provide integrated web-aided technology transfer services package to SMEs - To establish a network of Technology - Transfer Agencies in the Asia and pacific region to facilitate regional technology transfer and business cooperation - To develop a self-sustainable network Version 2002-2003: CD-ROM	Asian Pacific Centre for The Transfer of Technology (APCTT)	China, India, Malaysia, Nepal, The Philippines, Republic of Korea, Russian Federation, Thailand, Viet Nam	Early	Free and member-ship fees	English
	Web-based service provided:·	• Databases (technology, legal, market…) • Business e-coach • Communities of stakeholders • Project workspaces					

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TABLE 21 (cont./1)

	Provider/Website, Profile	Purpose	Developer	Member countries	Stage	Accessi-bility	Language
3[a]	**http://www.siyb.org.vn/**	The Start and Improve Your Business (SIYB) Programme equips private SMEs with the tools and skills needed to assist in the development of micro and small enterprises.	International Labour Organization (ILO)			Free and fee-based	
	Web-based/ICT-based service:	• Information • ISO online • IT solutions • Management					
4[b]	**http://www.technonet.org.sg/**	The specific objectives are to connect each of the participating institutions to the Internet and develop their capacity to network: - To provide information services based on the needs of SMEs. - To set up a World Wide Website to help SMEs and their support organizations establish global linkages. - To establish an electronic network between Technonet Asia member organizations. - To develop new information services based on the Internet. - To prepare SMEs for cyber business promotion and help them to gain access to international markets through the Internet.		Bangladesh, Sri Lanka, Nepal, Thailand, Philippines, Singapore, Viet Nam	Intermediate	Free of charge	English
	Web-based service provided:·	• Technology transfer and sharing • Industrial information dissemination • Professional expertise & consultancy	• Entrepreneurship and enterprise development • Industrial extension service • Pollution Control Awareness Programme for SMEs				

TABLE 21 (cont./2)

	Provider/Website, Profile	Purpose	Developer	Member countries	Stage	Accessi-bility	Language
5	http://www.asemconnect.com.sg/	To serve as a forum for the 26 ASEM partners, and as a platform for their efforts to promote business and trade between their countries. AsemConnect provides links to national home pages, each of which in turn provides links to business directories and business services in their country. These business directory sites will be encouraged to meet certain standards of content and navigation so that Internet users visiting these sites will find broadly similar features.	Viet Nam Trade Information Centre- Ministry of Trade (MOT)				
6	http://www.asidnet.org/portal/about.jsp	To increase the awareness-supporting industries in ASEAN member countries: - To be a business information centre to facilitate business translations. - To do information public relations for ASEAN manufacturers. - To link buyers and sellers by acting as an information source to both parties. - To act as one of the new media for effective communication. - To minimize costs of buyer and seller sourcing.	Investment promotion organizations in ASEAN member countries			Free of charge	
	Web-based service provided:	• Online catalogue: enables a company to provide any information to the public as much as needed on the Internet (online based). • Web board: provides an information exchange service. • Document: provides information (e.g. studies, roles and regulations ASEAN agreement, etc.) for downloading. • Chat Programme: Provides various interesting topics for online discussion.					

TABLE 21 (cont./3)

	Provider/Website, Profile	Purpose	Developer	Member countries	Stage	Accessi-bility	Language
7	**http://www.asean3.net**	- To serve as an electronic market place for ten ASEAN countries and three other Asian countries, including China, Japan and Korea. - To provide highly reliable trading information and accurate company information. - To provide expert advice and professional research for global business.		Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Viet Nam, China, Japan, Korea		Free of charge	
	Web-based service provided:	• Company list (business directory): Contains a list of firms with detailed profiles. • Product catalogue: Members can post and search products in the catalogue with detailed information and pictures of products/services. The catalogue is divided into groups of products/services for easy search. • Trade leads: Members can post, view and reply to buying and selling offers. With this page, traders do not have to meet potential partners in person for the initial assessment. • Resources: Provides the latest trade news, exhibition information and tender notices. There is also a discussion board for members to share information or materials.					

TABLE 21 (end)

	Provider/Website, Profile	Purpose	Developer	Member countries	Stage	Accessi-bility	Language
8	http://www.atpf.org	To enhance trade in the region through information exchange, implementation of cooperative projects and strengthening networks among ATPF members.	Asian Trade Promotion Forum (ATPF)	Australia, Bangladesh, Brunei, China, Chinese Taipei, Hong Kong, India, Indonesia, Japan, Korea, Macao, Malaysia, Mongolia, Nepal, New Zealand, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Viet Nam			
	Web-based service provided:·	• A compilation of links to the websites that are useful to get information • Basic indicators of ATPF member countries.					

Source: Prepared by the author.

[a] Contact: Viet Nam Chamber of Commerce and Industry (VCCI): National SIYB Focal Point <registry@siyb.org.vn>

[b] Contact: Technonet Asia; 749A-2, Geylang Road; Singapore 398655; Tel: (65) 6547-4330; Fax: (65) 6547-4331; Mailing Address: Kitchener Road Post Office; P.O. Box 0165; Singapore 912006.

VI. Conclusion and recommendations

A. Regarding development of SMEs

In many respects, SMEs in Viet Nam differ from those in other countries. For a long time, Viet Nam being a centrally planned, socialist country, SMEs and the private sector were not developed. The government began economic reforms and the introduction of market mechanisms in the late 1980s, and this accelerated in late 1990s, resulting in a rapid increase in private SMEs. The introduction of the first Law on Private Enterprise in 1991 has created a more conducive environment for SMEs to grow. The gradually improved legal framework helps to facilitate the operation of SMEs, such as: the regulations on direct export rights; the possibility of links with foreign investors and partners; preferential tariff; etc. Consequently, SMEs in Viet Nam have been developing rapidly in number and operational effectiveness. Approximately 100,000 private enterprises have been registered so far, contributing substantially to the diversity of the economy.

