



www.tourizen.com - The Market Place of Tourism Industry

by

Ms. Ananya Inphum

A Final Report of the Six-Credit Course
IC 6998 E-Commerce Practicum

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
in Internet and E-Commerce Technology
Assumption University

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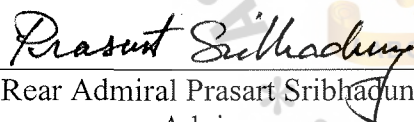
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Academic Year July 2002

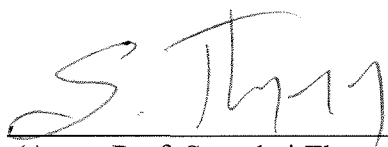
The Graduate School of Assumption University has approved this final report of the six-credit course, IC 6998 E-Commerce Practicum, submitted in partial fulfillment of the requirements for the degree of Master of Science in Internet and E-Commerce Technology.

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July 2002

ABSTRACT

Tourizen.com – the first electronic tourism market place in Thailand - will provide tourism information and pricing that Internet users can search package tour and comparing price from many travel agencies. Travel agencies and Internet user can negotiated, submit bids, and agree on an order and finishing the execution on line or off line in Tourizen.com. At the same time, Tourizen.com will support travel agencies with our consulting service in e-travel solutions.

In addition, Travel agencies will update package tour and information by themselves. Internet users can booking and use electronic payment channel in Tourizen.com as one stop service. Moreover, Tourizen.com will be tourism web complex – which contain many services about travel and tourism such as Travel Insurance, Climbing Mountain Accessories etc.

Purpose system of Tourizen.com are revolutionized the entire tourism industry, generating new business models, changing the structure of tourism distribution channels and re-engineering all processes.

Finally, Tourizen.com is bringing together some of the most rapidly developing tourism industry including information communication technology, e-commerce, tourism/travel/hospitality and strategic management/marketing/planning.

ACKNOWLEDGEMENTS

The author would like to take this opportunity to express her gratitude to Rear Admiral Prasart Sribhadung and Dr. Wuttipong Pongsuwan, her advisors, for his valuable assistance and support during the course of the practicum project. The author would like to express her gratitude to Dr. Saranyapong Pramsane, Dr. Chawaphol Jariyawiroj and Dr. Pornpong Vatanaromya for suggestion and information. The author would also like to thank her friends and staffs in Internet and e-commerce, Assumption University, for their helpful information. In addition, special appreciation is due to all the Tourism Authority of Thailand.

Finally, the author would like to express her deepest gratitude and appreciation for her beloved family who have continually given the encouragement and support throughout her Master Degree course at the Assumption University.

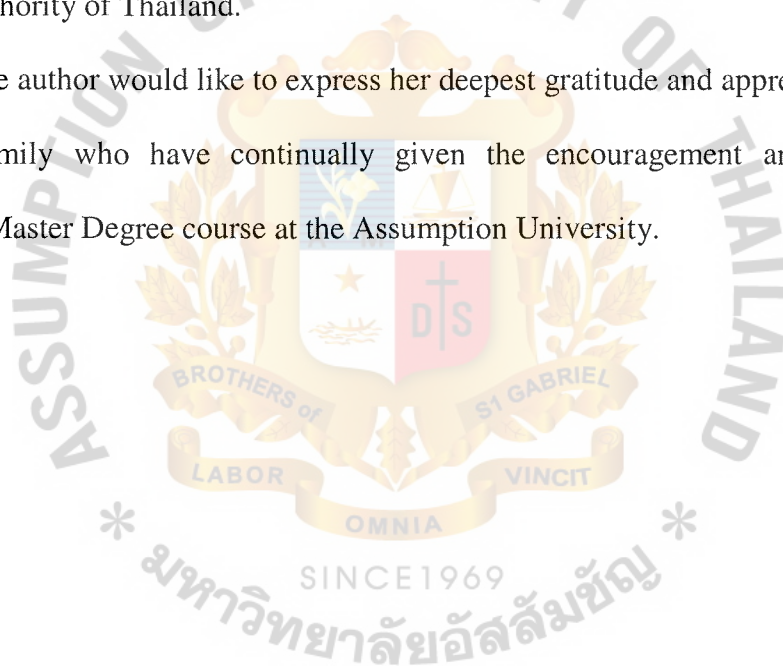


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I. INTRODUCTION

1.1 Background of the Project .

During the past few decades, tourism has emerged as one of the world's major industries, exceeding the importance of many manufacturing industries and other service in term of sale, employment and foreign currency earnings. The growth of the tourism industry has occurred in both industrialized and developing countries. Moreover, tourism industry will become the major source of income of Thailand.

Nowadays, Internet has become more appealing to consumers. The World Wide Web has allowed more consumers to confidently use the Internet and it has offered individuals and business new ways to present and find information. The Internet is rapidly becoming the technology of choice for electronic commerce because it offers businesses an ever easier way at a very low cost. Electronic commerce is becoming as part of day-to-day life and businesses are refusing to deal with any paper in the near future.

Thus, the author is pleased to present an opportunity for www.tourizen.com - a market place of tourism industry - to create value for travel agency and tourists with the advantage of Internet and e-commerce technology.

1.2 Objectives of the Project.

The purposes of the study are:

- (1) To create an application of tourism market place.
- (2) To develop tourism distribution channel for supporting customer behavior
- (3) To enable consumers to visit the site 24 hours a day, 7 days a week.
- (4) To reduce supplier costs i.e. lower costs in printing, postage and order taking.
- (5) To reduce buyer costs i.e. time cost for searching information.
- (6) To apply the advantage of Internet and e-commerce to tourism industry.
- (7) To develop a prototype of a cyber shop by applying the concepts studied in the

Internet and e-commerce program.

1.3 Scope of the Project.

- (1) To apply the knowledge learnt in the Master of Science in Internet and e-commerce technology into this project.
- (2) To conduct a complete advantage, and SWOT analysis. Then design business strategies and show how implementation will be done.
- (3) To provide a marketing plan by setting target market, market positioning and promotional mix.
- (4) To use off line payment since Thai e-commerce laws have not been declared to use and plan to use the online payment later.
- (5) To manage the web site effectively allowing users to find information easily.
- (6) To develop the web site as a tourism market place on net.

1.4 Deliverables.

- (1) The final report covers the scope as mentioned above.
- (2) The proposed e-commerce web site consists of the tourism market place.

1.5 Project Plan .

Table 1.1. Project Plan of Tourizen.com.

Year 2002

No.	Project Description	Jan	Feb	Mar	Apr	May	Jun	Jul
1	Proposal Submission					*		
2	Research	*	*					
3	Web enhancement	*	*					
	Concept / features		*	*				
	Design			*	*			
4	Web complete					*		
5	Report submission						*	
6	Defense							*

II. LITERATURE REVIEW

2.1 What Is Internet?

It seems like everyone is talking about Internet these days. But what is it, how does it work and how to access it? Most importantly, what can it do for us at work or at home?

Fortunately, accessing and using the Internet is fairly simple. Internet marketing is a system for selling products and services to target audiences who use the Internet and commercial online services by utilizing online tools and services in a strategic manner consistent with the company's overall marketing program.

World Wide Web is fast becoming one of the best ways for individuals and organizations to effectively, efficiently and economically communicate with an influential consumer. So any web company which requires to promote their business in cyberspace should implement Internet marketing in order to increase visitors and traffic in their web.

Internet is a worldwide collection of computer networks, cooperating with each other to exchange data, using a common software standard. Through telephone wires and satellite links, Internet users can share information in a variety of forms. The size, scope and design of the Internet allow users to:

- (a) Connect easily through ordinary personal computers and local phone numbers.
- (b) Exchange electronic mail (E-mail) with friends and colleagues with accounts on the Internet.
- (c) Post information for others to access, and update it frequently.
- (d) Access multimedia information that includes sound, photographic images and even video.
- (e) Access diverse perspective from around the world.

During the last two decades, primarily academic institutions, scientists and government used the network for research and communications. The appeal of the Internet

to these bodies was obvious as it allowed disparate institutions to connect to each other's computing systems and databases, as well as sharing data via E-mail.

In today's economy, E-commerce plays a very significant role in a rapidly increasing number of cooperation across a wide spectrum of industries. The ability to conduct secure business transactions across the Internet can give instant access to a new way to reach existing and new customers. There are numerous advantages to selling online or electronic commerce, but most of them come back to a single reality; it saves your company hard cash. From reducing reliance on call centers to eliminating printing and postage costs for catalogs, e-commerce enables business to address their customers directly and complete real-money transactions in highly efficient ways.

There are two main approaches to do business on the Internet

- (a) Directly offering a product/service for sales at web site.

The company can offer a product or service on web pages or offer free information to lure people to another web where the products or services are available. This is the most popular way of making money on the cyberspace because it is easy to set up and get the initial profits overnight.

- (b) Aim at sponsor or banner advertising.

The company tries to persuade as many visitors as possible to the web by enticing them to come with something special available on the site, such as valuable information, help, files stuff, etc. Then, once the visitor count is high enough, the company can sell advertising space on the site or sponsorships of banner advertising.

In addition to text documents, the Internet makes available graphic files (digitized photographs and artwork), and even files that contain digitized sound video. Through the internet, users can download software, participate in

interactive forums where users post and respond to public messages, and even join “chats” in which users and other users type (and, in some cases, speak) messages that are received by the chat participant instantly.

2.2 Benefits of the Internet.

Organizations are already benefiting from the use of internet in many ways, reducing communication costs, enhancing communication and coordination, accelerating the distribution of knowledge, improving customer service and satisfaction, and facilitating marketing and sales. The Internet has enormous potential for helping organizations participate in electronic commerce and for reducing their transaction costs.

(a) Reducing Communication Costs.

Prior to the net, to realize the communication benefit, organizations had to build their own wide-area networks or subscribe to a value added network service. Employing the Internet, benefit from being cost free, is certainly more cost effective for many organizations than building one's own network. And small businesses find reduced communication cost particularly beneficial because it sometimes enables them to compete with larger companies in markets that would otherwise be closed to them.

(b) Enhancing Communication and Coordination.

The Internet has made easier and less expensive for companies to coordinate small staff when opening new markets or working in isolated places because they do not have to build their networks.

(c) Accelerate the Distribution of Knowledge.

Because modern economies have become information economies, access to knowledge is critical to success of many companies. Organizations are using E-mail and the availability of databases all over the world to gain easy access to

information resources in such key areas as business, science, law, and government.

(d) Improving Customer Service and Satisfaction.

Companies large and small are using the Internet to communicate efficiently to make product information, ordering, and technical support easier and immediately available.

(e) Facilitating Marketing and Sales.

Marketing and sales via the Internet are new and only beginning to be viable. The advent of the web has made marketing and sale possible because the web is a passive instrument, it requires potential customers to seek out offering by companies rather than having those companies actively reach out to potential customers, as is traditional in most marketing and advertising. Retailers update their web pages offering virtually as often as needed. Suppliers can also update technical used by consumers just as easily. Even with limitations, the Net helps buyers and sellers make contact.

As for the benefits of the Internet to organization, the best aspects of marketing and sales product or service online are that start up and operational costs are minimal and it is possible to access potential buyers at an unprecedented speed. The reason is that earnings can come only after 24 hours of online business launch. The advertising can be tested in a matter of days, whereas conventional media advertising takes months to conduct a single test.

Among the ways that users are taking advantage of the Internet are:

- (a) Sharing research and business data among colleagues and like-minded individuals.
- (b) Communicating with other and transmitting files via E-mail.

- (c) Requesting and providing assistance with problem and question.
- (d) Marketing and publicizing products and services.
- (e) Gathering valuable feedback and suggestion from customers and business partners.

Only users' vision and creativity limit the Internet's potential. And as the Internet grows, new and innovative uses will surely follow.

Internet marketing and running an Internet business is a fantastic way of business if it is done right. The Net simply works better than traditional media, but it is new, so it requires some imagination to envision role and character to be online. There are two basic attitudes towards online marketing:

(1) The Silent Marketer.

It gets direct from web sites, newsgroups, BBC, and e-mail without any direct interaction with the customer. The company gets the customers coming to it.

(2) The Mouth Piece.

It gets sales from active participation in newsgroup, mailing lists, etc. (i.e. starting advice in forums, thereby building a relationship with each potential customer individually).

2.3 What Is Electronic Commerce?

In its broadest sense, electronic commerce refers to the use of electronic means and technologies to conduct commerce, including within-business, business-to-business, and business-to-consumer interactions. The enabling technologies, of course, are also used for noncommercial activities such as entertainment, communication, filing and paying taxes, managing personal finance, research, and education, which may still include the services of online companies. As a result, it is somewhat difficult—and sometimes arbitrary—to

separate electronic commerce areas from noncommercial applications of the same technologies and infrastructure.

Although these may be cutting-edge applications, conventional electronic commerce areas include:

- (1) Searching for product information.
- (2) Ordering products.
- (3) Paying for goods and services.
- (4) Customer service.

All are conducted online. The use of Internet to support marketing and customer-interface is only part of electronic innovations that are changing the way firms do business. Through intranets, corporations distribute internal memos and announcements to their employees, and exchange knowledge and schedule communication flows worldwide in a timely fashion. With direct connection to suppliers (for instance, an extended intranet), the same technology is used for manufacturing and supply-chain management. 3M (<http://www.mmm.com>), for example, expanded its EDI service to the Internet, allowing its over 2,000 suppliers and customers to have access to its EDI transactions via any way they choose—private VANs, phones, and faxes, as well as the Internet. For within business, business-to-consumer, and business-to-business applications, electronic commerce includes the following:

- (1) Internal electronic mail and messaging.
- (2) Online publishing of corporate documents.
- (3) Online searches for documents, projects, and peer knowledge.
- (4) Distributing critical and timely information to employees.
- (5) Managing corporate finance and personnel systems.
- (6) Manufacturing logistics management.

- (7) Supply chain management for inventory, distribution, and warehousing.
- (8) Sending order processing information and reports to suppliers and customers.
- (9) Tracking orders and shipments.

And countless other business activities. More important than the mere number of areas being affected by electronic commerce is the fact that these activities can be integrated into a holistic business process. Thus, all the areas mentioned above are not really a separate application, but rather, one aspect of the whole electronic commerce process. For example, inventory and supply management is tied to production as well as to the demand data collected from consumers ordering via web stores. In short, the business potential of electronic commerce is the capability to innovate and integrate business and market processes. The most obvious and immediate benefit is achieving transactional efficiency.

2.3.1 Electronic Commerce as a Communication Network.

At the core of traditional electronic commerce is the use of electronic means to expedite commercial transactions and improve efficiencies in business processes and organizations. In this vein, electronic commerce on the Internet means online ordering and payments. The narrowest definition of what electronic commerce holds is a networked electronic data interchange (EDI) with a more flexible messaging system. Traditional EDIs are limited to signals that only computers can read and that correspond to information on electronic forms used in standard business transactions, such as ordering, invoicing, and shipping. An open EDI using the Internet means that EDI messages may be sent and received via email. On the next level of sophistication, EDI can use electronic forms made available on web pages for customers to order. This view considers electronic commerce and the use of the Internet as merely improving business and communication, especially in business-to-business transactions. Accordingly, issues in doing business on the Internet are

mainly organizational and operational, ranging from security, competitive advantages in product development, and R&D (research and development), to efficiencies from automating purchasing functions, EDIs, point of sale information, and other inter organizational transactions.

To many, familiar with EDIs, doing commerce on the Internet is not entirely advantageous compared to traditional EDIs. A clear tradeoff is made between secure, but limited VANs using traditional EDIs and an insecure, but far more flexible network with messaging and remote login possibilities over the Internet. For example, Chevron Corp. of San Francisco pays over \$1,200 each time it sends an EDI report to the U.S. government via a private VAN. In comparison, it pays about \$2,000 per month for unlimited access to the Internet (Radosevich 1996). However, many consider the Internet to be inferior to EDIs because of the perceived lack of security and reliability, even though they are adjusting their EDI strategies to include the Internet.

However, many interactions between sellers and buyers happen before they are ready to exchange orders and bills. A somewhat broader view of electronic commerce includes these interactions between businesses and consumers. Consumer services and product announcements have been routinely released to the Internet by computer companies for many years. And increasingly, firms are gearing up for Internet advertising and marketing. Going even further down the digital road, electronic shops and malls are springing up that offer electronic versions of catalog shopping in which consumers can search and order products using web browsers, bypassing traditional paper and phone-based merchandising. Organizations devoted to commercial uses of the Internet such as Commerce Net (<http://www.commerce.net>) and government agencies such as the National Telecommunications and Information Administration (NTIA) (<http://www.ntia.doc.gov>) have encouraged doing business electronically by virtue of their presence on the Internet.

As recently as September, 1996, Yahoo!'s list of online malls contained over 700 shops (http://www.yahoo.com/text/Business_and_Economy/Companies/Shopping_Centers/Online_Malls) and Open Market's Commercial Sites Index contained 41,731 listings of commercial web sites in October, 1996 (<http://www.directory.net/dir/statistics.html>).

2.3.2 Commercial Potential of the Internet.

Businesses need to place electronic commerce within the context of broader uses of the Internet than the traditional commercial framework. As a market, electronic commerce impacts not only marketing but also production and consumption. Information collected through web stores is used to customize products, to forecast future demand, and to formulate business strategies. Consumers not only order and pay for products online, but also search for product information, reveal their preferences, negotiate with sellers, exchange information about products and firms, and use products online by filtering, processing, and linking them with other computer programs. Likewise, supply chain relationships among businesses and competitive strategies need to aim at increasing the overall market efficiency, not just transactional efficiency.

