Impact of Policy on Development of E-Commerce in Vietnam

By Tran Ngoc Ca

E-commerce began gaining momentum in Vietnam in the mid- to late-1990s. Considerable discussion and debate was generated on its feasibility, effectiveness, and policy impact, and many government organizations continued to discuss various plans of action and potential frameworks for e-commerce development. However, there was neither consensus nor an agreed-upon common platform for discussing and understanding e-commerce issues among policy-makers, researchers, and entrepreneurs. The process of accepting and implementing e-commerce solutions was deferred, and as a result, a number of institutional and conceptual difficulties were faced. The policy environment in Vietnam was not created to support e-commerce technologies and transactions. This deficiency negatively influenced the introduction and integration of e-commerce into Vietnamese society and the economy.

The scope of this study extends beyond the macro level of government organizations. It delves into the problems faced by Vietnamese enterprises in their efforts to use e-commerce to reach their business targets. To examine the impact of e-commerce on globalization and economic integration, we assessed the readiness of organizations to conduct e-commerce activities. The concept of readiness includes two notions:

- The capacity and the willingness to adjust to the requirements of e-commerce development. In particular, the project focused on the readiness of enterprises as wealth creators and important actors in the National System of Innovation.
- Business-to-business (B2B) relationships tend to be the first and most realistic form of e-commerce development; therefore, enterprise were given special importance to this study. The project also investigated the problems faced by grassroots organizations based in remote, rural, and underserved areas, and identified ways these organizations could cope with the shift to a new mode of economic activity. The conclusions and recommendations are aimed at governments, business managers, and academics.

The study had three specific objectives:

- To conduct a preliminary assessment of the policy environment to identify gaps between the existing policy environment and the environment required for effective e-commerce development;
• To assess the readiness (capacity and willingness) of Vietnamese businesses, both state-owned enterprises (SOEs) and private, large, and small and medium enterprises (SMEs), to develop e-commerce activities; and
• To recommend policy measures and a framework for e-commerce acceptance and implementation in Vietnam.

Research Methodology

Issues

The study addressed the following research issues:
• The lack of readiness on the part of government institutions, both in terms of their perception and commitment to e-commerce. These organizations include key infrastructure, legal, and policy-making bodies;
• The role of the state in the development of e-commerce practices, and its relationship with the private sector in promoting e-commerce development;
• The legal infrastructure related to e-commerce;
• The roles of various governmental or ministerial agencies with regard to e-commerce and their implications for e-commerce development;
• The e-commerce readiness of private enterprises in Vietnam and the impact of the policy environment in building this readiness;
• The required policy environment for e-commerce development and deployment; and
• Lessons and recommendations to improve the policy environment

Hypotheses

For operational purposes, the project examined the following hypotheses:
• Conflicting overarching objectives of the government and different government organizations about e-commerce issues create barriers to the development and application of e-commerce in Vietnam; and
• The absence of competitive pressure and lack of skilled human resources lead to low e-commerce readiness for enterprises.

Research Questions

To clarify the research issues and to test the hypotheses, several research questions were examined:
• What is the role of the state in the process of accepting and implementing e-commerce: supportive or restrictive? What aspects should be considered? Should the government support or control the development of e-commerce in Vietnam? If so, to what extent?
• What role does the regulatory system play with regard to e-commerce acceptance and implementation in Vietnam? Which of the various government departments should participate in conceiving this regulatory system? What are their responsibilities and interests with regard to e-commerce development?
Given the current management structure of various government bodies, what are the main obstacles to supporting e-commerce development in Vietnam?

• What e-commerce policy exists in other countries? What did they do to overcome the obstacles to developing the required policy environment? What are the lessons we can learn from their experiences?

• Are Vietnamese businesses ready for e-commerce deployment? What are the aspects of this readiness? How should these aspects be assessed? To what extent are they ready? If businesses are not ready, what are the reasons and problems behind this? What influence does the overall policy environment have on the e-commerce readiness of these organizations?

• What is the required policy environment for successful e-commerce development in Vietnam? What steps need to be taken to develop a policy environment that is conducive to e-commerce activities? What lessons and conclusions can be drawn about the policy environment? What recommendations can be made to tackle the difficulties and improve the environment for accepting and implementing e-commerce?

Policy Component and Flexibility

The rapidly changing policy environment in Vietnam provided an opportunity to turn the findings from the study into policy recommendations and to develop a scientific framework for the policy-making process. Therefore, the project involved policy-making to an extent that was not planned in the original work plan. Some of the findings and recommendations of the study were considered during working group discussions, and in the last stage of the project, various contributions were made to the policy-making process.2

When the project began in October 2001, e-commerce adoption in Vietnam was experiencing difficulty. There was considerable confusion among some organizations (mainly the Ministry of Trade, or MOT) with regard to the strategies and approaches that would further e-commerce development. Institutions changed responsibilities frequently, which led to both a lack of consistency in how they dealt with e-commerce issues and a lack of continuity in staff. There were also differing views on e-commerce development among departments within the MOT.

