December 1998

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Use of Electronic Commerce on the Internet: The Case of Thailand

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Abstract

For many businesses, electronic commerce is used as a new competitive strategy. Although the Internet is an ideal environment for E-commerce, many companies are still reluctant to go on-line with E-commerce on the Internet. In this study, a survey of twenty companies in Thailand was conducted to identify major factors and issues for the development of E-commerce on the Internet from business viewpoints.

Introduction

To increase business competitiveness, electronic commerce, or E-commerce, is used as a new strategy within many business sectors. Many companies believe that E-commerce can improve efficiency in finding and interacting with customers, in communicating with trading partners, and in developing new products and markets.

The Internet, as the prototype of the global information infrastructure today, is an ideal environment for E-commerce. It can be primarily used to reduce communication and publishing costs, as well as offering an inexpensive, flexible, and efficient way for businesses to trade and communicate with each other. E-commerce on the Internet can also improve companies’ innovation, production, sales, and service.

Although E-commerce has already been implemented in many countries and the Internet has been used to improve efficiency and effectiveness in today’s business environment, many businesses in Thailand are still reluctant to go on-line with E-commerce on the Internet. The purposes of this study are to determine the significant roles and current status of E-commerce on the Internet in Thailand and to identify the important factors and existing problems for developing E-commerce over the Internet.

Data Collection

In this study, an interview survey was conducted for data collection. The questionnaire was developed as a basis for company interviews. Companies that have already established or planned to implement a company web site were the main target users to provide the effective information sources for the study. There were two groups of target companies identified. The first group comprised Internet service providers (ISPs) that provide access to the Internet. The second group included corporate companies that are commercial companies developing E-commerce on the Internet. In order to achieve an effective survey, twenty target companies in Thailand were selected to be interviewed. The number of target companies in each category is shown in Table 1.

Survey Results

Roles and Current Status

There are three significant roles of companies for developing E-commerce on the Internet including Internet service providers (ISP), E-commerce developers, and corporate users. The relationship among these companies has been established in order to do their business electronically via the Internet community. The current status of Internet E-commerce is also described according to the different roles in each business perspective.

Internet Service Providers (ISP)

According to Thai regulations, in order to establish a company as an ISP in Thailand, a company has to get a permission from the Communication Authority of Thailand (CAT) to provide a communication network via the Internet. Therefore, all ISPs in Thailand are joint venture companies between their parent company in computer and communication business and CAT.

The important role of companies in ISP business is to provide information access via the Internet. They aim to encourage and expand the use of Internet into business sectors. ISP business is rapidly increasing in Thailand - there are more than sixteen companies in a very competitive ISP business environment. Now all types of E-commerce for electronic market purposes have been implemented via the Internet. In the case of business-to-business transactions, the only electronic forms that are being used are of on-line application forms. Because of Internet security problems, an on-line payment system has not been set up via any companies’ web sites in Thailand.
### Table 1. Number of Target Companies

<table>
<thead>
<tr>
<th>Business Category</th>
<th>Number of Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Internet Service Providers (ISPs)</td>
<td>4</td>
</tr>
<tr>
<td>2. Corporate Companies</td>
<td></td>
</tr>
<tr>
<td>Computer Consulting</td>
<td>4</td>
</tr>
<tr>
<td>Bookstore</td>
<td>2</td>
</tr>
<tr>
<td>Food and Restaurant</td>
<td>2</td>
</tr>
<tr>
<td>Retailing</td>
<td>4</td>
</tr>
<tr>
<td>Construction and Engineering</td>
<td>2</td>
</tr>
<tr>
<td>Telecommunication</td>
<td>1</td>
</tr>
<tr>
<td>Housing</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

**E-commerce Developers**

There are two distinct business categories that take a vital role as E-commerce developers on the Internet: ISPs and corporate companies in the computer consulting business. Some ISPs not only provide Internet access but also develop E-commerce on the Internet for their customers. Companies in the computer consulting business play a role in both developers and users of Internet E-commerce. They aim to provide the most suitable E-commerce solutions using advanced technical tools via the Internet, and they use the Internet to do business electronically for increasing customers’ service quality and satisfaction. Most of them are high-tech firms that have capabilities in transferring new technologies to Thailand.

**Corporate Users**

Commercial companies in other business categories are corporate users for E-commerce on the Internet. There are two methods that companies have used to do their business via the Internet. First, the companies that have appropriate Internet technology skills and knowledge will develop an Internet-based system for E-commerce solutions by themselves. Otherwise they will collaborate with an E-commerce developer to establish company web sites. Now the main use for their web sites is mostly to provide company information and advertise their products and services. On-line electronic trading and payment systems will be implemented in the near future.