The Internet can certainly be used as an alternative marketing channel, selling existing products online, but the future of electronic commerce will be guided by innovative digital products and services that will emerge in the electronic marketplace. But from where are these products and processes coming? The explosive growth of the Internet gives a partial answer. The core of digital commerce comes from selling digital products, but no one is certain how big the digital product market will become. To get an idea, one only needs to list products that can be digitized: all paper-based information products such as newspapers, magazines, books, journals, and databases; computer software, and games; audio products, including music, and speeches; video and multimedia products, such as

movies and television programs; other information products, such as weather reports, stock quotes, government information, consumer information, and even personal information; and digital counterparts for existing products, such as room keys, digital currency, digital checks and other financial instruments, airline and concert tickets, and so on.

Many business professionals dismiss the commercial potential of the Internet, pointing out that the most common uses of the Internet and the web are for browsing and entertainment. In turn, the most promising use of the Internet technology is found in Intranets and other within-business and business-to-business applications, in which EDIs and corporate networking are already familiar. A survey found that only about one in ten uses the Internet for shopping. However, shopping here is very narrowly defined. Internet users seeking information are, in fact, in search of products, and thus, network uses commonly categorized as informational and entertainment activities need not be viewed separately from commercial activities. Unlike television entertainment in which commercial advertising and noncommercial entertainment are alternatively presented, commercial uses of the Internet encompass all aspects of user activities. Even e-mail messages can be thought of as digital products, for instance digitized information, which can be sold directly as a product or used as a component of business transactions. All so-called non-commercial activities on the Internet are indeed commercial, an important realization for digital product sellers. In a truly informational age, the immense amount of human knowledge already accumulated and linked via the Internet will be the product being exchanged. As Christopher Anderson of *The Economist* argued, "In the audacious uselessness of millions of personal fish tanks (web pages) lie the seeds of the Internet revolution" (1995). These fish tanks are displayed side by side with products marketed by America's corporate giants.

2.3.3 Current Commercial Uses of the Internet.

The subject of e-commerce, Internet activity and the viability of growing online business have been under scrutiny by the media and companies alike for a few years now. The recent 're-alignment' of the value of dot.com shares has created much skepticism as to the future of doing business online. However this should be seen as the end of the beginning and not the beginning of the end. What is clear is that both business and the general public are keen on sourcing and purchasing products and services online. The statistics below give an indication of current trends.

The Internet is the largest computer network in the world, and it is used to make information available on request to anyone on the network with a browser. According to Global Research (2000), as of February 2000, there are a total of 176.5 million Internet users worldwide, and the Internet is adding about 1.5 million new subscribers every month (De Ville 1995). By the year 2001, it is expected that there will be 112 million host computers connected to the Internet, implying a user base of more than 300 million (McClelland 1997). Such a large and fast growing marketplace is too significant for any business to ignore. A study conducted in 1996 showed that 68% of Web users were male, with an average age of 33, whose median household income was US\$ 59,000 (Pitkow and Kehoe 1996). This indicated a dramatic growth of the female population in Web users compared with the previous year. As previous studies found, the ratio of the number of female shoppers to the number of male shoppers in shopping centers is 2:1 (Dholakia et al. 1995), the growth of the number of female Web users makes the Internet an even more ideal medium to reach consumers.

2.3.4 Competition and Market Organization.

Today's Internet users may be different from the general population in many ways, until the majority of the populations participate in the market. However, electronic

commerce as a marketplace differs fundamentally from other physical markets in many respects. For example, the size of a firm is not a significant factor in establishing one's presence in the virtual marketplace. Big and small companies can be located side by side with no difference in shop floors or interior decorations. Consumers can search for product information and compare prices over the whole Internet where geographical distance plays no role. From an economics perspective, electronic commerce has many characteristics of a perfectly competitive market. Although perfect competition has been the basis of most economic studies by which we evaluate economic efficiency, it is far more an exception in real life than the norm. Electronic commerce presents an experimental stage to further realize the economic efficiency of a competitive market.

Both economists and government regulators use perfect competition as a benchmark against which market efficiency is judged. In a perfectly competitive market, a commodity is produced for which the consumer's willingness to pay equals the marginal cost of producing the commodity, and neither sellers nor buyers can influence supply or demand conditions individually or collectively. A society cannot improve its economic welfare by deviating from competitive markets. However, perfect competition is seldom evident in real markets because it requires that several assumptions be met. Among the assumptions are:

- (1) Many potential buyers and sellers must be able to enter and exit the market at no cost (no barriers to entry)
- (2) There are many sellers and buyers who cannot individually influence the market (price takers)
- (3) Products are homogeneous (no product differentiation)
- (4) Buyers and sellers both know the price and quality of the product (perfect information)

Although wholesale agricultural markets are often cited as one example of a perfectly competitive market, in most other markets, one of the above assumptions, and often all four, will not be met. Heavy investment requirements in manufacturing facilities and R&D often limit free entry by competitors. Advertising also influences consumer behavior by changing demand preferences or establishing reputation, which gives sellers a degree of market power. To exploit taste differences among buyers, firms sell differentiated products by brands or by quality, which as a result limits the competitive effects on prices. Finally, both sellers and buyers have limited information about demand and product quality given that it is costly to learn about product quality, prices, and even the location of shops. Indeed, if sellers and buyers were perfectly informed, there would be no need for advertising, marketing, or sales efforts.

Even at a quick glance, the electronic marketplace better resembles the abstract market of many sellers and buyers in which prices are determined efficiently by supply and demand. The most important differences are lowered barriers to entry (low overhead costs) and the opportunity to search and obtain perfect information about products and demand.

The Internet is supposed to be the great equalizer, where big corporations will have no inherent advantage over small vendors. In physical markets, bigness has certain advantages, helping firms to command a larger presence in physical form, market share, and reputation. The importance of this 'big' presence to consumers is that it presents a signal of the quality of a firm's products. We know that products sold by big firms are not necessarily of higher quality, but it is one viable signal available in the physical market. A similar correlation between bigness and assumed quality does not exist in electronic commerce, lowering the barriers to entry.

Another characteristic of the ephemeral perfectly competitive market, the availability of perfect information, is typically undermined in physical markets by the consumers'

inability to search completely or at a cost that reflects the value of searched information. In electronic markets, automated indexing and cataloging technologies that gather and present information at low cost aid a complete search. The search for information is then as efficient as is allowed by search services. Using conventional economic reasoning, however, a complete indexing of the entire digital universe may not be economical, although desirable. Nevertheless, indexing and cataloging have been the most important Internet-based activities. Along with search services, they provide means to advertise web pages and to direct browsers to specific sites. Because of their importance, search services may be the first to be commercialized with access fees, but it will be essential to maintain search fees as low as possible, perhaps through competition, in order to minimize transactions costs.

Contrary to intuition, not only buyers benefit from perfect information, but sellers as well. Electronic transmissions generally leave a trail of information about consumer demand and tastes, which has a high value in its own right. Refined demand information is useful in reducing wastes due to demand uncertainty. Also, it leads to greater product diversity, enabling consumers to obtain customized products that better match their preferences instead of products that represent the average tastes of consumers. The flip-side effect of this is the ability for sellers to charge the maximum price consumers are willing to pay.

Despite the benefits to both sides, informational efficiency in electronic commerce is not guaranteed. The consumers' need to know about products and the seller's desire to gain more knowledge about consumers' preferences has to be balanced to avoid one taking advantage of the other. Clearly, complete product information will be available only if sellers are willing to provide that information just as consumer information is limited by the willingness of consumers to reveal their preferences. Fully customized products may

increase the total social welfare but transfer benefits from consumers to firms. It remains important, however, to recognize the unique potential for perfectly informed sellers and buyers that electronic commerce presents.

2.3.5 Business Organization and Virtual Firms.

When the World Wide Web first gained its popularity, many firms created web pages and initiated direct contact with consumers. Increasingly, however, web page development is contracted out to professionals, and many Internet-based marketing activities are handled by intermediaries. Even sales in electronic malls may be delegated to intermediary merchants, with the firms having no direct contact with the buyers. Since physical distance is not a barrier to business transactions, the electronic marketplace may resemble the face-to-face business of the old tradition, making such intermediaries unnecessary. On the other hand, market intermediaries have traditionally played other functions designed to enhance efficiency. The new electronic marketplace will necessitate new innovative models of firm organization, production, delivery, and overall market institutions.

Other time-tested, basic business assumptions can no longer be presumed to hold true in this new world. In the electronic age, firms no longer are based in a single location because all functions need not be operated in one locale. Going beyond even decentralization, a firm on the Internet becomes a distributed company or a virtual firm where any operation can be done anywhere. Multi-office corporation is a virtual firm's day-to-day operation which is also conducted on a network. The mundane aspects of managing a company administrative tasks, scheduling meetings, supervision of remotely located employees, and etc appear to be the greatest challenge of a virtual company because coordinating such matters most often depends on traditional means of communication.

A promising application of electronic commerce for a virtual firm is to use the web technology for within-business and business-to-business interactions. Business logistics

including supplier management, inventory, warehousing, and invoicing can be integrated in a corporation-wide intranet, or intraweb, which is defined as "a secure corporate network with rich functional features of Local Area Networks interconnected by the Internet or its technologies and applications" (Chellappa et al. 1997). Suppliers and customers are given appropriate levels of access to intranets so that employees, suppliers, and customers can be integrated in the firm's production and sales functions in a network rather than a physical locale.

Another still unanswered question is whether inter firm relationships of virtual firms will be different in electronic commerce. Economists have argued that a firm is an organization by which producers can internalize transaction costs, which are costs incurred in transacting business such as writing, monitoring, and enforcing contracts. For example, if the cost of contracting bookkeeping and accounting with an outside CPA (Certified Public Accounting) firm is high, a firm may reduce it by establishing an accounting department of its own to handle the tasks. In an extreme case, a firm may find it efficient to handle all activities from production, marketing, and payment to delivery. When transaction costs are low, on the other hand, many functions done within a firm may be contracted out in a market. To the extent that electronic commerce reduces transaction costs, firms will contract out or delegate many of their functions to other agents in the market.

Increasing use of contracting implies a more fluid inter firm relationship and a more decentralized, nonhierarchical organization. However, Steinfeld et al. (1995) have examined the buyer-seller relationships between firms on a network, and concluded, based on case studies, that the use of an electronic network between firms tends to lock out other firms. They present this as evidence that networked businesses tend to promote hierarchical organizations (such as corporations) instead of markets. In other words, doing commerce on a network increases interdependence between existing partners, and has not encouraged

firms to seek new suppliers or buyers in an open trading market. Such a trend is clearly observed when new firms have to invest in hardware and software to participate in bidding and contracting. The open Internet, however, lowers such investment requirements, and will facilitate a more market-like organization among networked companies.

2.3.6 E-mail Communication.

The primary Internet communication tool is e-mail. While e-mail is the least expensive type of Internet communication tool to implement, it is also the most powerful tool because it is simple to operate, fast, and reliable. For these reasons it is the most widely installed and used Internet technology and therein the surest way to communicate with the broadest possible audience. It is estimated that there are 25 million e-mail users worldwide sending 15 billion messages per year, a growth from an estimated 4 billion messages in 1994. In 1995 the number of pieces of e-mail sent is thought to have exceeded the amount of ground mail.

E-mail combines the near immediacy of the telephone for reaching people with the word processing power of the computer. Although e-mail can include complex data types such as graphics, audio files and video, most often it is used to send plain ASCII text encoded messages. Using e-mail and plain text messages alone, businesses can send and receive product information, customer support, place orders, as well as subscribe to mailing lists that receive up to date information on a variety of topics such as industry news reports, product announcements, policy updates, etc.

E-mail is also an extremely low cost form of communication. Unlike telephone or standard postal mail, there are no volume or long distance surcharges for sending e-mail. This means there are no charges other than the basic subscription to an e-mail account to send one e-mail message across the city or 10,000 messages to the other side of the world.

2.4 E-Commerce Business Integration.

By virtue of its similarities, the scope of operations for E-Commerce is nearly as broad as traditional commerce. E-Commerce includes both traditional activities (e.g. providing product information) and new activities (e.g. conducting online retail in virtual malls, publishing digital information). Some of the common operations that define E-Commerce are specific business-to-business and business-to-customer interactions, such as:

Information Exchange

- (1) Goods or services trading.
- (2) Sales promotion and advertising.
- (3) Online digital content delivery.
- (4) Electronic funds transfers and transaction processing.
- (5) Electronic share trading.
- (6) Electronic bills of lading processing.
- (7) Collaborative work interaction.
- (8) Manufacturing management.
- (9) Accounts settlement.
- (10) Online sourcing.
- (11) Public procurement.
- (12) Direct consumer marketing.
- (13) Inventory management.
- (14) Post-sales service.
- (15) Commercial auctions.

Although every E-Commerce implementation will differ, most SMEs focus operations on:

- (1) Product promotion via online catalogues.

- (2) Transaction processing (exchanging digitized monetary information)
- (3) Customer Support.

E-Commerce conducted over the Internet differs from typical commercial activity in that it is influenced by the unique characteristics of the medium itself. In contrast to print media, E-Commerce is dynamic, allowing users to interact with the commercial site, send comments, and even define the scope of a document. Unlike person-to-person commerce, E-Commerce allows for a controlled interaction between vendor and potential purchaser, where the vendor may strategically direct the customer through a series of options and processes. E-Commerce also differs from traditional commerce by its boundless relation to time and space. Interaction is not restricted to normal working hours or geopolitical borders. There is potential to conduct business with other merchants and consumers around the world in different time zones, 7 days a week, 24 hours a day.

In the short-term, entry into E-Commerce may offer a competitive advantage over slower means to counteract competitors. The market for E-Commerce is growing, as more consumers and businesses gain Internet access and transaction processing technologies improve security. Companies that establish an operation today, still in the early stages of Internet based E-Commerce, will have a fuller understanding of the issues and be better prepared to capitalize on emerging technologies when E-Commerce markets open up in the next few years.

The benefits of E-Commerce to a small business may include capabilities to:

- (1) Extend the range of sales territory.
- (2) Streamline communication to suppliers and clients.
- (3) Expand the customer base.
- (4) Improve service to existing clients.
- (5) Reduce paperwork and time spent on correspondence.

- (6) Track customer satisfaction.
- (7) Expedite billing.
- (8) Improve collaboration on work projects.
- (9) Expand markets beyond geographical, national boundaries.
- (10) Leverage legacy data.
- (11) Improve inventory control, order processing.
- (12) Establish position in emerging E-Commerce marketplace.
- (13) Lower costs of overhead.
- (14) Realize economies of scale by increasing sales volume to new markets.
- (15) Monitor competition and industry trends.
- (16) Improve or expand product lines - locate new suppliers and products that could be included in catalogue.

2.4.1 How Does It Integrate with Traditional Services?

As E-Commerce matures and more traditional businesses enter the electronic marketplace, it will become difficult to distinguish the E-Commerce merchant from traditional merchant. Although some firms operate exclusively as E-Commerce merchants, it appears that the greatest opportunities are for established firms that venture into E-Commerce as a means to refine existing business processes and gain new customers.

E-Commerce may complement or replace traditional commercial activities, depending upon the industry and the functions. Because it is both a threat and an opportunity for various industries, it is worthwhile to:

- (1) Study how E-Commerce can be integrated into operations. Determine needs and capabilities. E-Commerce operations may shadow traditional operations by providing redundant services such as product information distribution.

- (2) Develop an E-Commerce strategy into the business and marketing plans. Understanding how an E-Commerce system will strategically fit with the firm's existing operations will help the management allocate its financial resources in order to ensure its success. In the long-run, there have to be resources to set-up and sustain a system, making it work best for the type of operation that will be carried out.
- (3) Monitor competitors, suppliers, and customers' movements into E-Commerce. Special attention to their capabilities will help determine areas of E-Commerce shall be developed.
- (4) Establish a consistent operation review process. E-Commerce technology and operations are constantly evolving. Changes in technology frequently introduce opportunities to refine or create new services.

2.4.2 Barriers to Business and Target Consumer Markets.

Business-to-business E-Commerce presently represents the bulk of commercial volume over the Internet, although business-to-consumer traffic is growing and has the potential to become an even larger market. The primary reason why business-to-consumer E-Commerce has not kept pace is that the Internet is still not as established in the home as it is in the office. Many businesses have invested in Internet access technologies, are online and ready to expand their commercial capabilities into this emerging marketplace. Consumers should come online as the costs of Internet access decrease, data throughput increases and Internet connection becomes as simple to initiate in the home as using television and telephones.

Low confidence in security of technologies has also restricted growth of E-Commerce activity. Business-to-consumer E-Commerce in particular has suffered from poor consumer confidence in secure monetary and personal data transactions. Business confidence in

secure transactions is higher and continues to increase as electronic payment and encryption technologies are widely employed. It is important to note that this issue is strictly about confidence. Secure technology exists today. This indicates that business is either more informed or willing to take risks than consumers are. In either case, business-to-business E-Commerce is vibrant and demonstrates a confidence in the supportive technologies that should continue to transfer to consumers.

A third barrier to growth is the concern of legal issues, mostly the uncertainty of litigious boundaries. Since the Internet crosses political boundaries, legal jurisdiction is in question. Although the Internet improves access to foreign markets, national export/import laws still apply to all E-Commerce transactions.