The project continually engaged in dialogue with the MOT. Proposals were put forward and comments were provided on e-commerce activities implemented by the Ministry. Project staff helped the MOT draft an Ordinance on E-Commerce (a form of legislation) that is expected to be enacted by the President. Recently, this document has been undergoing a merger with a new Law on e-transaction being drafted by the National Assembly. Some members of the MOT were also directly involved in the research activity of the project — as experts rather than as representatives of the Ministry.

Due to some difficulties within the MOT itself, the initial policy proposals were not very effective. By the end of 2002 (one year after the project started), two reports: “The Role of the Government” and “Analysis of the Policy Environment” were circulated and discussed among various groups such as MOST, MOT, and other
government offices. However, no official policy action took place. In December 2002, a policy window opened with the return of the former Minister of Trade, who had initiated the process of e-commerce in the MOT. A synthesis of the two previous reports was prepared and submitted to the Minister via an unofficial channel. The report introduced several recommendations, both in policy and in organizational modifications. The recommendations included setting up a new independent department in the MOT to deal with e-commerce (rather than being a sub-unit of other department) and incorporating domestic activities involving e-commerce with other international commitments of the Vietnamese Government when entering free trade agreements (not previously linked with each other).

In February 2003, the Minister set up the Department for E-Commerce at the MOT and appointed a new director for this department to reorganize its activities. There was also a proposal to set up E-Commerce Council with the Minister of Trade acting as the Chairman of the Council. The new department studied the recommendations and analysis of our project. Last year (2003) was devoted to the implementation of scheduled activities. The new Department for E-Commerce has become an official and close partner of the project.

As a result, this IDRC-funded project has made significant contributions to changes in the Vietnamese policy landscape with regard to e-commerce development. In the last survey of the e-readiness of SMEs, the project team worked even closer with the newly created e-commerce department in conducting the survey and ensuring that the research and policy actions were in agreement with each another.

One of the important lessons learned during this process was that, due to conflicting interests, it was not always effective to gather opinions of all related stakeholders in a single discussion. Opinions of organizations sometimes need to be collected separately through individual interviews and discussions. In addition, different stakeholders understand the same concept differently. Therefore, fine-tuning of questions is required to make the concept more universally acceptable to various groups.

Research Findings

The project findings have been grouped into six areas:

• collection of information and database development;
• role of the state in the development of e-commerce;
• impact of the policy environment on e-commerce development;
• learning from other countries’ experiences;
• developing research tools and surveying the readiness of firms; and
• analysing case studies.

These research findings contributed to the achievement of the project’s objectives, both by generating new scientific knowledge and by developing policy.

Collection of Information and Database Development
During the course of the project, data relevant to e-commerce development in a number of countries were collected. In addition, overall socioeconomic development data about Vietnam and information and communication technology (ICT) development data related to the e-commerce acceptance and development were collected.

Using these data sets, the study was able to identify some urgent issues. These issues included a lack of legal documentation and policies, and a weak incentive system for ICTs in general and for e-commerce in particular. A study previously done by the MOT identified a range of issues as being crucial to e-commerce development in Vietnam (see Table 4.1), but no legal and policy framework had been prepared.

Role of the State in the Development of E-Commerce

The state’s role in accepting and implementing e-commerce is contradictory. It is simultaneously supportive and restrictive of e-commerce activities. In fact, in many cases, the role of the state is restrictive because it tries to control or manage things (in terms of supervising others) rather than to create a conducive and supportive environment. This is true both for ICT and e-commerce policy. This study found that the state intervenes in cases where it perhaps should not, and refrains from providing sufficient support when it should.

### Table 4.1

**Issues Identified as Important by the Ministry of Trade**

- Increased awareness
- Legal infrastructure
- Technological infrastructure
- Cryptography
- Electronic payment
- Standards in industry and commerce
- Protection of intellectual property rights (IPR) and customers
- State management and the role of the state
- Skill-development training
- Sociocultural aspects
- National security

The role of the state can be seen in three contexts: as a supplier; as a demand generator; and as a creator of a favourable environment. On the supply side, government instruments were insufficient, especially in providing infrastructure, technology, facilities, and training. On the demand side, the government could not
trigger the use of e-commerce by using purchase and procurement policies through public enterprises. The weakest aspect seems to be the state’s failure to create an environment that is conducive to e-commerce development by enterprises. In addition to the legal framework, other issues such as finances, taxes, and investments are important to consider. Enhancing the role of the state in these areas would be an important breakthrough to e-commerce development in Vietnam.