**Important Factors**

Suitable indicators for developing E-commerce on the Internet that were found in the analysis include four factors:

**Organizational Factors**

The following organizational factors may be appropriate for companies to consider in order to succeed by using E-commerce on the Internet:

1. *Company policy* that is related with information technology development must be well established inside an organization. The executive leadership styles take an important role in encouraging E-commerce implementation on the Internet.
2. Innovation should be used as a vital part of *company strategies*. Companies that compete mainly with innovative strategies can acquire more advantages to involve E-commerce strategy for doing their business via the Internet than other competitors can.
3. The most effective *company structure* would be to set up their own information center to get ready for advanced computer technology, such as Internet technology. E-commerce personnel knowledge and skills can be produced through in-house employee training.
4. Companies have to set up *technology policy and planning* for developing new Internet-based system. E-commerce on the Internet should be also included in their strategic plan.

**Cultural Factors**

In order to develop E-commerce on the Internet, cultural factors are considered in two major business perspectives:

1. *Business culture*: The most important aspect of business culture that affects the success of E-commerce development on the Internet is the changing of the company’s information culture. A strong information culture should be open, flexible, and expansive.
2. *Human resource management*
   - *Qualified E-commerce personnel*, who have strong computer knowledge and skills in combination of both business and technical expertise, are required for companies in order to develop an effective Internet-based system.
   - *English language skills* are also necessary for doing worldwide business via the Internet.

**Technology Factors**

Technology factors are very important for developing new Internet-based systems for E-commerce. Companies have to consider the following criteria:
1. **Technology capabilities:** Companies should have core competence to receive advanced information technologies in order to offer an effective Internet-based system for E-commerce. They must have IT specialists to take responsibility for system development. E-commerce strategy and Internet technology must be transparent to their developers. If companies do not have enough technology capabilities, they have to cooperate with E-commerce developers in order to do their business electronically.

2. **Technology skills and supporting tools:** They are very necessary for companies to succeed in developing E-commerce on the Internet.

3. **Internet Technology for Security Policy:** To avoid security problems, the security policy of an Internet-based system must be set up together with E-commerce on the Internet.

### Environmental Factors

Companies have to pay much attention to the following environmental factors:

1. **Marketing environment:** The relationship between companies and their business partners, such as customers and suppliers, should be set up via the Internet. Trade-off between costs and benefits for developing the new system must be examined to support the companies’ objective. If E-commerce on the Internet is not suitable for their market and cannot increase business opportunities, it may not be necessary for companies to create their own web sites.

2. **ISP selection:** The selection of Internet E-commerce developer can affect the success of a company’s web site development because some ISPs do not have the capability to provide full-scale E-commerce. In order to go on-line with Internet effectively, companies have to select an appropriate ISP and compare the Internet service quality of each ISP in Thailand.

3. **Law regulation for electronic trading:** Commercial and contract laws, such as digital signatures, are unclear and too complex for Thai business to do electronic trading via the Internet. Companies that already plan to do their business with E-commerce have to clearly understand the business laws for implementing on-line electronic trading; otherwise it might be difficult to succeed with the new Internet-based system.

4. **CAT Policy:** For the role of ISP business, CAT’s Internet policy is one of the important environmental factors that will influence the growth of Internet use. All ISPs in Thailand have to invest in the Internet community, join CAT, and pay communications service charges, so ISPs must understand CAT’s policy.

### Existing Problems

There are some existing problems for developing E-commerce on the Internet that cannot be completely solved. The following three major problems particularly are related to business issues rather than technology issues:

1. **Language problem and business adaptation:** Some customers and businesses do not have enough employees with good English language skills to communicate with their business partners via the Internet. The use of Internet is spread only among a small group of Thai people, such as highly educated people who have both English language skills and Internet knowledge.

2. **No legal acceptance for electronic trading via the Internet:** There is no legal acceptance for trading via the Internet in Thailand. Right now the business laws in Thailand do not support electronic trading via the Internet.

3. **Conflict in roles of ISP and CAT:** CAT is a non-profit organization that takes responsibility for all public communication networks in Thailand, including the Internet link line. But now the CAT policy about the Internet community is not clear for E-commerce developers, both ISPs and computer consulting companies.

### Conclusion

E-commerce on the Internet offers tremendous market potential for today’s businesses in customer-to-business transactions. It is mostly customer-oriented because companies want to satisfy customer needs. Although most of the attention and activity in E-commerce on the Internet has been in customer-to-business transactions, an increasingly large part of the market will involve business-to-business transactions through EDI, E-mail, and proprietary order entry. In this study, a survey of twenty companies in Thailand was conducted to determine the relevant information for fulfilling E-commerce implementation on the Internet. The results of this study will help give the useful direction for the future development of E-commerce on the Internet in the business environment.

### References