2.5 Factor Driving The Growth of Electronic Commerce.

The factors affecting E-commerce growth, including trades in both technology and customer attitudes can be divided into three categories.

(1) Economic Forces.

Under relentless pressure to reduce costs and stay competitive, firms are attracted to economic efficiencies offered by electronic commerce. These economic efficiencies include low-cost technological infrastructures that reduce the electronic transactions with suppliers, low cost of global information sharing and advertising, and the ability for firms to provide low-cost customer service alternative to expensive retail bank branches and telephone call centers.

The economic forces motivating the shift to electronic commerce are internal as well as external. The immediate application of electronic commerce is in the internal integration of firm' operation. External integration molds the vast network of suppliers, government agencies, large corporations, and independent contractors into single community with the ability to communicate

across any computer platform.

The automobile industry, where just-in-time (JIT) manufacturing methods forced Ford and General Motors to rely on EDI to interact with their suppliers, is a classic example of external integration.

Internal integration is perhaps even more vital than linking with the outside. In an internally integrated organization, incoming orders are received electronically and the information is automatically sent not only to production, but to shipping, billing and inventory systems as well. Internal integration also ensures that critical data is stored digitally in formats and on media that permit instantaneous retrieval and electronic transmission.

The ability to coordinate the movement of information is key to both external and internal integration, and firms need to find ways to design business distribution. While technology is important to information integration, coordination of that information is indispensable. Coordination requires that employees, customers, and suppliers work together to solve problem, improve services, and create new products.

(2) Marketing and Customer Interaction Forces.⁹

The customer preferences and expectations are changing. Today, many consumers prefer online transaction because of the convenience, easy reach and wide availability of information, products and services. Companies that don't develop an Internet presence will miss the opportunity to gain new customers and may lose many existing one.

Besides that, customer expectation changes rapidly. As more companies flood the marketplace with new products, target marketing is becoming an increasingly important tool of differentiation. Not only are new types of

product emerging, but also in old product categories, new spins on traditional plans, new strategies, new target markets, new market research methods, and more are developing.

In order to be competitive, company must develop new technologies to save cost, provide efficiency, establish close relationships with customers, and develop customer loyalty. Marketers of company should adapt to a business world in which traditional concepts of differentiation no longer hold. In this world, "Quality" has a new meaning, "Content" may not be equated with "product" and "distribution" may not automatically mean "physical location". Therefore, all industries today are seeking new ways of interaction with customers and delivering services.

(3) Technology Force.

(a) The Move from WANs to Public Network.

First is the trend away from private wide area networks (WANs) to public networks. In the past, businesses built private network infrastructures in order to facilitate the private communication. Using infrastructures, the company could connect its network with that of a business partner for the purpose of EDI or make it available to customers. These networks were costly and time consuming to implement, complex to manage, expensive to operate and required proprietary software to access. Today, public IP-based network services supplied by Internet Service Providers (ISPs) offer an economically and technologically superior means of connecting facilities and networks. In addition, public network enables customers and business partners to connect to a company's network by simply using standard Web browsers.

(b) Rapid Advances in Internet Security.

As companies integrate accounting order entry and inventory systems and make access available through the Internet, issues such as security become critical. Major technology suppliers, including Microsoft, Netscape, IBM, Cisco and Lucent, as well as numerous startup companies are all working to Internet security. The result is that Internet security is advancing at a rapid pace. It has already attained the level of security available in other types of transactions, such as those conducted by telephone, fax and mail. And with new technology, such as authentication and digital certification, e-commerce security will surpass that of other forms of commerce.

(c) Implication of Various Forces.

Economic and marketing forces and digital convergence have influenced how industries are repositioning themselves to take advantage of new opportunities, including the creation of entirely new service delivery channels, the development of new markets for existing products, and the development of new information-based products for the online environment. For instance, digital convergence is reshaping the competitive environment for telecommunications services around the globe. In response to the intensified competition and reduced margins on basic telephone services in telecom markets, network operators are building new computer driven intelligent network in order to offer a wide range of value-added services. These services foreshadow a looming battle between rival cable TV and telephone network operators over which systems will deliver video-on-demand, video games, home

shopping and baking, and other interactive consumer service to the home.

Companies need to understand the technological framework better before they exploit the capabilities of electronic commerce and market it as an industrial-strength tool for business.

2.6 National Electronic Commerce Policy Framework.

2.6.1 Information Society.

Having the goal to distribute prosperity and good living, the former National Plans for Social and Economic Development, including the 8th Plan have been based on agricultural and industrial sectors which are still the key of Thailand's economic and social development. However, in the past decades, new information system and knowledge that have been pouring into the society and economy have drastically affected economic and social segments. Information society is rapidly emerging and information technology is playing an important role in social and economic development thoroughly. The IT-driven economic and social transformations are expected to be the power to increasingly generate country's trade volume and potential in the future.

2.6.2 Evolution of Information Technology.

Evidently, information society is emerging from the advance of Information and Communications Technology (ICT/IT), especially those of computer, telecommunication, and broadcasting. Its revolutionary impact is becoming a vital engine of businesses and industries in order to gain more competitive advantages. The fundamental principles of IT are derived from a huge leap in electronic devices; computers, fiber optics, communications satellites, networks, software and multimedia. It is also enabling enterprising individuals, businesses and communities, in all part of the world, to bring economic and social activities effectiveness, cost reduction, systematically-linked workflow, new opportunities as well as

people's better living attributed by IT applied to education, public health and services.

2.6.3 The Internet.

The key factor of the change is the Internet. The reason for the quick spread of using the Internet is from its features. Namely, it is worldwide- linked information network without time or space limits, immediate and convenient interaction, and simultaneous multimedia with the same standard worldwide. The increasing statistics of the Internet users indicate that in the past five years, its advantages, convenience and fairly low expense in accessing, have widely affected consumers' decision of using the Internet. This leads to changes in the society's customs and development. One can say that in the past few years, the Internet has a great influence on trade, industries, education, public services and governmental administrative system.

2.6.4 Trading in the Globalization Era.

Since, at least, the second half of 20th century, information technology and advanced telecommunication have been defined as means of production, distribution, marketing, sale or delivery of products, fund transfer and trade information exchange such as electronic data interchange (EDI) system for import and export or customs procedures. Additionally, in the last few years Internet commerce has been drastically changing business models in terms of either time or place or quantity and quality around the world. The crucial roles of the internet in terms of conducting transactions is increasing more and more in the future. It mainly decreases cost and expense while making opportunities for businesses, especially, small and medium enterprises (SMEs). All participants including individuals can achieve potential benefits of globalization in spurring trade competition by promoting and creating new world trading system.

2.6.5 Electronic Commerce.

Electronic Commerce is about doing business via electronic means. It refers to

many kinds of Electronic Commerce including business-to-business such as a procurement or purchasing system of raw material and parts among trading partners; business-to-customer such as cyber bookstore, and business-to-government such as government procurement through electronic media. Formerly, it is based on conventional media such as telephone, facsimile, television, EDI system, and so forth. However, the major means which plays an outstanding role is the Internet because it gives chance to communicate and exchange information for commercial purpose all around the world at any time by using electronic mail, World Wide Web, file transfer, etc. As of the third quarter of the year 2000, approximately 350 million people around the world are online and it is expected to increase to nearly over 1 billion by next four years. With the fast growing number of Internet users, Electronic Commerce encompasses diverse activities based on which system they applied such as online advertising, ordering, payment and delivery of digital products. Then, global electronic trading or E-Commerce revenues for all kinds of EC are projected to be over \$300 billion in 2003.

2.6.6 International Movement.

Rapid growth of Electronic Commerce around the world will create potential economic growth of national and regional trading. There are many predictions about global Electronic Commerce values, which grow up to hundreds of billion and it is expected to double annually. In international forums, international organizations have made initiatives on Electronic Commerce and their co-operation in New Economy scheme. World Trade Organization (WTO) members have given an approval on 'Declaration on Electronic Commerce' in the 2nd session of the Ministerial meeting of the WTO (20 May 1998). This declaration includes a commitment by governments not to impose customs duties on Electronic Commerce and it does not affect tax or customs policy with respect to goods that are ordered electronically and delivered physically. The UNCITRAL Model Law on

Electronic Commerce, adopted in 1996, and Model Law on Electronic Signature, adopted in 2000 by United Nations Commission on International Trade Law (UNCITRAL) - is intended to facilitate the use of modern means of communications and to provide standards by which the legal recognition of data messaged can be assessed or shall not be denied legal effect, validity and enforceability. The Organization for Economic Co-operation and Development (OECD) also has been playing an important role in Electronic Commerce fields such as Electronic Government forums on government policy, consumer protection, taxation, etc and so do the APEC and ASEAN.

2.6.7 Thailand and Electronic Commerce.

For Thailand, electronic commerce can be both opportunity and challenge, what it will be depends on government policy and potential development of private sector so as to compete in world trade forums. Electronic commerce is an opportunity to improve efficiency of organizations, businesses, and government services. The efficiency includes promptness, convenience, accuracy, cost reduction, and market opportunity expansion, together with quality-based production and service. When the domestic use of electronic commerce spreads widely, various transactions, such as retailing, wholesaling, supply chain as well as management in sector production and service industries will be generated and be more ready for competition. This would grant opportunities for Thai business spersons, industrialists, financiers, service providers, and marketers. They can proactively compete with the others at international level by making use of the Internet network's universality and electronic commerce. Electronic commerce provides opportunities for Thailand's exports, especially electronic and computer devices, agricultural products, auto parts, Thai handicrafts, etc. Furthermore, electronic commerce is an important marketing tool for service and hospitality industry sector, especially tourism industry, advertising and entertainment, etc. Electronic commerce provides opportunities not only for large

enterprises but also for SMEs as well as individuals having their own products and intellectual properties. It is a system facilitating economic development in highly competitive era at global level and also an important strategy of solution to current economic problems/crisis. On the contrary, if the government has no clear policy to promote electronic commerce or if private sector is not interested in electronic commerce, it is very possible that Thailand will be at a disadvantage in global trade. International companies can be dealers for Thai products all over the world using electronic commerce as a managing tool whereas Thai entrepreneurs may serve only as a production factor with low value added. Moreover, this can lead to high importation due to convenience of purchasing products from oversea and possibly limit the market for Thai producers and entrepreneurs in various areas such as agricultural, industrial, and general trade. That is, they cannot expand customer base as they should in spite of opportunities provided by world trade potential. This can cause low competitive capacity in global economy and finally disadvantages in negotiations in world forums.

2.7 Policy Framework.

In order to promote Electronic Commerce in Thailand in accordance with the principles of readiness, unity and clear position, the government has set policy framework for development of Electronic Commerce as follows:

- (1) Electronic commerce is a national trades strategy that should be included in the 9th and 10th National Plans for social and Economic Development. Actually, there should be a plan starting from the middle of the 8th National Plan to support Thailand's Electronic Commerce development. The plan should be flexibly and timely adjusted to ever-changing situation in the long run in order to set a plan for each private sector facilitating export, trade in services and domestic consumption.

- (2) Government should support and proceed those measures facilitating private sector and consumers' Electronic Commerce activities, aiming to increase Thai entrepreneurs' competitiveness in international trade and to build up trust and confidence among entrepreneurs and consumers at both domestic and international levels. Government should give priority to address the legal infrastructure and security in Electronic Commerce by taking any necessary action to promote and initiate appropriate and updated action plan.
- (3) Government should lessen or avoid any restrictions that would obstruct (the) such development. At the same time, the government should support fair competition and consumer protection by existing mechanism. This is to contribute ultimate benefits to Thailand's economy as a whole.
- (4) The government should give priority to streamlining public administration by putting in place the electronic media and information technology to set up 'e-government' in order to improve governmental administration and public services. So they become more effective and efficient tool to promote and expand Electronic Commerce market in terms of business-to-government (B2G) transactions. Moreover, the government should provide trade facilitation for business-to-business and business-to-consumer transactions.
- (5) Government together with private sector should set up an Electronic Commerce database and study policies and guidelines for the development on both domestic and international scale. This is to proactively protect the country's rights and benefits in negotiations and on trade cooperation at regional and global levels, as well as at the bilateral and multilateral levels.

2.8 Development Strategies Finance and Banking.

2.8.1 Payment systems.

To facilitate Electronic Commerce and digital economy, new emerging methods of payment or electronic financial products and services such as payment cards (credit card, debit card); automated teller machine (ATM); phone banking; internet payment; electronic money(store-valued card), electronic bill payment, electronic fund transfer (EFT), etc. have been changing the behavior of consumers and businesses. The payment system and involved electronic means must be concerned firmly in order to create the economic and financial strength of the nation.

The government will ensure the safety and soundness of electronic payment systems by taking any necessary and appropriate action to protect consumers. In this way, consumers will have more confidence in the system which will encourage national economic growth.

2.8.2 Taxation.

The taxation principles applied to electronic commerce should be the same as those applied to conventional commerce in terms of neutrality; efficiency; certainty, simplicity; effectiveness, fairness and flexibility. New way of conducting business electronically has the potential effects on economic and social structures, thus new products and services will be created. The government will promote Electronic Commerce and increase revenue without distorting the fundamental principles of taxation. Furthermore, it is also necessary to investigate, study, and have clear position on taxation of Electronic Commerce in order to protect national benefits as much as possible.

2.9 Regulatory Framework.

2.9.1 Laws concerning Electronic Transactions.

To encourage Electronic Commerce, the government should support researches and

studies on the legal implication of electronic transactions, on legal principles of existing laws either paper-based or electronic transactions concerning law of contract, law of evidence as such. The harmonization of legal framework of Electronic Commerce in international organizations has become major issues of global communication and trade, for example, UNCITRAL Model Law on Electronic Commerce (1996) and Recommendation on the Legal Value of Computer Records (1985).

The National Information Technology Committee (NITC), Thailand, chaired by the Deputy-Prime Minister had approved to set up the 'Information Technology Laws Development Project' conducted by the National Electronic and Computer Technology Center (NECTEC) in 1998. One of the main objectives is studying and drafting the six information technology laws: Electronic Transaction, Electronic/ Digital Signature, Electronic Funds Transfer, Data Protection, Computer Crime and By-law of the Law Constitution of Thailand Section 78. At the moment, the Electronic Transaction Bill which is developed from the combination of "the Electronic Commerce Bill" drafted by the Ministry of Justice and "Electronic Transaction Bill" drafted by the mentioned Sub-commission had been given an approval by the House of Representatives and is pending in the National Assembly.

2.9.2 Information Infrastructure.

The Section 78 of the Constitution of Thailand B.E.2540 (1997) which is in Chapter V: Directive Principles of Fundamental State Policies reflects the principle of diminishing gaps between information Haves and Have Nots which is called 'universal service safeguard provision'. It states that "The State shall ...develop public utilities and facilities systems and information infrastructure in the locality thoroughly and equally throughout the country...". In accordance with the mentioned policy, the section 51(14) of new Broadcasting and Radio Frequency and Telecommunication Law B.E. 2543(2000) defines

the authority of the National Telecommunication Commission in respect to setting rules or measures in terms of implementing telecommunication liberalization and universal service. Information infrastructure is recognized as one of the major pillars of Electronic Commerce as well as a new channel for promoting business in both communities and provinces nationwide.

2.9.3 Data Protection.

To enhance the protection of consumers' right to privacy and personal data, in particular, whilst avoiding risks or obstacles to the border less trading, it is to be seen that whether new measures are needed to address specific issues emerging from rapid technological developments of information, computers and telecommunications. Government shall promote awareness of data protection principles for individuals and private sector in order to protect their rights and avoid trade barrier (NTB) in the future respectively.

2.9.4 Consumer Protection.

To build trust and confidence, consumers whether they are involved in Electronic Commerce or not should be protected by effective and appropriate legal instruments. Government, businesses, consumers and their representatives should work together to achieve such protection and determine what changes may be necessary to modify existing laws or set up any self-regulation framework so as to maintain favorable environment of Electronic Commerce according to the Constitution and international standard.

2.9.5 Intellectual Property Rights.

To accelerate the concrete measures of intellectual property protection, the copyright law shall be enforced in the short term and shall be educated in the long term. Therefore, people can realize the importance of respecting the owners' rights.

2.10 Basic Infrastructure Strategy.

2.10.1 Telecommunication.

The implementation of the 'Master Plan of Telecommunication Activities' shall be pushed forward in order to facilitate equal national information infrastructure for all according to the Section 78 of the Constitution. It is realized that telecommunication network services which are wide spread, accessible, and reasonably-priced are distributing growth and opportunities for entire range of businesses as well as general public to be capable of participating in entrepreneurship and consumption in Electronic Commerce systems. Government should set up the national commission that has authority to monitor telecommunication activities in line with transparency, fair competitiveness and consumer protection.

2.10.2 The Internet.

Taking overall national stability, security and effective investment of the Internet system into account, government should liberalize or end monopoly of telecommunication activities so as to promote wide usage of the Internet for electronic commerce and to respond to more requests from private sector and consumers. Government should subsidize academic sector in order for them to have access to the Internet system with the price lower than the commercial one so that students will have IT skill, especially, that of the internet. The above-mentioned measures will promote sustainable Electronic Commerce in Thailand in the long run.

2.10.3 Certification Authority.

To support the establishment of Certification Authority in order to reach its roles regarding authentication, confidentiality, integrity and non-repudiation, and to provide cross certification services among the parties at regional and international level, government should keep in mind that economical benefit and national trade stability will be

achieved by such method.