The creation of a new Ministry of Post and Telematics (MPT) and the Department for E-Commerce in the MOT led to some minor adjustments in the study’s final conclusions and recommendations.

Impact of the Policy Environment on E-Commerce Development

The perspectives and understanding of ten ministries and government agencies involved with e-commerce implementation were examined. In many cases, these viewpoints were contradictory. Here are some observations on the policy environment for e-commerce:

- The e-commerce regulatory system in Vietnam lacks a legal framework, documentation, and appropriate policy to guide regulatory management.
- The legal framework for e-commerce is weak in the areas of taxation, customer protection, intellectual property rights (IPR), e-payment, security infrastructure, standardization, public security, technology infrastructure, sociocultural aspects, training, and human resource development. In addition, the wording of the legislation makes it unsuitable for e-commerce regulation because it has limited jurisdiction force.
- The Vietnamese Government is committed to join different free trade agreements such as e-ASEAN, the paperless trading of APEC (Asia-Pacific Economic Co-operation), and the WTO (World Trade Organization). However, there is a difference between these commitments and the hesitant efforts that the government has made to realize e-commerce policies. The current policy environment, including the legal framework, does not take sufficiently into account the needs of private enterprises, which are the major stakeholders for ICT and e-commerce development.
- The state, judging by its policy actions (such as its procurement policy), will not assume a pioneering role in facilitating the market demand for e-commerce. The e-commerce policy environment reflected a similar situation to that of ICT policy. There were no close linkages between policies and policy-making bodies, making the system fragmented. There was little consensus and harmonization among key institutions on the pace, extent, format, and nature of e-commerce development in the country. This often led to the creation of inappropriate policies, which sometimes were contradictory or ineffective in accomplishing their purpose.
- Differences of opinion were quite prevalent between ministries that support a faster and stronger integration process (e.g., ministries dealing with foreign affairs, commerce, science and technology, and international law) and those that seem to be overly cautious in dealing with the issues (e.g., ministries
dealing with culture and information and security). These differences arise due to conflicting interests. For example, sometimes the policies of a sectoral monopoly are meant to preserve the interests of certain industries (e.g., post and

<table>
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<tr>
<th>General Policy Environment Issue</th>
<th>ICT Problem</th>
<th>E-Commerce Problem</th>
</tr>
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<tbody>
<tr>
<td>• Integration and interaction of different factors within the policy environment</td>
<td>• Lack of co-operation between sectors to promote ICTs</td>
<td>• The policy-making process is fragmented. There is weak linkage between different domestic policies, or between domestic policies and international commitments of the Vietnam government. The plan for economic integration also lacks a comprehensive and proactive strategy.</td>
</tr>
<tr>
<td>• The nature of some central policies leads to differences in importance and understanding</td>
<td>• Inconsistent and some irregularities in the functioning of macros</td>
<td>• State management of e-commerce is not functioning properly.</td>
</tr>
<tr>
<td>• No consensus reached on the operational formats for ICT policies</td>
<td>• Various Ministers or agencies consider their own policies as the central ones. They do not take into account the need for interaction or harmony with other policies</td>
<td>• Sectoral monopoly still exists.</td>
</tr>
</tbody>
</table>
• Limited co-ordination between policy-making organizations, policy-making, and policy implementation activities limits policy impact.

• Differences between Directive No. 58 (an important document issued by the Party Central Committee on ICT Development) and specific activities to promote ICTs agencies. Even the existing linkages are occasional, irregular, and inconsistent in nature.

• Lack of dialogue between policy-makers and those influenced by policies (e.g., enterprises).

• The draft plans for ICT had insufficient involvement of enterprises and people.

• There is little or no dialogue between policy-making organizations and those affected by the policies (e.g., enterprises, individuals, and local communities). In cases where there is dialogue, it exists only on an ad hoc basis.

• Lack of information to analyse the impact of e-commerce.

• Suitable policies to encourage and support demand from enterprises.

• Policies seem to be too cautious and restrictive, rather than facilitating.

• Lack of legal or regulatory documents related to e-commerce.

• The non-specific nature of the legal and regulatory documents, which are sometimes too general or vague.

• The focus of many of the documents is
not appropriate to
the activities of
e-commerce.
• The views
expressed in the
documents still
represent a cautious
or old mentality.
• The state cannot
play a pioneering
role.

 telecommunication and finance), but this can be at the expense of overall
development in other sectors.
• Although e-commerce development started much later than ICT development,
the problems (or policy failures) of e-commerce are more complex than those
for ICTs. Overcautiousness and hesitancy portrays the attitude of the
government, which is preoccupied with managing or controlling the sector.
Another important weakness for e-commerce policy is the absence of legal
and policy documents. The failures of the policy framework are presented in
Table 4.2.