In the 2001-2010 Socio-Economic Development Strategy, Viet Nam set out, and is determined to achieve, important goals, the core of which are sustainable economic growth, lower unemployment and poverty reduction. Private SMEs are considered to play a pivotal role in national efforts to attain those fundamental goals. Hence, the role of SMEs in Viet Nam's industrialization and modernization process is notable.

The 2003 annual report on Viet Nam's Comprehensive Poverty Reduction and Growth Strategy (CPRGS) confirmed that Viet Nam had the highest economic growth and poverty reduction rate in the world in the previous two years.

In fact, SMEs in Viet Nam have proved to be of importance in national efforts, since they share around 65% of the country's GDP, contribute half of the country's exports and employ approximately 85% of the total workforce. More than one million jobs are generated each year, mainly by SMEs. Investment from the non State-owned sector, especially local private investment, has been a major driving force for economic growth in recent years.

SMEs are increasingly considered as the backbone of the economy. Their contribution to economic growth, reducing unemployment, developing the workforce and improving the standard of living has been significant, making them the most active sector in the Viet Namese economy.

However, Viet Namese SMEs have a lot of obstacles to cope with, notably the following:

- Serious shortage of capital.
- Lack of markets.
- Lack of raw materials.
- Lack of advanced technology, machinery and equipment.
- Lack of management and technical skills.
- Lack of information on market and business opportunities.

- **Recommendations for SME development**

  - Business cooperation between enterprises is fundamental to economic growth. Therefore SMEs should enhance their coordination in order to facilitate trade and investment.
  - Market awareness, business information and local business practices should be developed. This also means developing human resource training and retraining. These elements have become fundamental conditions for SMEs to prosper.
  - International and regional cooperation in human resource training, technology transfer between developing countries in ICT for SMEs should be tabled at international forums.
  - Existing tools that serve the cooperation and development of SMEs in Asia and Latin America should be developed, updated and interconnected. Governments of country members and multilateral institutions should support this process.
  - The increased globalization of SMEs should be promoted through trade missions and virtual business meetings.

B. Regarding ICT application

Given that a very high proportion of Viet Nam's GDP is generated by SMEs, developing their ICT capability, starting from a low base, is an important concern and opportunity to maximize their current efficiency, future competitiveness and participation in international trade.

One of the important characteristics of ICT is that it allows even a small business with minimum initial investment to have access to a global market. ICT therefore provides a unique opportunity to promote the growth of SMEs in countries like Viet Nam, where capital is scarce. ICT also allows SMEs located in small towns or villages far away from the capital to develop, where local information sources are limited. Moreover, by enabling domestic entrepreneurship, ICT allows sustainable development and strengthens the local economy.

- **Recommendations for IT development and application**

  - The government's efforts to promote IT should focus on small and very small firms.
  - Government support policies or actions should focus on advising SMEs on selecting technologies and training.
  - Enterprises should allocate a reasonable budget for human resource development. Furthermore, universities and training centres should have suitable training programmes so that their trainees are ready for working in an e-commerce environment.
  - Enterprises should invest in IT as an efficient method of trade promotion.
  - The government's support for IT application, especially for enterprises in remote areas, should focus on financial assistance (preferential tax rates and preferential loan interest rates), human resource development, and strengthening the dissemination of IT.

References

Centre for International Development (2003), Havard University, The Global Information Technology Report.

General Office of Statistics (2003), Annual Statistics of 2002, Hanoi.

Government of Viet Nam (2001), Decision on the Strategy for Development of Post and Telecom to the year 2010 and the Orientation to the year 2020, No. 158/2001/QD-TTg, Hanoi.

ITC (International Trade Centre) (2002), "Viet Nam E-Trade Bridge", Geneva, January,

ITU (International Telecommunication Union) (2002), "Viet Nam Internet Case Study", chapter 4, Geneva, March.

MOT (Ministry of Trade) (2003), Report on the result of the survey of present situation of application of e-commerce in Viet Nam, Hanoi.

MPT (Ministry of Posts and Telematics) (2004), Evaluation of Policy for Development of Internet in Viet Nam, Hanoi, unpublished.

_____ (2003), Draft Strategy for development of information and communication technology up to 2010 and the orientation to 2020, Hanoi, unpublished.

National Steering Committee for Information Technology Development (2003), Assessment of Current Development and Strategy for up to the year 2020, Hanoi.

Ngoc Tuan, Nguyen (2004), Development of different economic sectors, Viet Nam Investment Review, No. 79, May.

OOG (Office of the Government) (2002), reports that "most ministries have websites now", interview April.

UNIDO (United Nations Industrial Development Organization) (2000), Industrial Development in Viet Nam: Performance and Policy, Hanoi.

VCCI (Viet Nam Chamber of Commerce and Industry) (2002), Report of the Survey of the Application of Information Technology at Enterprises, Hanoi.

VNCI (Viet Nam Competitiveness Initiative) (2004), Viet Nam ITC industry at a glance, Hanoi, unpublished.

_____ (2002), Report of the Survey of the Application of Information Technology at Enterprises, Hanoi.

VINASA (Viet Nam Software Association) (2003), Present situation of Application of Information Technology in State-Owned Enterprises, Hanoi, unpublished.

World Bank (2003), Accelerating e-readiness in Viet Nam: Information and Communication Technologies for Development, draft for discussion.