2.10.4 Human Resource Development.

Human resource development relevant to Electronic Commerce will be promoted as much as possible by systematically and continuously allocating resources necessary for the development. Target for developing in educational fields and enhancing working skills in current market will also be identified to define measure for effective development such as financial and tax incentives and the establishment of Institute of standards and human resource development in Electronic Commerce that will continuously create concrete development of human resource potential.

2.10.5 National Projects.

Projects which put forward major components of Electronic Commerce development will be supported by the government. They include physical projects such as Software Park, Electronic Commerce Trade Zone, Multimedia Industrial Zone, Digital Entertainment Industrial Zone, Office of Electronic Commerce News Industrial Zone, etc. They also include project relying on network locations such as Virtual Agro-Product Trading Market, Garment Industry Portal, Tourism Portal, etc. and various activities supporting SMEs, for example, National Electronic Commerce Exchange.

2.10.6 Research and Development.

Research and Development will support private sector by focusing on creating standards, innovation, prototypes, demonstrative projects, pilot projects for technical, business, and policy researches. With collaboration with other organizations or units, this can be done by assigning those agencies to develop their projects in line with Electronic Commerce and, if appropriate and necessary, to set up an institute for developing Electronic Commerce. Government should promote measures to support incubation of new business and venture capital.

2.10.7 Database.

Information database and its networks used for business planning, providing information services for business and industrial sectors will be created and other countries' Electronic Commerce framework in each industrial sector shall be studied as well.

2.10.8 Standard.

Technical standards and systems which are necessary for Electronic Commerce development shall be created. They include payment standard, cryptographic standards, and other commercial standards related to products and services in general which are Thailand made and unique products and services.

2.10.9 Electronic Commerce Security and Safety.

The coordinator office, which will be the center for national Electronic Commerce security and safety will be set up. The mission of this center is to be the trusted center for consultancy, cooperation and dissemination of information related to security and safety.

Security and safety standard and 'Emergency Response Team' for governmental agencies will also be set up to safeguard any information which will affect national Electronic Commerce security and safety. Therefore, the system will be prevented from those trying to corrupt Electronic Commerce information system.

2.11 International Strategy.

2.11.1 International Cooperation.

There should be cooperation with other countries, groups of countries, inter-regional and international organizations to support the internationalization of Electronic Commerce and the establishment of internal mechanism in order to prepare for Electronic Commerce readiness in international trade negotiation for.

2.11.2 International Initiatives.

Both domestic and international Electronic Commerce activities in accordance with

those co-operations shall be preceded. The establishment of APEC Electronic Commerce Training Center in Thailand and carrying out such activities among the neighboring countries will benefit Thailand's economy with respect to regional trade area development and good international relations.



III. TOURISM INDUSTRY TOWARD INTERNET AND E-COMMERCE

3.1 Global Tourism Industry.

Tourism is an industry generating high income to many countries, and induces enormous revenue from other nations to the homeland. The World Tourism Organization (WTO) makes a survey from tourism authorities globally. The research reveals the future of the tourism industry with the prospects focused mainly to the niche market covering 10-15% tourists worldwide. The targets are well-educated people with purchasing power, and are interested in ceremonies, cultures and local ecologies. However, the tourism entrepreneurs also give importance to the mass market, as the tourism development has a long-term effect on their economy, society and satisfaction of the tourists coincidentally. The development is based on three principles; entertainment, excitement and education. In the future, the government sector will take lesser role in the travel business and there will be more mutual support between the tourism authority and the government instead. Moreover, the market co-operation of nations in the same region will increase.

World Tourism Organization forecasts that number of tourists traveling to overseas will become greater than one million which will generate income about 1.55 billion U.S. dollars or 60.45 billion bath in the year 2010. Similarly in the year 2020, it is predicted that the number will increase to 1,600 million. Comparing the tourism industry with other businesses throughout the world, it creates revenue surpassing to other industries' revenue collectively at 532,000 billion U.S. dollars or 20.748 billion bath. It consists of automotive products valued at 525,000 million U.S. dollars or 20.475 billion baht and chemical products valued at 503,000 million U.S. dollars or 19.617 billion baht respectively. According to this important aspect of tourism, all countries realize its potential, especially the nations which spontaneously prompt for tourism service.

According to recent statistics, nations in Europe are more attractive to tourists worldwide. In 1999, there were 392.5 million inbound tourists in Europe while France was the most popular country among tourists having 73 million tourists. However, United States generated the highest income from tourism valued at 74,400 million U.S. dollars or 2.9 billion baht, and their citizens spent the greatest expense for tourism concurrently valued at 56,100 million U.S. dollars or 2.187 billion baht in 1999.

For the Year 2000, the report from WTO shows that the tourism growth in 1999 was higher than expectation. There were 633 million tourists traveling worldwide revealing a 4.1% increase from the year 1998. The tourism industry generated income of 453,000 million U.S. dollars or 17.667 billion baht globally which was 3% higher than the previous year. The year 1998 was a great year for tourism business. Referring to the progress of tourism business in each region, there was a sign showing a recovering from the economic crisis. The economic situation in some regions, especially in Asia, was still in a critical moment resulted from currency devaluation. This money devaluation in Asia persuaded numerous tourists to Asia (e.g. East Asia, Pacific, etc.) simulating better tourism condition to Asia region. WTO forecasted the average growth rate to be 5.5% annually for tourism in Asia Pacific region while the East and Mediterranean region followed closely. WTO also researched the tourism development in many regions as follows.

3.1.1 Asia Pacific Region.

There is preferable tourism development in this region with the 97 million tourists visiting East Asia and Pacific region in 1999. It is an increase by 10.5% from the previous year. China was in the first place having 27 million inbound tourists followed by Hong Kong, Thailand, Malaysia and Singapore having 10.6 million, 8.6 million, 7.9 million and 6.2 million inbound tourists respectively. However, Malaysia had the highest growth rate in term of tourism expansion experiencing 42.9% growth in inbound tourists. It was followed

by Hong Kong with 11.5%, Singapore with 11.1%, Thailand with 10.5%, and South Korea with 9.6% respectively. It was noticeable that Malaysia had greater tourism expansion than Thailand. Malaysia might stay ahead of Thailand in the near future if the situation remains unchange.

A tourism survey report done by Bureau of Tourism Research in Australia which was published in the year 2000 reveals that less tourists traveled to Australia in 1999. It is a decrease by 3% from the year 1998. The effect was resulted from the world economic crisis. In spite of the situation, it is found that tourists stayed longer and spent more money in the country. Though the number of tourists visiting the nation in 1998 was only 4.2 million, it is predicted to increase to 8.4 million in 2008.

3.1.2 Middle East and Mediterranean Regions.

The Middle East Region is one of the regions in the world that has the biggest tourism expansion having growth rate of 17.4% in 1999. Egypt, Israel and Lebanon were in the first, second and third places respectively. The growth rate of nations in Mediterranean Region including South Europe and North Africa also increased in 1999 comparing to the year 1998. The widely well-known nations having growth rate of tourism expansion are France, Spain and Greece. In addition to this region, there are newborn countries in tourism industry having expanded growth rate such as Iceland, Estonia, Georgia and Iran.

3.1.3 America Region.

Expansion of tourism in the region for the year 1999 was 2.5% lower than the average expanded growth worldwide, although there was an increase of inbound tourists by 3 million from the previous year in America. Two in three of these tourists traveled to America while the U.S. currency was high in value. There were 48.4 million inbound tourists in U.S. in 1999, increased from the previous year by 4.5%. Canada had 19.5 million inbound tourists increased from the previous year by 3.7%. Brazil had 5 million inbound

tourists increased from the previous year by 5%. There were not many inbound tourists in Middle America, but their tourism growth rate also expanded. These countries consist of Brazil, Dominican Republic, Cuba, Costa Rica and Guatemala.

3.2 Thai Tourism Industry.

According to the statistic from Tourism Authority of Thailand (TAT), there was an expanded growth rate in the country for the year 1999. There were 8,580,332 inbound tourists which is an increase by 10.50% from the previous year. The industry generated an income of 270,000 million bath with an 11.49% increase. The highest tourism season was from end of November to December.

In 1999, many of the inbound tourists were from East Asia numbering 5,195,972. The rest are from Europe (1,990,449) and America (514,595). The three nations with the highest number of tourists visiting Thailand were Japanese (1,064,539), Malaysian (991,060) and Chinese (775,626). However, European tourists spent the longest time averaging 13.05 days per trip followed by tourists from Middle East spending 10.63 days per trip and tourists from Africa spending 9.56 days per trip.

As natural sceneries in Thailand are outstanding and beautiful with the distinguished characteristics, the highest numbers of visitors come to the country for tourism purpose amounting to 7,560,588 tourists, followed by 743,003 travelers coming for business purpose. It is noticeable that most inbound tourists are new generation people or those who are working. The largest group of tourists is aged between 25-34 years numbering 2,281,186. It is followed by the group of age between 35-44 years and 45-54 years numbering 2,036,449 and 1,636,432 respectively. These groups are potential travelers. They live a modern life-style and follow technological innovation so that they are sometimes called "Men in Cyberspace Age". Using advanced technology to provide tourism information is one way to persuade these prospective travelers to Thailand.

Tourists spend most on shopping and averages 1,077.51 baht/ person/ day while the next spending is on accommodation, especially for hotels and averages 1,013.08 baht/ person/ day. Majority of the inbound tourists do not travel with business agencies. Studying of their traveling behaviors can be used to develop a strategic plan to attract a larger number of visitors and to entice them to stay longer. More than halves come back to Thailand because they are impressed with the places, culture, ceremonies and courteous welcome. The research on tourists' behavior will further support in planning effective tourism promotion.

3.2.1 Strategic Plan Developed by Tourism Authority of Thailand.

Information technology and tourism in e-commerce are identical as both are in the service category providing intangible products. The intangible products work well through the Internet which is why we sometimes call it "Virtual Enterprise" because there is no necessity for physical delivery. Business transactions can be achieved via electronics, as users are able to access tourism information through the Web.

Tourism industry expands with an increasing rate. It is expected that domestic traveling will be increased 10 times that of oversea traveling. The information notifies that the industry has sufficient power to grow in the future.

To make a comparison, France has a similar area and population to Thailand. However in 1999, the number of inbound tourists in France is greater than that of Thailand. There were 73 million inbound tourists in France while Thailand had 8.6 million. If Thailand is to attract more tourists, the nation has to prepare the existing resources (e.g. sceneries, culture service, etc.) and develop other necessary aspects in technology and commerce (e.g. communication, electronic commerce, etc). According to the global conference held by WTO in London, there are three directions by which tourism can be promoted:

- (1) Provide individual service to meet specified wants (Tailor Made)

- (2) Offer standard and quality service.
- (3) Be fast in service and customer contact.

The three directions can be reached with the electronic system. Currently, effective marketing strategy is done through the electronic medium in order to reach customers. For example, a small company has constructed its own Web site named www.ayothaya.com aiming to the target groups. Being online, the business has achieved reduction in advertising expense in oversea magazines. A research reveals that there are 11 million people in England using Internet; 57% of the users accessing tourism information and 56% of the users making online reservation for holiday package.

A research surveyed by Forrester Company forecasted that 75% of viewers would make online reservations directly by the next 10 years. The agency roles have been changed too. A business needs to be concerned about the impact of electronic communication as the information provider develops their business for e-commerce.

Tourism Authority of Thailand holds a duty as the center for tourism and e-commerce development concurrently so the organization concentrates on all the existing tourism resources (e.g. information, tourism companies, travel agencies, etc.) intending to publicize tourism information to the general public the most. Referring to e-commerce development, there is preparation of online system for a real operation as soon as possible. TAT classifies its organizational role into four levels.

- (1) Support the use of Internet and e-commerce at the basic level.

Have seminar for the basic Internet knowledge targeting to:

- (a) Businesses that have no experience in using Internet.
- (b) Businesses that have Internet experiences only at the basic level such as e-mail and information search. This will help them to get acquainted with the development of e-commerce in their business operation.

- (2) Assist in developing e-commerce at high level.

Having capacity to compete globally, there is mutual support between TAT and National Electronics and Computer Technology Center (NECTEC) providing business practices and marketing operation through Internet. The project aims to help the businesses to have web sites to be fully equipped with e-commerce system.

- (3) Co-ordinate with relevant organizations.

This is to provide mutual co-ordination between both private and government sectors such as Internet Service Provider, Thai Communication and NECTEC. The support is to create the online network of Thai tourism operated by the nationals instead of foreigners. The activity promotes the tourism industry to actively utilize e-commerce.

- (4) Being an information center.

The project promotes the web site of TAT as a portal web for tourism industry in Thailand publicizing relevant information thoroughly. In marketing, the pushing strategy is applied by encouraging businesses to create own web sites and database for room reservation and online payment systems. In addition, the organization plans to establish departments for developing web sites and constructing online system in all branches of TAT both in Thailand and overseas.

The importance of encouraging businesses to utilize e-commerce is to create understanding in applying Internet and e-commerce which requires mutual cooperation between private and public segments in order to bring about a competitive edge over rivals globally. This unity is to take advantage of tourism in order to generate income for the nation.

3.3 Tourism Development for E-Commerce.

Nowadays, Internet plays an intense role in hanging the nature of business operation especially in tourism business which is a service industry providing intangible products. The change occurs effectively through the electronic channel so it is time for the industry to enter into e-commerce era. Ms. Melissa Shore from Jupiter Communications Company said that use of e-commerce in Thai Tourism Industry is very low accounting for only 3% of the whole industry. If entrepreneurs do not operate online as soon as possible, they would not be able to compete with rivals.

The new comers providing only online service in tourism business should be aware of the marketing attack from veterans who expand to virtual channel. The veterans can cover a big portion of market share, as they have had longtime experience and good relationship with both customers and business providers. Their corporate image is also well established among people, hence, they have bargaining power over others due to their lower cost. The online providers have to build brand awareness by launching advertising programs in other media and not only on Internet. Tourism businesses integrated as portal web can support each other productively in the industry and they are also able to employ the existing natural resources in the most effective manner in order to survive in a competitive environment.

Enterprises operating through the virtual channel, both veterans and newcomers, have equal chances to face the challenge posed by Internet technology but differentiated marketing strategies will determine who attracts more potential customers. Business owners need to create brand loyalty for long-term benefits by developing consumer database to have one to one relationship with the customers. The biggest challenge in capturing the attention and interest of viewers is to offer all necessary information and to promptly reply with fast communication. People prefer to have human contact rather than electronic means; therefore response from the firm will greatly satisfy the prospects. Virtual

enterprises should be concerned about quality of web site, responding time and customer convenience in contacting clients and providers. A research found that other in industries (e.g. retail business, financial institutes, etc.) 67% of the businesses answer e-mail within a day to prospects. In tourism industry, 58% of the providers reply e-mail to clients within a day while 28% of entrepreneurs take more than five days or never reply. Companies should have fast response, and provide their contact information to customers well.

Internet possesses both positive and negative characteristics, therefore users who take advantage of with Internet technology receive superior marketing opportunity. In contrast, people not going forward with the technology take greater risk.

3.3.1 Online Marketing Strategy of Tourism Industry.

The interest and challenge of Internet to entrepreneurs in tourism industry are to use Internet as the medium to find new business channel and to take an opportunity in e-commerce. Businesses have to recognize that everybody can obtain equivalent opportunity posed by the Internet, but firms with the most effective e-commerce system will help the business to survive.

There is high demand for tourism service nowadays. Customers ask for better service and high quality including reliable information. Tourists also tend to have a shorter trip per time, and there is increasing rate of tourists who plan the trip themselves by searching relevant information on the Net. Unfortunately, most Web sites providing tourism information are not of high quality. The information offered are scattered and unsystematic causing confusion to viewers. Companies expanding to virtual channel need to develop systematic web sites allowing users to find the required information within three clicks and not getting loss in the site. The approach is a way to appeal people to come back in the future.

Businesses in the same region can group together to create opportunity and strength in marketing, as well as, the necessary information should be available 24 hours a day providing convenience to users in viewing data of each place. Entrepreneurs should cooperate with local tourism organizations to create database system and marketing strategy for local region using Internet technology for further business operation. Web site development for tourism requires the following element:

- (1) Information.
 - (a) Provide related and updated tourism information.
 - (b) Include interesting and appealing content.
 - (c) Enable users to link with other related sources.
 - (d) Enable users to access the information 24 hours a day.
- (2) Process.
 - (a) Have fast response with customers.
 - (b) Offer full service (e.g. information support, reservation, payment service, etc.)
 - (c) Allow customers to plan their own trip and to have instant reservation
- (3) Coordination.
 - (a) Have mutual support with other entrepreneurs to create marketing opportunities in the region.
 - (b) Provide variety of services (e.g. traveling, accommodation, entertainment, etc.)
 - (c) Offer alternatives to customers such as choices of accommodations.
- (4) Customer Service.
 - (a) Develop interesting and attracting web site with updated contents.
 - (b) Promote special activities (e.g. entertainment, education, etc.) and provide

related information (e.g. weather report, currency exchange, map, tourism places, shopping guides, etc.)

- (c) Co-ordinate with other enterprises to provide full service.
- (d) Provide all related information of the region clearly.
- (e) Promote web sites in relevant sites (e.g. portal web, e-mail, etc.)
- (f) Launch advertisements through other media in the traditional way (e.g. press ads, radio spots, etc.)