Clarifying Ministerial Responsibilities

Before the creation of the Department of E-Commerce in February 2003, a wide range
of agencies and departments were working under different ministries to deal with
e-commerce issues. The Ministry of Trade alone had three departments for this
purpose: the Department of Trade Promotion (supported enterprises to familiarize
them with e-commerce, but did not have any authority or vision to implement
policies); Department for Multilateral Trade Policies (dealt with integration issues
including that of e-commerce activities, but lacked overall vision for integration), and
the Trade Information Centre (provided information on the creation of trade points but
lacked a comprehensive view of e-commerce). Besides these, many other ministries,
such as the Ministry of Justice and the Ministry of Science and Technology, were also
involved with different aspects of e-commerce.

E-commerce policies must be viewed in the context of other policies. Co-ordination
is important to create a sound policy environment, but this was lacking in the
Vietnamese e-commerce system. Co-ordination among the government organizations
that participate in setting up regulatory systems is rather formal and inefficient.
Responsibilities are not clearly defined and there are often conflicting interests.

The process of information sharing and dialogue among the stakeholders is
irregular and the organizations seem to work independently. There is even evidence of
information hiding. Most of the cases of co-operation are formalities, with little
co-operation. With the introduction of the new MPT, it is still unclear who is taking the leading role in e-commerce development in Vietnam. Although in principle the MOT is the authority for e-commerce, the MPT seems to have the same responsibility, but lacks capacity, knowledgeable staff, and infrastructure. Considering the current management structure within the various government bodies, the main obstacle is the lack of an organization that is powerful and competent enough to act across different sectors (see Table 4.3).

Learning from Other Countries’ Experiences

A study of legal systems in other countries revealed that different e-commerce issues such as consumer protection, privacy policy, electronic signature, trust mark, domain registration, electronic payment, and taxes are covered by different legislation. The guidelines in various documents

<table>
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<th>TABLE 4.3</th>
<th>Issues Related to the Organization of Agencies Responsible for the Development of ICTs and E-Commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
<td><strong>Impact on ICTs</strong></td>
</tr>
<tr>
<td>Status</td>
<td>• Absence of a supreme agency that could manage the overall development of ICTs. The newly created MPT is a ray of hope.</td>
</tr>
<tr>
<td>Problems</td>
<td>• ICT policies are implemented by a number of agencies in addition to the</td>
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<td></td>
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</table>
MPT. This created rivalries, and there are no linkages between the agencies.

- There is a need for a co-ordination mechanism that would be cross-sectoral and inter-ministerial.

- Petty competition among agencies
- Co-ordination (if any) is a formality and means little in reality.
- Crippled by short-term vision and a lack of strategic direction.
- Actions respond to pressures rather than to needs.

of the United Nation Commission on International Trade Law (UNCITRAL) address the most common themes and provide a good reference for Vietnam.

Study tours to Canada and Europe, as well as experiences from Asia-Pacific, demonstrated that an institutional framework is necessary for e-commerce development. In Canada, for example, Industry Canada (part of the Government of Canada) deals with most e-commerce issues. In addition, other national and provincial institutions are in place to handle issues of e-commerce development. The Council of E-Commerce (national) and the Programme in Montreal run by the Ministry of Culture and Communication of Quebec (provincial) are two such examples.

Canadian experiences, such as the Institute of Information Technology at the National Research Council Canada (NRC) and its project on clustering for Nova Scotia and Halifax, are valuable contributions to developing Vietnam’s initiatives to serve remote and rural areas. Social science institutions such as the New Economy Initiative of the National Council of Social Sciences Research are also actively involved in promoting ICTs and e-commerce.

European experiences in training (e-UK University initiative) to support enterprises (e-Business Group of CBI, e-Business Council, e-Business Forum, and the digital economy mission of the French Ministry of Economy and Industry) are important. To illustrate the importance of e-commerce, the Government of the United Kingdom has appointed an e-envoy at the highest level of government to facilitate e-commerce activities.

Developing Research Tools and Surveying the Readiness of Firms
Preliminary interviews with some private enterprises revealed that physical infrastructure was an important but not crucial factor in e-commerce readiness. Other factors, such as management, proved to be a decisive element. In some cases, private enterprises that had poor management, particularly poor information management, could hardly do anything with their well-equipped facilities. Legal and cultural aspects were also considered important.

Another survey on private enterprises pointed out that virtually all firms are aware of the importance of e-commerce to their businesses and would like to undertake such activity if possible. However, due to many difficulties, not all are ready to embark on e-commerce applications. Most cases revealed that larger enterprises (with more than fifty employees) are more ready to deploy e-commerce than smaller ones.

A July 2003 survey of the readiness of SME indicated that the majority of enterprises could identify products for sale via e-commerce (88 per cent), but that only 41 per cent could identify the technology and 47 per cent the required human resources for e-commerce. Only 33 per cent could assign specialized staff to take care of e-commerce; whereas, 63 per cent planned to train new staff for this purpose. Of the enterprises that were applying e-commerce at the time, 76 per cent of the firms intended to use e-commerce in business-to-business (B2B) transactions; whereas, 39 per cent considered that they were already involved in such a business mode.

Another interesting finding is that the enterprises did not identify e-commerce as being dependent on gender issues. However, most of them agree that projects located in remote places are at a disadvantage for using e-commerce. As a result, they would like to see government policy measures on issues such as taxation, training, and awareness building, specifically targeted to rural or remote users. Some details of the survey are presented in Table 4.4.

### Analysing Case Studies

In Hai Duong, Hanoi, and Ho Chi Minh City, seventeen companies were extensively interviewed. Here is some general information on these companies. ETC was set up in 1995, has 200 million dong in capital and seventeen employees, and created ETCNET in Hai Duong province. Electricity Company No. 1 is located in the same province and started to use IT for business administration in 1995. Ha Thang ICT is based in Hanoi and specializes in software development, networking, and supplying hardware. In Ho Chi Minh City, two IT companies and four companies using IT in their businesses were studied. These companies were: Paragon Solution Vietnam (PSV) (100 per cent foreign investment); Kim Yen Limited Co. (Camon Tour); import-export company Fideco; security service company and security trading company Bao Viet; and Nha Dat Limited Co. Some of these companies are located in the Saigon Software Park (SSP). In addition, a range of other companies such as Rang Dong Plastic, Thanh Cong, Phong Phu Textile, IBM, ACER, Phu Lam Shoe-Making.

### Table 4.4

Results of a Survey of SME Conducted in July 2003
<table>
<thead>
<tr>
<th>Type of Ownership</th>
<th>Economic Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOE (state-owned enterprises)</td>
<td>Industry and Construction 37%</td>
</tr>
<tr>
<td>FDI (foreign direct investment)</td>
<td>Agriculture 0%</td>
</tr>
<tr>
<td>Other</td>
<td>Trading and Services 32%</td>
</tr>
<tr>
<td></td>
<td>Mixed 32%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of Business Activities</th>
<th>Firm size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale</td>
<td>Less than 10 staff 5%</td>
</tr>
<tr>
<td>Retail</td>
<td>From 11 to 50 16%</td>
</tr>
<tr>
<td>Sell tangible products</td>
<td>More than 50a 76%</td>
</tr>
<tr>
<td>Sell intangible products</td>
<td>No. of employees not provided 3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Does e-commerce matter?</th>
<th>Expectations from e-commerce</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure</td>
<td>Extended customer reach 89%</td>
</tr>
<tr>
<td>Not necessary</td>
<td>Attracting new customers 89%</td>
</tr>
<tr>
<td>Necessary</td>
<td>Increased revenue 70%</td>
</tr>
<tr>
<td></td>
<td>Improved profitability 68%</td>
</tr>
<tr>
<td></td>
<td>Improved customer satisfaction 57%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Why use e-commerce</th>
<th>Attraction of e-based transactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating new sales channel</td>
<td>Best service 63%</td>
</tr>
<tr>
<td>Building company image</td>
<td>Availability of products 42%</td>
</tr>
<tr>
<td>Launching new products</td>
<td>Quick delivery 39%</td>
</tr>
<tr>
<td>Preparing for export</td>
<td>Cheapest price 29%</td>
</tr>
<tr>
<td>Trying new idea</td>
<td>Trust 29%</td>
</tr>
</tbody>
</table>
Being supportive 26%  Specialized website for product 3%
Follow others 0%

### E-commerce readiness

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
<th>IT infrastructure readiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product-wise</td>
<td>88%</td>
<td>Have computers 100%</td>
</tr>
<tr>
<td>Customer-wise</td>
<td>59%</td>
<td>Have leased lines 21%</td>
</tr>
<tr>
<td>Technology-wise</td>
<td>41%</td>
<td>Have LAN 58%</td>
</tr>
<tr>
<td>Human resource-wise</td>
<td>47%</td>
<td>Have WAN 11%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have Internet access 97%</td>
</tr>
</tbody>
</table>

### Organizational Preparedness

- Have specialized e-commerce personnel 32%
- Plan to train staff in e-commerce 63%
- Have separate e-commerce unit 18%

Notes:

- a Most in traditional manufacturing and trading.
- b Most focus on enlarging market.
- c 26 per cent of the firms reported that they get some kind of support (from the government) for e-commerce development, and 45 per cent of the firms said that e-commerce is a step to increase exports.
- d Although in “Expectations from e-commerce”, the potential of e-commerce to “improve customer satisfaction” received relatively low consideration; here “best service” is considered most important.