3.4 E-Commerce and Global Tourism.

Making reservation through Internet worldwide is full of potential and tends to increase in the near future. It is forecasted that the tourism revenue generated through the channel worldwide will exceed 20,000 million U.S. Dollars (780,000 baht) in 2002, and it will increase to 23,400 million U.S. Dollars (912,600 baht) in 2003. E-marketer Company believes that sales value in tourism through the net will cover 29% of all consumers who spend through Internet in 2003. Online tourism generates main revenue directly in Business-to-Consumer or B-to-C section through e-commerce. In United States, Forrester Company predicts that a quarter of American families will make tourism booking through online service in 2003. Both predictions point the same direction.

Researching current consumer behavior, Gartner Group reveals that consumers are ready to have Internet communication in tourism industry. There are 75% of users in America searching tourism information through Internet such as flight schedule, tourism programs and discounts which is an increase of 400% from the year 1998. There are 16% of users making reservation and payment through Internet, which is an increase of 800% from the year 1998.

In addition to the research of eMarketer Company, the firm found that most tourists search information from portal Web using search engines. Another source is from

destination sites by indicating names of airlines and hotels. Some users find information from commercial sites such as www.travelocity.com and www.priceline.com.

Travel Industry Association of America (TIA) estimates that tourism business in e-commerce will increase to 8,887 million U.S. Dollars (346,593 million baht) in 2002. Referring to the revenue received, 75% or 6,500 million U.S. Dollars (253,500 million baht) is generated from air ticket sales. This amount decreases from the year 1996. This year the air ticket sales is valued at 243 million U.S. Dollars (9,477 billion baht) representing 90% of gross tourism revenue of 276 million U.S. Dollars (10,764 billion baht) generated through the virtual channel.

According to the statistic of tourism industry for European region in 1999, Jupiter Company reported that consumers in Eastern Europe spent about 800 million Euro dollars (29.6 billion baht) on tourism which is calculated as 30% of expenses for the region spending through Internet. England has the highest tourism expenses through the Net which is 250 million Euro dollars (9,250 million baht). This is followed by German spending 210 million Euro dollars (7,770 million baht). A forecast estimated that income from tourism industry through Internet for nations in Europe will increase to 10,000 million Euro dollars (370,000 million baht) in 2003. The value expects to increase to 17,500 million Euro dollars (647,500 million baht) in 2005.

3.5 Thai Tourism and E-Commerce.

Presently, tourism business performing in Thailand is divided into two types consisting of direct tourism business and supplementary business. For example, supplementary business refers to trade that involves tourism business like car rental, room reservation and document preparation service. Direct tourism business is classified as inbound and outbound. The inbound refers to local people and foreigners traveling in Thailand while the outbound means people traveling abroad. The inbound tourists from

other countries may contact the local tourism company or through travel agent, however most inbound tourists will contact through the travel agent as is shown in the model of business operation in tourism.

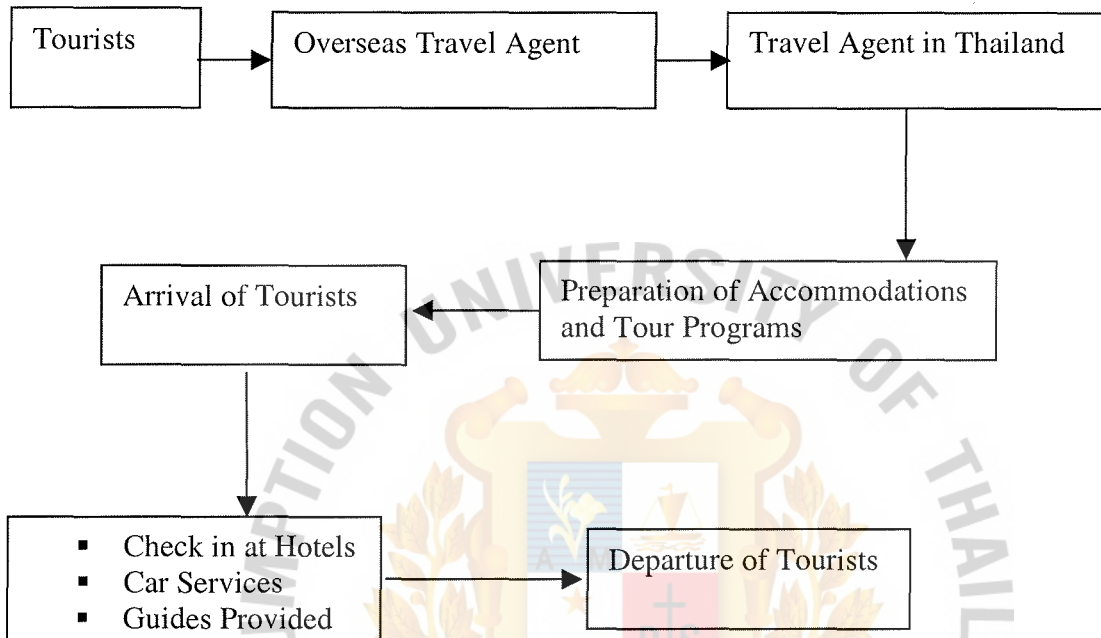


Figure 3.1. Model of Business Operation in Tourism.

The above model is not entirely effective, as the operation has to depend on travel agent who is abroad when contacting with foreign a customers. If Thai entrepreneurs have an argument with a foreign agent, a great risk may occur. For instance, they may lose groups of tourists contacting through the agent. Creating customer relation with customers is also not fully efficient because the operation requires high support from overseas agencies. The dependence on others may cause entrepreneurs to lose prospects and so that they cannot support customers' requirement in time.

Tourism in Thailand requires development on many sides. Obstacles and insufficiency necessitate solutions urgently. Relying on overseas travel agent extensively is

an important issue because there is risk in losing a number of tourists and the business operation becomes inefficient if Thai entrepreneurs have an argument with foreign agents. Vision of Thai entrepreneurs is another issue. They perceive the current tourists in hand without looking at the situation further where there is extensive competition. Therefore there is no preparation for world competition and the lack of a well-prepared strategy force them to leave the business. Strengthening tourism industry in Thailand can be done in many ways. For instance, domestic businesses should co-operate with each other creating a network facilitating the industry, and persons employed in the service must be recruited properly.

E-commerce is another solution to face rivals globally. The channel allows increasing the number of prospects helping to increase customers because 24 hours service is provided worldwide. Surfers can search for information provided on the Internet any time from any place, and have interactive communication rapidly with providers if they have only doubt. Thai entrepreneurs should not rely on overseas travel agents if they want to expand their business to e-commerce. A direct contact with users worldwide allows enterprises to access larger groups of prospects via digital channel. A new business model is created to extend business to the virtual channel (see figure below).

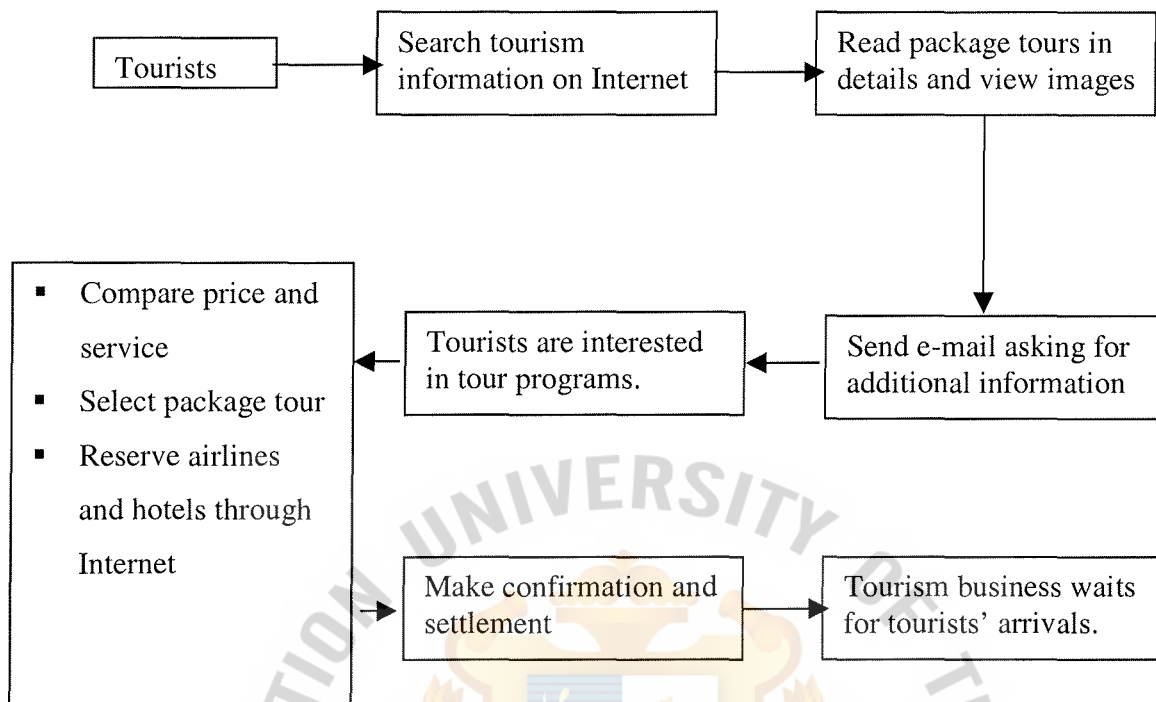


Figure 3.2. Applying Internet to Tourism Industry.

3.6 Readiness of Thai Entrepreneurs toward E-Commerce.

Businesses will operate on Internet, as the technology provides convenience and opportunity by creating worldwide communication. Domestic entrepreneurs should be concerned about impacts of Internet and develop necessary channels. Tourism entrepreneurs in Thailand being in e-commerce are able to provide information to people worldwide any time. Besides, the country retains potentiality and readiness of both tourism places and entrepreneur side so an energetic support from relevant organizations is required in order to do business online.

Surveying visitors at the E-Commerce Conference held by Thai Tourism Industry in December 1999 that most samples were found to work in tourism category. The report reveals that many tourism companies have connected to Internet already, as most samples

have experience in this information technology. Samples have used Internet for the purpose of searching information about traveling and tourism, reserving hotels and accommodations, renting cars for traveling, and booking air ticket. Some samples have bought products and service online, and have applied for attending overseas conferences.

Frequently encountered Web sites are www.tat.or.th, www.yahoo.com, and www.expedia.com arranged respectively. Thai Web sites which collect history and information of tourism places are www.sabuy.com and www.tourthai.com. Examples of both Thai and international Web sites are www.travelocity.com, www.exoticthailand.com and www.tourismthailand.org. In designing Web sites, enterprises should be concerned about quantity, rapidness and convenience when visitors enter the sites. There are difficulties that users always find in the sites. The main obstacle is large image file creating longtime loading, which causes visitors to switch to other sites. Moreover, the information provided should have sufficient quality and quantity. Unsystematic Web sites create confusion to users so that they cannot find the required information easily, so enterprises should develop their sites systematically to provide more convenience to the audiences. There are 12% of users who make online payment, but about 51% of the sample from the survey are still confident and trust in e-commerce system.

The majority of tourism businesses in Thailand have developed Web sites in order to promote and publicize their business transaction because they accept that the channel is very profitable. Firms have a capacity to enlarge target groups, to extend the market, and to enchant corporate image. For internal operation, the advantages received are reduction of working level, flexibility, convenience and rapidness. Electronic communication enables businesses to survive in extensive competition in the world market. The technology helps to generate sales increase, high income and cost reduction in business operation. Most contents and activities in the Web sites are intended to promote the businesses, and are the

centers in providing information about tourism and relevant news. Currently, users can make online reservation for trips and accommodation, as well as, make online payment. Referring to the survey from the conference, more than half of the companies which do not have personal Web sites are in the process of development while less than a quarter have not developed the sites yet. The fact shows the active direction of tourism industry in Thailand is stepping forward with this technology age. Thai enterprises are recognizing the potential of e-commerce on Internet.

There are several reasons that some samples do not consider e-commerce widely extended in Thailand. Tourism business targets B-to-C group where customers are individuals while knowledge and comprehension of e-commerce among persons and entrepreneur are not considerable resulting in unreliability to the system. E-commerce law to protect both buyers and sellers are also not fully sufficient while payment gateway is another critical issue taking time to achieve. Internal issues of the nation are also creating uncertainty to users such as communication fundamentals, deficiency in foreign languages and company performance in business.

Information received from WTO and Thai Tourism Industry reveals that the potential and industry growth for tourism has a bright future; therefore government should promote the industry intensely by harmonizing local resources and advanced technology in order to increase the competitive potential of the nation. In order to support the campaign, government should provide knowledge by organizing conferences about e-commerce with involved persons expansively. In addition, organizations taking part in tourism industry have to support tourism enterprises especially the SMEs by establishing web site as a center for tourism in Thailand. The entrepreneurs generate value-added service and expansion of market share by developing innovative strategy for online marketing.

3.7 E-Commerce and Tourism Industry Nowadays.

Firms providing online service receive numerous benefits. For example, there is cost reduction, convenience, rapidness and service coverage. Not only that but customers' satisfaction is also achieved communicating on Internet where computers are connected as worldwide network allows users to have updated information at all time. Online reservation is available for reserving air ticket, train, accommodation, resort and hotel. Prospects can make reservation and confirmation-creating convenience in planning their trips.

Nowadays, most airlines have come together to establish computer reservation system to help providing to travel agents achieve cost reduction and benefits of advanced technology application. The system is also expected to expand the sales channel.

Large hotels and resorts have provided online reservation to users while some companies have established their online system overseas too. Medium and small hotels group together creating portal Web site such as www.phuket.com and www.koh-samui.com. The mutuality is to pose accommodations in the same region on a Web site, therefore surfers have alternatives to select the place suiting to their requirement.

In the future, providers will have higher direct sales to customers. Hotels have more advertisements on Internet creating higher income and the least dependence on intermediaries. Tourism enterprises should be ready to face the coming situation. Small business puts emphasis on market in specific groups and differentiates the business from rivals like providing golf tour, diving tour and full service tour. Enterprises need to publicize beneficial information to targeted tourists. For instance, the information of tourism places nearby should be provided. Establishing portal Web can support tourists searching information, planning own trips and calculating the budget. The Web allows tourists searching prices of all hotels lessen than 2,000 baht, and surfers are able to prepare a trip from a web site as well.

E-commerce in tourism business is to support the industry, and it takes time to appraise the achievement. A well-planned marketing strategy for online operation is essential, so that effective implementation can be carried out.

- (1) Survey.
 - (a) Examine the business (e.g. business type, target group, goals, etc.)
 - (b) Use the collected data to meet customers' satisfaction.
- (2) Development.
 - (a) Strengthen capability of personnel to work for e-commerce.
- (3) Planning.
 - (a) Create online marketing strategy suitable to business operation.
- (4) Adjustment.
 - (a) Adapt the marketing strategy continuously.
- (5) Modification.
 - (a) Change and develop products and service for superiority in order to attract new visitors and to persuade experienced users to revisit the site.

3.8 Tourism Web Sites.*

Applying tourism to e-commerce is classified as developing personal Web site and co-operating with others.

- (1) Developing Personal Web Site.

The method is providing amenity, as business requires a web site posted on Internet instead of having a physical shop. Surfers can visit the site to search for information, make reservation and make settlement directly. The outstanding advantages of the technology are it can connect worldwide, respond rapidly, build one to one relationship with individuals, and provide 24 hours a day service.

(2) Co-operating with Others.

The approach applies a system of supply chain management which is a larger business system. Firms work together, as they are linked as a connecting structure. In tourism business, enterprises add related businesses providing convenience to customers such as air schedule, car rental and accommodation.

Tourists can plan their trips at the one stop service searching from a site only.

3.9 Considerations for Successive Tourism Web Site.

Jupiter Company views that Web site development for tourism should be concerned about customers' wants, survivability, improvement of online service, Web contents and development. There are four points to be considered to be successful in operating a Web site.

(1) Customer Service.

Enterprises should be concerned about convenience of users and reduce any unnecessary policy because they may be obstacles to surfers. For example, many Web sites require membership registration prior to access of required information. This approach may have adverse effect because users will lose patience. Besides, it results in more overheads cost in service rendering.

(2) Creating more options in service rendering to customers.

Apart from service through Internet, companies may think of other options in order to enable their customers to contact with them any time interactively. For example, iExplore Company trains staff who are knowledgeable in tourism for working in e-commerce, then advertises their business online addressing the ways to communicate with them such as chat, e-mail and telephone. This is interactive communication where users are able to contact directly with the staff, as customers trust human contact rather than

electronic medium. It results in high sales volume.

(3) Information classification in web site.

Grouping data into categories save time for surfers because they find required information by searching from the keywords or related word groups. Providers can divide information into numerous categories e.g. service classification, content classification, prospect group classification, activity classification, etc.

(4) Creation of community on Internet.

Creating a community for a group of people communicating within a Web site of a business provides positive effects. The business will collect data on users' behavior in order to develop further product and service to meet customers' wants. The transaction brings good relationship with clients. Moreover, sales promotions also help to generate more revenue like discount allowance.

3.10 Thai and International Tourism Web Sites.

Current web sites are classified according to their business types or organizations such as accommodation web sites, traveling web sites, traveling activities web sites, and tourism web sites. Each type of web sites is explained in details as follow:

(a) Tourism Organization Web Sites.

The sites conduct the promotion activity of the organization by providing business information to tourists and enterprises in tourism industry. The sites allow tourists to access data in requirement such as www.tat.or.th. Besides, a union formed by a group of tourism businesses pose information of their members in portal Web, so people interested in a group member are able to find information of those members in detail on the site such as www.thaihotel.org

and www.astranet.com.