Nhat Vinh, and VNET, which work in manufacturing and the service industries were studied.

### Some General Trends

The following conclusions and trends can be drawn from the findings of these studies:
• **Understanding e-commerce and identifying its benefits to the business community** — All organizations are aware of the importance e-commerce has in their business activities. Some companies have experimented with alternate communication and transaction methods, and some have started to set up an electronic supermarket. This e-supermarket hosts information on sales, and markets a dozen companies from a single website. Sales over the Internet are the first step of e-commerce. However, sales activities have not yet begun to take place. E-commerce applications in private enterprises still experience many difficulties.

• **Technological infrastructure** — Unreliable connections to the Internet and to telecom networks are concerns for many companies. Because of the low level of reliability and slow connectivity, online transactions often get “jammed” and need to be abandoned. Enterprises dealing with tourism and export-import businesses (Camon Tour, Fideco) face these problems quite often. Although they contact their Internet service providers (ISPs) to solve problems, sometimes the ISPs do not supply proper technical support. Other software companies (those located in the SSP) who attempted to subscribe to a separate leased line or to an independent port still faced problems, which include bureaucratic hassles, legal restrictions, cost, and other technical problems. Lack of standardization also posed a considerable obstacle to users who were connecting to, or building up, a system.

• **Legal infrastructure** — Protection of intellectual property rights (IPR) is the most serious problem for companies that produce software products. Software products are copied on a massive scale (copied software is available even in government organizations) and no effective action is taken to solve this breach of IPR. Many companies such as Lac Viet (producer of multimedia software on tourism and culture) feel that software development in Vietnam has little or no future because of copyright infringement. Another important legal aspect is transactions over the Internet. The e-commerce environment is still very disorganized due to a lack of legal regulations on electronic information exchange and the expense of credit card services (7 per cent charge). These problems have led to many difficulties in dispute settlement, not only between business partners, but between the partners and management organizations in finance, tax, customs, and security.

• **National security** — The blocking of access to selected websites by private enterprise has hindered access by software companies to knowledge resources that are essential to their operations. When companies need to be involved in networks with local partners, they find that some Internet connections are blocked without just cause. Selective access to information, whether it is right or wrong, must be exercised with proper judgement. The government should be restrictive only with information that is clearly immoral or corrupt, such as pornography. In contrast, access should be more easily given to information
that comprises knowledge resources or that could be vital for economic activities. Things have improved recently but more needs to be done.

- **Incentive policies for e-commerce** — With the hurdles placed in front of private enterprises, such as high taxation, telecom fees, and Internet connectivity costs, incentive policies to help these enterprises embark on e-commerce activities are needed. The taxes levied on the IT industry are similar to those applied to other services. With the introduction of VAT (Value Added Tax), the tax levied on software products has increased year after year (from 0 per cent to 10 per cent in four years\(^4\)) rather than decreased, as would be the case for an incentive policy. Fees for leased lines are too high (US$2,000 per month for a 64 KB line\(^5\)) and many companies indicated that they could not afford these prices. Some respondents suggested that it is not security that was a concern, but the existing business monopoly that raises fees and makes telecommunication services cumbersome. The telecommunications industry itself has not benefitted from monopoly practice, but it has affected the development of other sectors. SMEs, due to their lack of resources, hope that the government will reduce taxes (for a period of time) on their businesses to support the building of websites and the development of e-commerce activities. In the last few years, things have begun to improve as connection costs have declined.

In this context, businesses have plans with regard to e-commerce development. Despite the difficulties, companies will continue their e-commerce activities. To deal with difficulties in the payment system, some companies have chosen to explore foreign partnership options. For example, Fideco (a seafood export company) chose an Australian partner to receive payment directly on their behalf. Camon Tour Co. (tourism) also decided to use a company in Singapore as an external e-commerce focal point to solve difficulties with online payment. This is a common trend in e-business to overcome difficulties with the banking system in Vietnam. Regardless of government policies, businesses will continue their e-activities in a way that is most appropriate to their resources and situation.