For people and organizations of each country relating to tourism promotion, there are Web sites which convey useful knowledge for planning tourism promotion like www.world-tourism.org which includes tourism information, statistics, and tendency of global tourism. Entrepreneurs are able to analyze the information for further tendency and to develop strategy in order to attract more tourists.

(b) Hotels and Accommodations Web Sites.

Both Thai and international sites of this type have the main objective of promoting hotels and accommodation. Some sites include tourism information of places nearby as a convenience to users. Considering tourism in e-commerce of each hotel, most hotels are international corporate with several networks worldwide. Their e-commerce systems are already well-established. Hotels in Thailand belonging to international brands also have effective e-commerce system. For some local hotels, the promotion is only on hotel advertisement if they are not grouped together. However, some Thai hotels unite together to establish a portal Web to facilitate online service to surfers. There is mutuality for room reservation and payment system on Internet.

(c) Traveling Web Sites.

Web sites of many global airlines are immediately available for e-commerce at a high level because the airlines already have ticket reservation system through networks for a longtime. Tourists can search flight schedule of each airline, and investigate for seating status. Referring to other vehicle services (e.g. car rental, boat, train, etc.) enterprises additionally create Web sites to facilitate customers. The importance of Web development is to

publicize business service and information of places nearby in order to be convenient to users. A good Web site with an updated information will attract more users to visit and come back to the site.

Nowadays, airlines unite as a group like Star Alliance to provide quality service to clients by establishing a portal Web. Tourists are able to search flight schedule by keying destination places and the system will display the schedule of all related flights to them. Long distant travelers require to make many transits are benefited as they can change to any airlines in the group.

(d) Information Service and Tourism Web Sites.

The sites provide one stop service by facilitating tourists to prepare their trips as a whole within a site. These sites collect all relevant tourism information such as tourism places nearby, accommodation prices, tourism guide, and traveling data. Some sites in Thailand provide information not including online service (e.g. www.tourthai.com, www.sabuy.com, etc.). Others include online service but mostly in a package price. Concurrently, some international sites offer service upon the users' request. Tourists are able to search information regarding route of travel, accommodation, price range in any time duration, and tourism programs. Besides, all requirements can be severed through a site on Internet.

(e) Tourism Activity Web Sites.

These Web sites offer explicit activities upon customers' request which are not generally presented to all (e.g. wild travel, birds and butterflies investigation, diving, photo trip, bicycle riding, etc.). Some sites have isolated target groups whose wants are different from general tourists (e.g. www.wildtravel.com, www.ecochallenge.com, www.wild-planet.co.th, etc.).

Moreover, there are sites emphasizing on special activities not providing tourism information but they issue magazine to provide information and variable technique instead like www.trekkingthai.com.

Web sites involved in tourism activities both in Thailand and abroad offer numerous quality services, however some of these sites are not established for business purpose but for personal favor and group activity. Examples are www.thaimtd.com for mountain biker club <http://pantip.inet.co.th/club/photoclub> for backpacker club, and www.geocities.com/TheTropics/Lagoon/2510/.

(f) Traveling Equipment Web Sites.

The characteristic of these sites is similar to general sites selling goods and service but the products presented are mainly for traveling purpose. In Thailand, there is no such enterprises in tourism involvement operated through Internet while there are so many in abroad with one stop service in e-commerce provided. Users can order products and make payment through the web (e.g. REI www.rei.com, L.L.Bean www.llbean.com, Lafuma www.lafuma.fr, etc.).

According to government policies conveyed by H.E. Pol. Lt. Col. Taksin Shinawatra, tourism activities have to be applied under the following policies;

- (1) To improve the quality of tourist attractions to attract and accommodate the increasing number of tourists as well as to upgrade the quality of services to a high standard.
- (2) To accelerate the development and restoration of cultural heritages in order to preserve the existing attractions and create new ones.
- (3) To support development on ecotourism, culture tourism, agro tourism and health tourism in the country and neighboring countries by focusing on potential destinations.

- (4) To develop tourism in certain overseas quality market segments; namely, meetings, incentives, conventions and exhibitions (MICE).
- (5) To develop a system for safeguarding personal safety and property of tourists.
- (6) To encourage community and local non-governmental organization (NGOs) to take part in maintaining tourist attraction and live the Thai way of life as well as participate in the all round management of tourism resources.
- (7) To develop potential service businesses to increase competitiveness and to be an important new source of income e.g.; medication and health care services for foreigners, Thai traditional treatments and medicinal herbs, Thai restaurants both in and outside the country (focusing on food for health), education and training services.

However, it is accepted that Thailand has now fallen into the profitless growth trap. Most tourists agree that Thailand is a cheap destination. To break the trap and increase tourism receipts, the Tourism Authority of Thailand policy and operation this year will focus on repositioning Thailand as a quality destination for international tourists by upgrading the quality of tourist services and products as well as promoting the image of Thailand as “Quality Destination”. To be a quality destination, Tourism Authority of Thailand’s operation in term of tourism product development will focus

- (1) To assure the quality of tourist attractions, activities and services include:
 - (a) To co-operate with the private sector to outline the service standard for Thailand e.g. standard of hotels and accommodation, standard of tourist guides, etc.
 - (b) To develop and restore existing and new tourist attractions and activities.
- (2) To launch quality products:
 - (a) Attraction: 8 major attractions (Bangkok, Chiang Mai, Pattaya, Phuket,

Hat Yai, Nakhon Ratchasima, Kanchanaburi and Ko Samui and 3 groups of alternative destinations including – Royal Paradise (Petchaburi – Prachup Khiri Khun), Andaman Hideaway (Krabi – Trang – Satun – Phatthalung) and Mythical I-San (Nakhon Ratchasima, Buri Rum, Sisaket, Surin, Ubon Ratchathani), Beaches and Resorts, Unique Arts Culture, Lifestyle such as palaces, temples, archaeological sites, and festivals)

- (b) Activities: Shopping, Thai Food Cooking and Tasting, Golfing, Spas, Diving, Eco- soft adventure activities, etc.

The Thai tourism industry this year (2002) expects 11.13 million international arrivals, earning about 8,151 million USD from 19 market segments such as leisure, MICE, golfer, health and spas, families, divers, the elderly, overseas weddings, honeymooners, etc. arrivals will be from 34 countries in Asia, Europe, Oceania, the Americas, Middle East and South Africa e.g. Japan, Malaysia, China, the U.K., Germany, Scandinavia, France, East Europe, Russia, Baltic and CIS, Australia, the USA, Canada, etc.

In term of marketing, the major policies of Tourism Authority of Thailand are:

- (1) To deliver a new image of Thailand as a “Quality Destination” under the Amazing Thailand theme by using conventional and new marketing activities, sales aid production, direct sales and the Internet.
- (2) To create consumer awareness of Thailand’s tourism products and services information which can influence tourists in deciding whether to visit Thailand.
- (3) To boost the number of sale packages by joint marketing with local tour operators, and other national tourism organizations by marketing strategy of Thailand and other specific products by using conventional and new marketing tools.

The co-operation from overseas partners including government and private agencies, may be clarified as follows:

- (1) To assist in delivering a new image of Thailand as a “Quality Destination ” through each channel.
- (2) To co-operate and take impromptu action on publicizing and managing of information in a crisis / event that affects tourists security, emotions and feelings.
- (3) To assist in promoting the Thai tourism industry.



IV. MARKETING TECHNIQUE AND ANALYSIS

4.1 The Proposed E-commerce Web Site.

The Proposed web site will cover the following functions:

- (a) Sell Travel Agent Membership.

It is considered that telephone, newspaper and tourism magazine are tools that allow travel agencies to communicate with their customers, which in turn helps them sell products. However, before people decide to become customer, they want to know more about the products and services information. Travel agencies can take the new chance easily and inexpensively on the WWW. with our Tourizen.com web service. Then this might turn people into customer at a cheaper cost.

- (b) Open International Markets.

The travel agent may not be able to make sense of the mail, phone and regulation systems in all their potential international markets, but with a Web page, travel agent can open up a dialogue with international markets as easily as with the company across the street.

- (c) Create a 24 Hour Service.

Countries and organizations are not on the same schedule. Business is worldwide but office hours are not. A web page serves the client, customer and partner 24 hours a day, 7 days a week. There is no overtime either. It can customize information to match needs and collect important information that will put you ahead of the competition, even before they get into the office.

- (d) Establish a Presence.

Approximately 70 million people worldwide have access to the World Wide Web (WWW). No matter what a business is, no one can ignore 40

million people and should show interest in serving them.

(e) Make Changing Information Available Quickly.

Sometimes, information changes before it gets published. The result could be a pile of expensive, worthless paper. Electronic publishing changes with the needs. No paper, no ink, nor printer's bill is required. A web page can even be attached to a database, which customizes the page's output to a database, so this can be changed as many times in a day as needed. No printed piece can match that flexibility.

(f) Make e-brochure.

A picture is worth a thousand words, but what if the space is not enough for a thousand words? The WWW can add sound, pictures and short movie files to a company's information if that serves their potential customers. No brochure will do that.

(g) Answer Frequently Asked Questions.

Most people in an organization say that their time is usually spent answering the same questions over and over again. These are the questions to which customers and potential customers want to know the answer before they decide. Posting them on a WWW page will remove this problem freeing up some time for the staff and avoiding incidents with impolite customers or phone operators.

(h) Allow Feedback from Customers.

After passing out the brochure and the booklet, what if there is no sales, no calls, and no feedback? Wrong packages, wrong price, and wrong booking? With a Web page, owners can ask for feedback and get it instantaneously at no extra cost. An instant e-mail response can be built into Web pages and can get

the answer while it is fresh in their customers' mind without the cost.

4.2 What Kind of Product Should Be Provide?

In an economic situation like this, it is very difficult to do business only domestically in Thailand, so the product must be carefully chosen to sell abroad and worldwide.

Product Chosen Concept.

- (1) The product should be provided to both travel agencies and tourists.
- (2) Intangible product is the best because it reduces logistic cost and logistic problems.
- (3) Market should grow with the citizens.
- (4) There are not many competitors.
- (5) Product life cycle is not short.

According to the product concepts which are listed above, the product that we have chosen is tourism e- market place.

4.3 Why Do We Choose These Products to be Provided on Internet?

The reasons are follows:

- (1) Tourism industry is the highest income generator in Thailand.
- (2) Growth of tourism industry is increasing every year.
- (3) Government policy supports the tourism industry.
- (4) The market expands according to the population growth.
- (5) There are many travel agencies in Thailand.
- (6) Products are different.
- (7) There are convenient and inexpensive.

4.4 Element of Success.

A web site that supports e-commerce can provide an important strategic asset for a business. A successful site has many benefits.

Launching a Successful E-commerce Initiative.

- (1) A web site that supports e-commerce can provide an important strategic asset for a business. A successful site has many benefits:
- (2) It tightens relationships with existing customers and business partners.
- (3) It offers new revenue-generating opportunities-through new channels as well as new business models.
- (4) It offers opportunities to reduce costs by streamlining processes.
- (5) It provides a competitive advantage.
- (6) It offers universal compatibility with other Internet-based Top-IP solutions without requiring proprietary software or special expertise to maintain it.
- (7) It positions the company for future growth and success.

Building a site can represent a significant investment in time and resources. A hazardous approach often results in waste of money and lost opportunity. To be successful, companies must integrate e-commerce into their overall business strategies and processes. They must understand the role of e-commerce in the context of other revenue-generating channels as well as re-engineering and cost-reduction initiatives.

Armed with this knowledge and understanding, companies can then take a structured approach to the planning, design and development of Web site for e-commerce.

Companies must also recognize that e-commerce may have a dramatic impact on existing business models. It may be necessary to redefine the current business model and perhaps modify relationships with the current channel of supply chain-or develops entirely new relationships with supply chains. Some industries will be more affected than others will by the supply chain transformations caused by the introduction of e-commerce of the Internet. In some industries, a complete redefinition of the business models may be the only way to maintain a competitive edge. As a result, a careful examination of the existing

business model and how e-commerce may affect it is essential for in the online arena.

There are three primary phases in developing and implementing a successful e-commerce initiative.

Phase 1 – Identifying the E-commerce initiative and Obtaining Buy-in.

First and foremost, the company needs to identify the process or area of business in which e-commerce initiative can be applied and obtain buy-in from internal and external constituencies. Internal constituencies include functional area, department management and teams that are affected by the initiative. External constituencies include suppliers, vendors and other partners, such as advertising and public relations firms, particularly partners who have systems that must connect or interact with the Web site of the company's Intranet/ Extranet.

An important part of the identification process is examining the resources and skill required carrying out the project from the planning stage through development and implementation. Companies need to determine the skill sets required and identify the skill they already have in house. Most companies find that they don't have all the skill internally, and must determine the best way to acquire them.

This process involves as analysis of whether to:

- (1) Grow the expertise internally through education or the recruitment of new talent.
- (2) Outsource some or the entire project to a firm that specializes in Internet technologies and e-commerce.

Senior management, information technology (IT) and other functional areas must butt into the choice of whether to use internal resources, develop new skill internally or outsource some or all of the project.

Buy-in on the e-commerce initiative is critical to the success of an e-commerce strategy. Without it, the company may fail to get essential input and support from important constituencies. Participants may conceive that it is a passing fad rather than a key component of the company's overall business strategy. As a result, they may not give proper attention to the development and implementation of the e-commerce site. Top management should emphasize the importance of the project and demonstrate the commitment of senior executives throughout the company as well as externally to business partners.

Phase 2- Developing a Business Plan.

Phase 2 involves developing an e-commerce business plan that is integrated with the overall company business strategy. The plan needs to address a number of important issues and concerns, including:

- (1) The dynamics of the new marketplace.
- (2) The company's e-commerce goals.
- (3) The definition of the customer or audience.
- (4) Requirements for the online marketing campaign.
- (5) Competition.
- (6) The risks and how to mitigate them.
- (7) The road map for moving from the strategic level to development.
- (8) Integration of e-commerce systems with other business systems.

The dynamics of the New Market Place.

E-commerce represents a changing revenue model. Not all e-commerce revenue is the result of new customers. Some revenue comes from customers who move from physical channels into the electronic channel. Top management, development managers and business partners-particularly resellers and distributors-need to be aware of this and

understand how it will affect such areas as performance reviews and sales targets.

Customer expectations must be factored into the plan for web site development. This is difficult to do when planning for 12 to 18 months out because technology and user preferences change very quickly on the Internet. Plans must be flexible enough to adapt to changing customer expectations.

Customers have a continual supply of new choice new companies appearing rapidly. The plane needs to take into account the changing complexion of the competition in the company's market.

The Company's E-commerce Goals.

The company needs to set realistic goals for the e-commerce initiative and communicate them clearly in the plan. Questions that need to be answered include:

- (1) What portion of the business will e-commerce represent in 12 month, 2 years and 5 years?
- (2) What volume of business does the company expect over the coming years?
- (3) What level of return on investment does the company expect?
- (4) How will return on investment be measured?
- (5) What cost saving can the company realize through e-commerce?

Examples might include reduced IT staffing requirements due to Web-based administration tools higher productivity through easier access to information and lower customer service costs as a result of facilitation of customer self-service.

- (6) Will online sales reduce the sales volumes in existing channels? If so what will be the impact on each channel?

This information is essential because the site design and support infrastructure must be able to handle growth effortlessly over time. Otherwise, companies may lose valuable

time and money re-engineering a site after a few months.

Audience / Customer Definition.

Defining the audience or customer is one of the primary tasks in the overall scoping and planning of an e-commerce initiative. This includes identifying internal audiences, such as personnel from marketing, sales, channel sales, finance, IT and other internal groups, as well as external customers, suppliers, vendors, resellers and other business partners.

This element of the overall plan affects many other aspects of the e-commerce system, from site design to online marketing techniques.

Requirements for Online Marketing.

To develop an effective online marketing campaign for the initiative, marketing, advertising and PR personnel as well as site designers need to understand the target audience. Who are they? Where do they spend their time on the Internet? What factors are important to them? The plan should also identify customer needs and expectations as well as how the company and its products or services address more effectively than the competitors.

Competition.

The company's traditional competitors may already have e-commerce initiative. It is essential to identify what these competitors are doing. Are they aggressively pursuing an e-commerce strategy or are they taking a wait-and-see approach? Are they extending their existing offerings to the new channel or are they creating an entirely new business?

Although current competitors are a threat, nontraditional competitors represent the biggest competitive risk. These are the companies that find new ways to deconstruct and reconstruct traditional value chains into value web, gaining a significant head start over companies that simply move existing business processes to the Internet.

Mitigating the Risks.

As with any new business initiatives, there are risks and rewards. It is important to identify any risks that could significantly affect the company and provide backup plans to mitigate any negative effects. A company that is offering a customer service and support, web site needs to be prepared for technical problems, such as interruptions in service from ISPs. Companies need to determine how to respond if a security breach occurs. They also need to investigate attitudes and perceptions in existing channels and minimize channel conflicts.

The Road Map from Strategy through Deployment.

The business plan should provide a road map that defines major milestones as the project moves from the strategic level to the tactical level. The road map should cover the next 12 to 18 months in some detail and provide major milestones over several years.

Integration of E-commerce with Existing Business Processes and Partners.

E-commerce is one component of an overall business value chain that integrates existing business processes and systems, and should complement existing channels rather than compete with them. It may need to integrate with existing information technology systems, such as inventory, accounting, order processing, sales forecasting, customer information and Enterprises Resource Planning (ERP) applications. The plan needs to examine the level of integration required and the impact of e-commerce on other processes and systems.