- **Government understanding of the needs of businesses** — Most of the enterprises argue that the government does not have suitable mechanism to understand or study the business needs of their companies, particularly in relation to ICT development. These opinions often remain unaddressed or are responded to with inconsistent action. Policy steps are also inconsistent or even contradictory in some cases. In the formulation of the ICT master plan and strategy (approved in 2002), representation from the business community was limited.
Many businesses feel they have suggestion to make with regard to the role of the state. They think that the government lacks a clear vision of the role of the state — either to be supportive or restrictive or to create a favourable environment for business operations. The enterprises feel that their suggestions could be an important guide to the actions of the government with regard to IT and e-commerce development in the country. They believe that the government should help create favourable conditions in such areas as legal framework, taxation, infrastructure, standardization, and network security.

In relation to human resources development for enterprises, two observations were made. First, enterprises have weaknesses in their communication capabilities in English. They also lack the ability to link issues of a complex problem to potential solutions. In general, they do not have enough capacity to manage projects and to write adequate technical reports. Second, new university graduates do not have enough capacity and need to be retrained before they can work for businesses.

The Vietnamese social environment is still not conducive to the introduction of e-commerce in business. Customers prefer to pay by cash and to touch and see things before they pay.

**E-Commerce in Companies: Business-to-Business (B2B) or Business-to-Customers (B2C)?**

Currently, different stakeholders (e.g., government, enterprises, policy-making organizations, and policy-makers) understand e-commerce in different ways. Considering the difficulties with an electronic payment system in Vietnam (including electronic signature and security), some stakeholders believe that e-commerce is a distant concern and cannot be implemented in the immediate future.

Some enterprises are already carrying out e-commerce transactions directly with their customers (B2C). However, the implementation of e-commerce combines modern communication means with traditional payment systems. For example, in the cases of Fideco and Camon Tour Co., all communications, transactions, and advertisements are done over the Internet and by e-mail; whereas, all payments are received by the traditional system of a letter of credit from a bank. Although the system is slow, this is the first experimental step by the enterprises to endorse e-business.

There are also diverse views on the market for e-commerce. Some see a market for export-oriented activities; whereas, others advocate developing e-commerce activities for the domestic market. Although there is consensus on the need and benefits of e-commerce, opinions vary in terms of capabilities, degree, and direction.

A case study of nine traditional villages with small enterprises was conducted to understand how e-commerce could be used for business development in such a setting. Among these villages, there was one from Hanoi province specializing in ceramics;
three from Ha Tay province specializing in ceramics, fabrics, and casting; three from
Nam Dinh province
working with casting, fabrics, and construction materials; one from Ninh Binh
province specializing in peanut processing; and one from Binh Duong province
specializing in ceramics and porcelain. The case study suggested that it would be
rather difficult to successfully implement e-commerce practices in these villages and
enterprises. In addition, the study also proposed measures to overcome such
difficulties. One of the most interesting test cases was ceramic production case in the
village of Bat Trang (see below).

A comparative analysis of selected villages is presented in Table 4.5. Only a few of
the villages are prepared to take on ICTs and e-commerce even on a limited scale. The
majority of the villages (other than Bat Trang) do not have enough infrastructure (e.g.,
access to PCs, Internet access, or training), human resources, or purchasing power to
adopt e-commerce.

Project Impact

The project has had the most noticeable impact on the e-commerce policy-making
process. The findings of the project (although preliminary and tentative in some cases)
have helped clarify issues, reinforce messages to policy-makers, and prepare the legal
framework for e-commerce development in Vietnam.

The immediate impact of the project was that it led to the creation of a new
department in the MOT, which changed the direction of policy-making and
institutional arrangements. With the appointment of a new Minister in the MOT, the
project could generate significant impacts — although this study is only one of the
many factors affecting change.

After release of the survey findings, more impacts have been achieved. The
responses and the tendencies reflected in the survey of enterprises gave impetus to the
development of policies to address the issues that were raised. This information about
the status of Vietnamese enterprises also provided challenges that could be addressed
by future actions.

Project Recommendations

General

• To make best use of ICTs in society, it is necessary to consider information
  as a source of knowledge for development rather than as

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Bat Trang Village: Using the Internet for Traditional Ceramic
Production and Export
One of the most interesting examples of the first steps towards e-commerce in rural areas was in a ceramic project in Bat Trang village. Here, family traders and artisans use the Internet to market their products. The village is about 10 km north of Hanoi, has 6,692 inhabitants, and 1,600 households. There are about 1,000 kilns (still using coal fuel) and nearly 100 gas kilns.

The use of ICTs has developed since the beginning of 2000. Initially, e-mail and the Internet were used because they provided a cheaper and faster method of connecting to buyers in non-Asian markets, particularly in Europe and North America. Traditional buyers from Japan, South Korea, and Taiwan seemed to be slower with payment. The villagers’ attempts to search for new customers and markets attracted them to Internet-based marketing.