The plan also must address the increasingly important requirement to integrate the e-commerce system with the systems of upstream suppliers and downstream partners. In many cases, the viability and profitability of e-commerce systems will depend on the efficiency of value-chain-wise system implementations.

Phase 3- Designing, Developing and Deploying the System.

A variety of functional groups should participate in the design, development and deployment of the e-commerce system, including marketing, sales, customer service, engineering, operations and information technology. In order to ensure the success of the e-commerce initiative, top management should allow the representatives of affected groups to be a part of the project team and assign them with the tasks of designing, development, and deployment because this team provides input drives functionally and design requirement.

1. Designing and Development.

During the design phase, the company should consider the technical aspects of integrating the e-commerce system with core business systems. If e-commerce goals require extension of business systems beyond the firewall to the outside world, security becomes a critical issue in the design and development to protect sensitive information.

In designing and developing the system, the project team needs to determine specific technologies to be used and identify the best way to integrate the e-commerce system into existing business IT systems. It also needs to consider the visitors' needs when designing the web site. The development of navigational cues and user interface is of critical importance. A good web design engages visitors, makes it simple for them to navigate the site and compels them to explore the site further and purchase products.

2. Piloting the System.

Once the design is complete, the company should conduct a pilot to test its effectiveness. The pilot provides an opportunity to obtain feedback from functional groups, customers and business partners. It ensures the quality and usability of the system, providing information regarding:

- (1) The clarity and effectiveness of navigational cues and user experience.
- (2) Whether or not performance is acceptable.
- (3) Whether or not integration with other systems is seamless and transparent.
- (4) Whether or not the system is scalable and reliable under extreme stress conditions.

3. Bringing the System Online.

Once the final modifications have been made based on pilot feedback, the company is ready to develop the site fully. This is typically done by technical personnel in the IT group.

4. Developing on Audience.

With the e-commerce system up and running, marketing takes over the major responsibility for generating site awareness, attracting visitors and fostering customer relationships. The key to e-commerce success is to attract and increase the number of visitors of the web site and make them frequent visitors. To accomplish this, the staff must use a combination of proven audience development techniques that include online advertising, special promotions and PR campaigns that leverage the unique characteristics of the Internet.

Marketing techniques that work effectively in the online area significantly differ from those that work in the print and broadcast media. Companies must take full advantage of the unique Internet environment, including online communities, promotional tools and cutting edge technologies. They also need to develop a keen appreciation for the subtle complexities of online culture. Companies that recognize this subtlety and leverage the unique nature of the Internet will succeed in their e-commerce efforts. Others risk

taking a back seat to more aggressive competitors.

5. Putting the Proper Skill in Place.

Moving into the electronic commerce area requires new skill, knowledge and expertise in three disciplines, strategy, technology and creativeness.

Required Disciplines.

Strategic planning must be approached in a totally different way because because of the dynamic nature of the Internet. Strategy involves a variety of activities including:

- (1) Analyzing existing business process and identifying areas that can be streamlined and enhanced by Internet technologies.
- (2) Investigating the competition of both traditional and nontraditional competitors.
- (3) Developing the business plan.
- (4) Risk management.

Internet technologies are rapidly evolving and hence keeping pace with the new breakthroughs is difficult. Technological expertise involves in-depth understanding of current hardware and software solutions, new technologies, site development, and systems integration and security issues.

Creative skill involves more than just basic web site design. This discipline encompasses the entire user experience what users see, how they navigate, how they obtain information and how they conduct transactions. It also encompasses the audience development that drives traffic to the site. Marketing and promotional techniques that are effective in traditional media do not always translate well into the online marketplace. The creative area involves understanding the most effective online marketing techniques and applying the one that makes most sense for the specific product and the audience.

Augmenting In-House Capability.

Most businesses do not have in-house expertise in all three disciplines. Developing

them internally may delay e-commerce activities and allow competitors to gain an advantage. As a result, companies that want to move quickly often turn to partners to tap the skills, knowledge and expertise of companies that specialize in launching e-commerce system. A number of firms-from the big five consulting firms such as Andersen

Consulting and Booz allen to local one and two person shops are offering e-commerce consulting services that ranges from planning, designing and development to deploying and managing Web site. Therefore, choosing the firm is essential.

In searching for a partner, companies should look for a firm that can demonstrate extensive experience in all three disciplines. The firm should be capable of taking the e-commerce project through its entire life cycle. From strategic planning to development and ongoing operation. This is true even if only a portion of the project is to be outsourced.

By choosing a firm with proven strategic, technological an creative abilities, a company can move quickly into Internet space and achieve greater results which provides a competitive edge and a faster return on investment.

V. THE PROPOSED SYSTEM

5.1 Mission and Vision.

Tourizen.com will command a leadership role in tourism market place on the net in Thailand.

5.2 Goals.

(a) Short Term Goal.

Tourizen.com will be an efficient marketplace via Internet to offer competitive tourism information and pricing.

(b) Long Term Goal.

Currently, lack of expertise in tourism marketplace presents an exceptional opportunity for Tourizen.com. So this is a chance for Tourizen.com to develop a dominant presence in Thailand. With exceptional knowledge of tourism management, Internet and e-commerce skill, Tourizen.com will be well situated to take advantage of the region current economic situation.

Tourizen.com will be a famous center of tourism community on net.

5.3 Competitive Analysis.

Tourizen.com is the first tourism marketplace via Internet in Thailand that focuses on comparing tourism information and pricing, negotiating and bidding. However, Tourizen.com has indirect competitors as follow:

- (1) Travel Agencies Website.
- (2) Airline Website.
- (3) Others – any website that provide Tourism Information and Pricing.

Aspects of Online Shopping.

From a survey by Tourism Industry on Internet and e-commerce it was found that Internet users shop online because of:

- (1) Comprehensive selection and easy comparison.
- (2) Control over “What to see” – Instant interaction with the seller.
- (3) No hassle and pressure from sale people.
- (4) Shopping privacy.
- (5) Convenient hours – 24 hours a day, 7 days a week and no traveling time and expense.

Some users might also oppose to online shopping because of:

- (1) Security reason.
- (2) Low speed of data transfer.
- (3) Poorly designed site.
- (4) Low level of trust – Seller’s reputation and policies and lack of actual experience with the product.
- (5) Pleasure and experience of the offline shopping
- (6) Unavailability of computer hardware or lack of computer literacy.

5.4 SWOT Analysis.

Strength.

- (1) Tourizen.com has knowledge in tourism and Internet & e-commerce.
- (2) Tourizen.com is the first tourism market place on net in Thailand.
- (3) Tourizen.com is the new communication channel of travel agencies directed to target groups.

Weakness.

- (1) New website need time to be favored by users.
- (2) Service is not a tangible products it is not easy to make a first impression like tangible products.
- (3) Tourizen.com is a new company in tourism industry so it lacks bargaining

power to other organization.

Opportunity.

- (1) Government has the policy to support both tourism industry and Internet & e-commerce.
- (2) Increasing rate of Internet users.
- (3) Many banks launch new electronic payment method to support e-commerce such as e-card.
- (4) Internet knowledge has become a fashion of teenagers.

Threat.

- (1) Many websites are launched each day.
- (2) Economic depression affects tourists during 2001 so that they will be a much lower growth rate in the next year.
- (3) Internet speed in Thailand is not stable.
- (4) Some groups of Internet user do not have trust in electronic payment so most of them select to deal directly with companies.

5.5 Target Market.

- (1) Primary Target.
 - (a) Tourists.
 - (b) Travel Agencies.
- (2) Secondary Target.
 - (a) Business people who travel frequently.
 - (b) Hotel & tourism industry persons.

Main target markets of Tourizen.com are tourists and travel agencies. Internet users are early adopters who have interest in tourism. Travel agencies should create new distribution channel for reaching Internet users. The secondary target groups are business

people and those in hotel and tourism business. The students who study in hospitality program also will be our quality targets in the future.

5.6 Market Segmentation.

For market segmentation, Tourizen.com's customer is divided into four groups: those who are:

- (1) Familiar with Internet and interested in tourism.
- (2) Familiar with Internet but not interested in tourism.
- (3) Interested in tourism but do not spend much time using Internet.
- (4) Not interested in both Internet and tourism.

The first three groups are early adopters and they are our target groups.

5.7 Market Positioning.

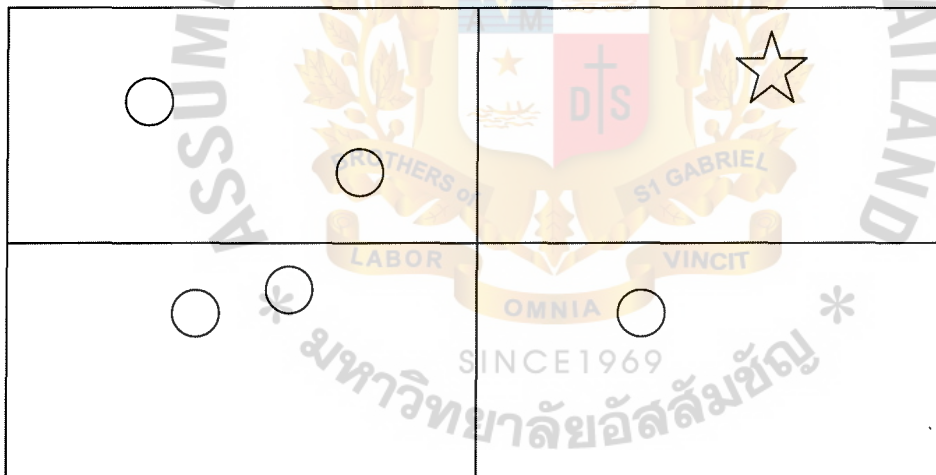


Figure 5.1. Market Positioning.

Tourizen.com is the website that provides tourism information and booking/reservation services with one stop service concept. Other website do not provide such services like our website. Moreover, Tourizen.com is the first website in Thailand helping users to compare price and information of package tours.

5.8 Customer Delivery Value (CDV)

The evaluation of customer delivery value derives from having the total customer value over the total customer cost. The information below describes the strategy in broader scope of our business.

Value.

(1) Product Value.

Product of Tourizen.com is service - that will build tourism market place on net - by initially locking tourist and provide the tools to achieve cost saving and convenient tourism information search regarding such as package tour and price. At the same time, Tourizen.com will provide travel agencies with an online distribution channel to serve their customers both existing and new customers. In addition, Tourizen.com will provide comprehensive online service such as package tour with powerful search engine including effective communication channel between tourists and travel agencies. Moreover, Tourizen.com has a variety of packages to serve each target group which are

separated by destination:

- (a) Domestic Tour for those who want to travel in Thailand.
- (b) Out Bound Tour for those who want to travel abroad.
- (c) In Bound Tour for foreigners who want to come to Thailand.

separated by target group:

- (a) Young people between 18-30.
- (b) Families with children.
- (c) Retired / Senior citizens.
- (d) Activities / Sport seekers.
- (e) Culture seekers.

(2) Service Value.

Tourizen.com provides web board service to users for posting their requirements. Customers can negotiate or bid directly with travel agencies. Service from Tourizen.com also includes detailed and updated news in response to the changing current situation. In addition, Tourizen.com will provide one stop service solution for customers.

(3) Image Value.

Tourizen.com will provide a clear company profile and obvious concept “Tourizen for Tourists Citizen” as well as clearly stated terms and conditions. Tourizen.com will co-operate with Tourism Authority of Thailand and use TAT brand in Tourizen website with link.

(4) Personnel Value.

Tourizen.com will be run by people who have tourism knowledge and computer skill in managing the website. Moreover, the staff will be experienced professionals. At the same time, Tourizen.com will let other people know the famous people who use our service.

Cost.

(1) Phychic Cost.

Tourizen.com has an office in Thailand and represents itself in the same way as Tourism Authority of Thailand and be under the Government policy. Customers can rely on Tourizen.com to get what it has to offer. Therefore, the phychic cost is very low.

(2) Energy Cost.

Since Tourizen.com as a new distribution channel provides tourism package information, and compare price and booking / reservation as one stop

service, prospects can visit the site both to find the required data and to have online booking/ reservation. Hence, potential customers use less energy than really going out to see travel agents in order to perform the same task.

(3) Time Cost.

Tourizen.com is an interactive website which provides instant updated information thus little time is needed for searching and comparing available alternatives. Customers could get immediate response. At the same time, customers can book or make reservations directly via our website with our one stop service. Tourizen.com will reduce all customers' time cost.

(4) Monetary Cost.

Cost that travel agencies have to pay for advertisement is pretty low compared to other offline advertisement media. At the same time, cost that customers have to pay for searching information before decision-making is also the lowest compared to other methods.

Value Proposition.

(1) Current tools used.

- (a) Customers: Newspaper advertising, Magazine advertising, and Telephone.
- (b) Travel Agencies: Newspaper advertising, Magazine advertising, and Sales person.

(2) Current Practices.

(a) Customers:

- (1) Time consuming and tedious information = high time cost and energy cost.

- (2) Limited travel agencies for making decision = ineffective price.

(b) Travel Agencies:

- (1) Service provided during office hours 5 days a week (08.00am.-05.00pm.) and some agencies provide service on Saturdays (08.00am.-12.00am.)
 - (2) Traditional phone and fax contact = high customer service cost.
 - (3) Some agencies fail to establish a homepage = missing internet economic opportunities.
- (3) Tourizen.com's value proposition.
- (a) Customers:
 - (1) Centralized sources = lower time cost and energy cost and better convenience.
 - (2) Competitive bid and negotiation = cost saving.
 - (b) Travel Agencies:
 - (1) 24/7 = convenience
 - (2) Develop travel agencies homepage = additional distribution channel
 - (3) Create e-brochure once/ for multiple access = provide cost effective means to reach qualified customers

5.9 Marketing Mix (4P's)

5.9.1 Product.

Tourizen.com is e-tourism market place providing intangible products which are separated into 2 parts.

- (1) Services to Travel Agencies.
- (2) Services to Customers.

Phase 1.

- (1) Introductory homepage development.
 - (a) For travel agencies without existing homepage, Tourizen.com will offer

economical solution to those who do not want to over invest in developing and hosting the homepage. Tourizen.com will offer Gold Class program 5 pages and Silver Class containing 3 pages.

- (b) For travel agencies who already have existing homepage, Tourizen.com will offer service linking their homepage with other homepage.
- (2) e – brochure development.
 - (a) Tourizen.com will develop searchable package tour list.
 - (b) Insert tour information into main database.
- (3) Information center.
 - (a) Customers can post request on web board.

Phase 2

- (1) Increased additional service.

Travel agencies can add / remove and update their package tour and price at all time. Tourizen.com will provide self service for updating information by verifying password through the system.

- (2) e-payment development.

Tourizen.com launches e-payment service for more convenience, which co-operate with commercial banks.

- (3) Security management.

Tourizen.com will provide SET for developing security system because every bank in Thailand uses SET. Also, cost of SSL is very high.

Thus, Tourizen.com will provide tourism information and pricing so that Internet users can search for package tours and compare prices of many travel agencies. Travel agencies and Internet user can negotiate, submit bids, and agree on an order and finish the execution on line or off line in Tourizen.com. At the same

time, Tourizen.com will support travel agencies with consulting service in e-travel.

In addition, travel agencies will be able to update package tour and information by themselves with comfortable tools via Internet. Internet users can book and use secure electronic payment channel in Tourizen.com in phase2. Moreover, Tourizen.com will help travel agency develop their organization with Internet and e-commerce advantages.

Value Added Service.



Figure 5.2. Value Added Service.

Marketing Services Model.

- (1) Bid posting
- (2) Offer posting
- (3) Buyer auction
- (4) Agencies auction

Tourists Source Value Chain.

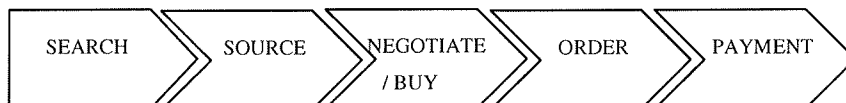


Figure 5.3. Tourists Source Value Chain.

Travel Agencies Source Value Chain



Figure 5.4. Travel Agencies Source Value Chain.

Product Description.

(1) Tourizen.com will provide tourism package from travel agencies as follows.

- (a) Domestic Tour Package.
- (b) Outbound Tour Package.
- (c) Inbound Tour Package.
- (d) Sight Seeing Tour Package.

Customers can find packages and details of package tour in our website. For example, Mr. A wants to go to Phuket on weekend with the family. He can choose Domestic Tour Package and search for information of package tour in a faster way via Internet.

This also helps travel agencies present their companies and package tours for online publishing. Tourizen.com will offer two classes of e-distribution services through travel agencies namely;

- (a) Gold Class.
- (b) Silver Class.

Both services perform the following functions;

- (a) Distribute product and service information such as package tour information, and sale promotion offer.
- (b) Provide space for displaying their products:

- (1) Gold Class having 5 pages.
 - (2) Silver Class having 3 pages.
 - (c) Provide travel agencies with advice and assistance.
 - (d) May provide supporting services.
 - (e) May receive and assist in following up customers complaint.
 - (f) May act as a source of marketing intelligence for travel agencies.
- (2) Price Comparison Service.

The biggest problem of customers when looking for package tour is they have to waste a lot of time in searching for package tour which suit their budget and spend a lot of energy searching information through many forms of media. Tourizen.com can solve this problem by providing price comparison service. Tourizen.com uses database to compare prices of any package tour, which is very convenient for customers to make a decision.