At present, about twenty enterprises have websites to showcase their products. This number is not large, and the enterprises use the websites only as points of contact and to advertise their products to foreign markets. However, this has been a catalyst for the entire community. Now, 15 per cent of households in Bat Trang have computers, and 100 per cent of residents have access to a telephone. Other enterprises have also recognized the advantages and have started to use ICTs. Most of the websites only have general information and images of products to prevent others from copying the product designs.

Bat Trang residents who have graduated from university design some of the websites. To facilitate the use of ICTs, the Commune Council has communicated with a computer company in Hanoi to organize a computer training course in Bat Trang. The training course started with four computers, had a fee of US$9 per programme and lasted about 1.5 months. They offered three lessons per week and allowed students to use the computers from 8.00 a.m. to 11.00 p.m. The training fee was deducted from the commune fund. About sixty residents have now finished their computer training course and many Bat Trang residents continue to create demand for further training courses. In addition, learning the English language has been given a special priority, and many individuals are hiring English teachers to teach in the village.
a threat. This would help minimize the attitude of suspicion and hesitancy to share information, reduce information monopolies, and increase the transparency and balance of information access within society.
• It is important to have an overall vision of the economy rather than a specific priority targeted only on a number of industries. In this context, the telecom industry may need to accept losses for the sake of the overall benefit to other sectors. E-commerce may also generate spillover effects by increasing the number of subscribers for the telecom industry itself. The uptake of e-commerce depends very much on widespread development.

• The introduction of e-commerce needs to be seen as a new paradigm of development in all socioeconomic activities. As a result, this development needs to be supported by a proper policy framework and institutional arrangements.

• The government should encourage dialogue between important stakeholders and create a forum for enterprises to discuss IT issues, software development in general (which is useful for e-commerce development), and e-commerce in particular.

Policies

In addition to the policies already adopted by the various ministries, here are some other specific policy recommendations.

• **Investment policy** — The government should devise a favourable investment policy in relation to e-commerce. The role of the government should be clear and distinct and be supported by actions, not by restrictions. The government can stimulate demand in the sector by using purchase and procurement policies of public enterprises and by building infrastructure. The government could also consider setting up a special fund to support e-commerce development. The fund could be managed by the state agency for e-commerce management and be used to support enterprises that want to initiate e-commerce activities. SMEs should be provided with more support on issues of IPR, standardization, infrastructure, and human resource development.

• **Taxation policy** — This is part of financial policy and should be targeted at supporting enterprises (e.g., ISPs and digital content providers) that deal with e-businesses. The government could consider providing incentives for better and cheaper access to telecom infrastructure. Reducing the prices of e-services to an affordable rate for the majority of end users is an important step in this direction.

• **Pricing policy** — There is a need to stimulate subscribers to e-commerce. Increasing the number and use of credit cards and developing an inter-enterprise payment system could facilitate e-payment, which is an essential ingredient for e-commerce success.

• **Other policies** — A range of other policies should deal with diversified issues such as developing the technological infrastructure, setting up the legal framework for e-commerce, and training people in new way of production and trading. The government should consider formulating specific need-based policies to help remote, rural, and poor areas and specific target groups, such as women, youth, and the disadvantaged, to take up e-commerce. These
actions could help promote e-commerce among these groups and help them to cross the digital divide.

Institutional Arrangements

• It is important to set up a multisectoral, inter-ministerial agency (with participation from ministries such as finance, banking, trade, justice, post and telecom, and science and technology) to work on a legal framework for e-commerce.
• A national focal point on e-commerce should be created. This could be a National Council for E-Commerce Development that would include representatives from concerned ministries, agencies, and the private sector and would act as an advisory body. There could also be another body, the National Committee for E-Commerce that would formulate and implement policies to help develop e-commerce.
• To overcome the current fragmented policy structure, the government should promote transparency and openness in activities related to e-commerce policy-making. It is also important to set up a network of organizations and experts working on e-commerce development and promotion.

Notes

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2. The project provided recommendation for the policy-making process, both in terms of policy measures and changes to institutions dealing with policy-making. The project engaged policy-makers at different levels at the outset of the research. As such, the project was not a typical academic project because it had an explicit policy orientation.
3. These studies are continued from previous surveys for another project on using ICTs for business (Tran Ngoc Ca et al., “ICT in Business and for Business”, Report of the VCIT Project, 2000). Data have been updated and complimented by another round of in-depth interviews with new companies in 2003.

4. Figure for 2002.

5. Figure for 2000.

Source: http://www.idrc.ca/ Accessed on 01/01/2006