- (3) Negotiate and bid.

Customers can negotiate and bid for the package tour on web board of Tourizen.com. This is an open channel for customers who need special rate or more requirements. Also, that is good for travel agencies for attracting customers.

- (4) Reservation Online.

Customers can book and make a reservation via Tourizen website without worrying about date and times because Tourizen.com serve 24 hours a day, 7 days a week different from any organization that opens around 9.00 a.m. and closes at 5.00 p.m. This is a way of saving time and cost and is very convenient.

(5) Information Service and Searching.

Tourizen.com will provide tourism information as follows;

- (a) Tourism Destination.
- (b) Transportation.
- (c) Accommodation.
- (d) Restaurants.
- (e) Souvenirs.
- (f) Temperature.
- (g) Currencies.
- (h) Tools & Tips for travel.

5.9.2 Price.

Income of www.tourizen.com will come from:

- (1) Monthly fee from member travel agencies.

This fee will be received from travel agencies on a monthly basic. Fee is charged for preparing pages of their package information, price and sub domain name under www.tourizen.com. Members will have their own domain name. For example, NS Tour will get domain name of www.tourizen.com/nstour.html.

The monthly fee will be separated into 2 classes as follows:

- (a) Gold Class.

1,000 baht per month

(This price includes 5 pages and sub domain name.)

- (b) Silver Class.

700 baht per month

(This price includes 3 pages and sub domain name.)

*The information of package tour for both classes will appear in search

engine of www.tourizen.com

(2) Update fee.

The monthly fee does not include update cost because our website will provide self update service so that the travel agencies can update depending on their need. However, we will provide update service for their convenience which costs as follows:

(a) Program - Made to order A

200 baht per page

(Travel agencies must prepare the content for updating.)

(b) Program - Made to order B

500 baht per time

(This included 3 pages and travel agencies must prepare the content for updating.)

(c) Program - Made to order C

1000 baht per month

(This includes 9 pages per month and travel agencies must prepare the content for updating.)

(3) Sales Transaction.

We can keep track of the transaction of the Internet user's decision to buy and get 10% from the price of sale. For example, Mr. A buys a package tour to go to Hong Kong - costing 10,000 baht with NS Travel via our website. That means Tourizen.com will receive the transaction fee of 1,000 baht.

(4) Banner.

In Tourizen website, we provide advertising banner with different rate as follows:

(a) AA Rate.

At the top of the first page (home page) measuring 25x100
pixel = 2,000 baht per month

(b) AB Rate.

At the bottom of the first page (home page) measuring
25x100 pixel = 1,000 baht per month

(c) AC Rate.

At the right side of the first page measuring (home page)
25x100 pixel = 500 baht per month

5.9.3 Place.

(1) Website.

Website is the place which provides service for 24 hours a day, 7 days a week - With the domain name of www.tourizen.com. It is easy to remember and is meaningful as well.

(2) Company Address.

Address of our company (Office) is 1023/67 Soi. Pridi Bhanomyong 41
Sukhumvit 71 Road, Klongton-Nao, Wattana, Bangkok 10110 Thailand.

(3) Call Center.

After we launch this website, we will undertake phase 2. In order to generate more profit, we will launch a call center service to serve customers for booking and providing tourism information. In the first period, we will have 4 persons to take care of our customers with PABX system. For the next period, we will recruit more customer care staff and use Rock Well ACD system in our call center.

5.9.4 Promotion Mix.

(1) Price cut and sale offer.

Tourizen.com will offer special price when customers buy from our website. It is commonly recognized as the most powerful incentive for all customers. For example, to sell off unsold capacity on under booked package tour, we will offer large discounts on specific days and also for group tours making cash settlement.

(2) Discount vouchers and coupons.

Offering of 10-15% discounts is commonly used for attracting tourists such as discount vouchers and coupons on one adult admission only basis. This way we generate high volume of sales. Users cannot exchange discount vouchers and coupons with money.

(3) Disguised price cut.

Disguised price cut is a popular way to maintain the regular price structure. We will offer added value to customers and incentive to buy. For example, we offer package tour to Europe to customers with rack rates but expect to generate added revenue through bar (1 drink per person).

(4) Extra product.

We will offer extra product as an incentive. For example, buy a package tour for 10 persons and get free for 1 person or free wine on certain dates for a tourist's birthday and additional sightseeing excursion may be added by the tour operator.

(5) Additional service.

We will offer welcome reception with Thai dresses at the airport or vouchers for beauty salon in some hotels to weekend visitors.

- (6) Free gift.

The gift will range from travel bags and passport wallets to badges or pens offered to children.

- (7) Member and reward.

Tourizen.com will offer rewards to promote loyalty and frequency of purchase by identifying repeat customers. We will use the power of computerized database for customer record. Also, reward points will be transferred as prizes.

5.9.5 Push and Pull Strategy.

Push.

Tourizen.com will use push strategy via following means:

- (1) E-mail.

We will send weekly news, promotion and information update to customers. For advertising, we will also send attractive flash movie file to customers.

- (2) Leaflet.

Leaflet is an effective channel because it can be specifically distributed to the target group.

Pull.

- (1) Provide information on web.

Tourizen.com can pull customers with our tourism information as the information contains the following;

- (a) Tourism Destination.
- (b) Transportation.
- (c) Accommodation.
- (d) Restaurants.

- (e) Souvenirs.
- (f) Temperature.
- (g) Currencies.
- (h) Tools & Tip for travel.

(2) Banner.

Banner can be used to pull customers when they click on to our online advertising banner which is presented in other websites. Tourizen.com will have online advertising banner on average of 5-10 websites which have high static of visitors.

(3) Activities and Games.

Tourizen.com will launch promotion activities and games through existing and new customers. Most of the Internet users are always interested in prizes and free gifts offered by promotion activities and games, thus it is an effective way to pull customers to our website.

5.10 Personnel Management.

Tourizen.com will manage staff divided into 2 groups;

(1) Full time employees.

- (a) 1 technician will be employed to work forty hours a week at 10,000 baht per month.
- (b) 2 administrative staffs will be employed at 6,000 baht per month.
- (c) 1 sale executive will be employed at 8,000 baht per month. (This includes commissions.)

(2) Part time employees.

Tourizen.com will employ part time employees working at standard rate. However, the decision to employ part time employees depends on time and

situation.

5.11 Organizational Structure.

There are five major roles of employees to support Tourizen.com.

Role 1: Management.

The founder who will be responsible for financial management, human resource management and overall monitoring will handle this function.

Role 2: Customer Care.

This function will be handled by customer support and general administrative staff.

Role 3: Technical Support.

This function will be handled by web support and technical management team in order to ensure the reliability of sale transaction and security management.

Role 4: Content Development.

This function will be handled by web content developer to update and to create new and interesting content.

Role 5: Sales.

This function will be handle by agencies and organization support.

5.12 Financial Analysis.

The Net Present Value Analysis.

Investment Capital

Web development	0	Baht
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Operating cost per year

Fixed cost

Office rental	60,000	Baht
Promotion cost	5,000	Baht
Salary	120,000	Baht
Hosting service	10,000	Baht
Facilities	60,000	Baht

Variable cost

Commission**	25	Baht
From Break-even analysis, total variable cost is	13,425	Baht
Total operating expense	268,425	Baht

Revenue per year

Monthly fee from Gold Package	158,250	Baht
Monthly fee from Silver Package	134,250	Baht
Fee from web information update	12,000	Baht
Fee from transaction	40,000	Baht
Fee from advertisement	12,000	Baht
Total revenue	356,500	Baht

Net Present Value for First Five Years.

Tourizen.com estimates the net present value for next five years before launching new services and developing call center service.

Net Present Value = Present Value of Cash Inflow – Present Value of Cash Outflow

Present Value of Cash Outflow is

Investment = 0

First year operating expense = 268,425

Second year operating expense = $268,425/1.05 = 255,642.85$

Third year operating expense = $268,425/1.05^2 = 243,469.40$

Fourth year operating expense = $268,425/1.05^3 = 231,875.60$

Fifth year operating expense = $268,425/1.05^4 = 220,833.90$

Total Present Value of Cash Outflow = 1,220,246.75

Present Value of Cash Inflow is

First year cash inflow = 356,500

Second year cash inflow = $356,500/1.05 = 339,523.81$

Third year cash inflow = $356,500/1.05^2 = 323,356.01$

Fourth year cash inflow = $356,500/1.05^3 = 307,958.10$

Fifth year cash inflow = $356,500/1.05^4 = 293,293.43$

Total Present Value of Cash Inflow = 1,620,631.35

Therefore, Net Present Value is 400,384.60

From calculation, the NPV is positive so the investment is worth undertaking.

Remark** Commission is 5% of expected revenue from selling travel agencies membership.

Break Even Analysis.

Monthly fixed cost is 255,000 baht.

Average variable cost per unit is 25 baht accounting for commission fee.

Average per package service is 500 baht

Therefore, the unit of sells are X2 by x2 is as following;

$$500X2 = 255,000 + 25X2$$

$$X2 = 536.84$$

Therefore, the company has to sell at least 527 units per year in order to break even.



VI. PROJECT IMPLEMENTATION

6.1 Hardware and Software Requirements.

The requirements of this system are as follows:

- (1) Hardware Specification.
 - (a) Pentium III 450 MHz Processor.
 - (b) 64 MB of RAM.
 - (c) 9.35 GB of Hard Disk.
 - (d) 44X CD-ROM Drive.
 - (e) 3.5 inch Floppy Drive.
 - (f) 17 inch Monitor.
 - (g) 102 Keyboard, Mouse.
 - (h) Modem.
- (2) Software Specification.
 - (a) Window Me.
 - (b) HTML Editor.
 - (c) Cute FTP.
 - (d) Internet Explorer 4.0, Netscape Communication.
 - (e) Internet access.
 - (f) Illustrator.
 - (g) PhotoShop.
 - (h) Flash.
 - (i) Dream Weaver.

6.2 How to Create a Web Home Page.

Creating a web home page is a relatively direct process. Here are the steps to create a home page.

- (1) Determine the goal of the home page. Will it be used to sell products, create an image or serve as a library for company information?
- (2) Create content and design of the web pages taking advantage of interactive tools to make files accessible.
- (3) Save the file as ASCII.
- (4) Import the file into an HTML (Hypertext Markup Language) program.
- (5) Assign codes to the content. These codes will assign font attributes, display pictures, link to other pages and allow forms and e-mail to be sent.
- (6) Load the home page onto a computer server.

6.3 Planning Web Site Development.

It is important to be able to answer these key questions readily:

- (1) What does the company provide?
- (2) How can its products be bought?
- (3) How can the company be contacted?
- (4) Are there any special offers available currently?

As well as answering these questions, the company's corporate and brand identity should be apparent to establish credibility, even from a short visit. For customers who repeatedly visit to site, updated information on products, prices or the market should be available, to encourage further repeat visits.

The prototyping approach has the following benefits:

- (a) It prevents major design or functional errors being made during the construction of the web site. Such errors can be costly and time consuming to fix once the web site becomes live and can also damage the company's image. Such errors will hopefully be identified early on and then corrected.
- (b) It involves the marketers responsible for the web site and ideally the potential

audience of the web site in proactively shaping the web site. This should result in a site that more closely meets the needs of the users.

- (c) The interactive approach is intended to be rapid, and a site can be produced in a period of months or weeks.

6.4 Web Site Designing.

One of the important rules Web designers need to bear in mind is that they must not ignore the needs of their users. Most of the time, a common mistake is made because sites are built more for designers and their needs than for the site's actual users. It is worth noting that what designers understand is not what a user will understand. Many users will not necessarily have the same knowledge of the sites or even the interests as designers do. Most users often have unrealistic requirements and expectations for sites. Some users will not think carefully about the individual components of a web site. Therefore, the key to successful, usable web site design is always trying to think from the user's point of view. In addition, author must remember that while users may have similar basic characteristics, they are also individuals. What may seem easy to one user may be hard for another. Sites that are created for a common user may not meet the needs of all users. Experienced users may find the site restrictive while novice users find it too difficult. Users are individuals with certain shared capacities and characteristics.

Our web site will take account of the relevant differences while focusing on the shared common features. In summary, the web site should be designed for the common user, but account for differences. Our web site will be created as a combination of utility and usability. Utility describes the site's functionality that hopefully meets a user's need. Usability describes the user's ability to manipulate the site's features in order to accomplish a particular goal. We try to make usable site that is efficient, easy to use and helpful for users in accomplishing their goals in a satisfactory and error-free manner. We try to keep

the users in mind at all times so that many of the most serious design errors can be avoided.

At this stage of web site design, there are a couple of practical rules to be followed:

- (1) Web Design Rule: Visual design should proceed in a top-down fashion from home page to sub section pages and finally content pages. Do not marry your design prototypes. Listen to your users and refine your designs.
- (2) Web Design Suggestion: Always consider the bordering effect of the browser window when developing visual composites.
- (3) Once you come up with an acceptable home page design, continue the process with sub pages and content pages.

Tourizen.com aims to organize the page layout in accordance with the practical rules. We would like to group our web site designing into 3 major parts:

- (1) Site Structure / Architectural Blueprint.
- (2) Site Content Design.
- (3) Visual Design.

The details are as follows:

- (1) Site Structure / Architectural Blueprint.

The design and the structure of the site are something that should be decided upon early in the development of the site, since it may be costly to redefine the structure at a later stage. The storyboarding method can be used to develop the site structure. Here are some of the examples why users visit the web site.

- (a) Users click to get into Tourizen.com for searching tourism information and comparing price.
- (b) When choosing a package tour, users can compare the price of a package tour with those from other tour agencies.

- (c) Users may need to book or make a reservation. Touiren.com will provide telephone number on the web page. Moreover, users will be able to book directly via Tourizen.com website in phase 2.
- (d) When buyers have decided to make a booking, they just needed to click order. Then the next frame with order ability will be shown and buyers have to select and put it into the cart and fill in the order form to complete the order process.

Having one diagram can do this or 'map' that shows the structure of the site and other sheets that show the layout of individual pages. An hierarchical or tree-like form is a very common type of web structure since it is natural to have a top-level 'home page' with different options.

The site structure of Tourizen.com is put into order to create an interesting and understandable resource for users. It provides tourism information and price comparison with a user friendly policy.

6.5 Tourizen Website.

Site Structure & Architectural Blueprint.

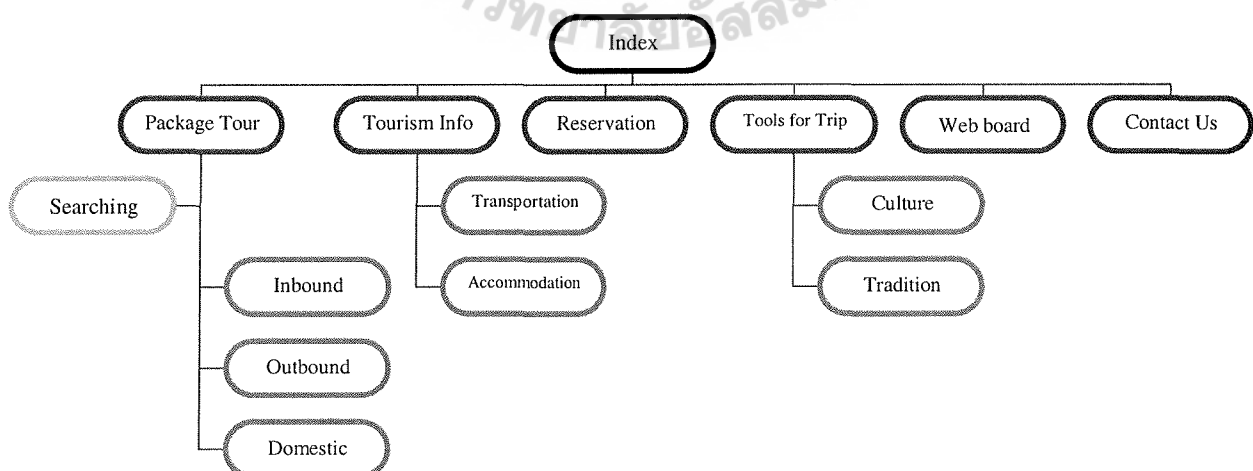


Figure 6.1. Tourizen Site Map.

Audiences.

The intended audiences of tourizen.com will include as follow:

- (1) International Tourist.
- (2) Local Tourist.
- (3) Tourist and Traveler.
- (4) Guide.
- (5) General People.
- (6) Any Organization in Tourism Industry.

The purpose of audiences to visit this website includes the following:

- (1) Searching for tourism destinations.
- (2) Searching for accommodations.
- (3) Searching for restaurants.
- (4) Searching for more information about tourism.
- (5) Searching for the cheapest cost for travel.
- (6) Searching for booking and make reservation.

User Experience and Group of Audiences.

- (1) International Tourists.

This group can separate by tourist destination.

- (a) International Tourist who want to visit abroad.
- (b) International Tourist who want to visit Thailand.

(Support Thailand inbound tour)

- (2) Local Tourists.

This group can separate by tourist destination.

- (a) The Local Tourist or Thai Tourist who want to visit upcountry

(Support Thailand outbound tour)

- (b) The Local Tourist or Thais Tourist who want to visit tourism destination in Thailand (Support Thailand domestic tour)

(3) Tourist and Travelers.

This group covers the Tourist and Traveler that not specific point of destination. This audience group also include for the adventurer and who travel for long period.

(4) Guides.

This guide group separate by destination

- (a) Outbound guide: who respond the tourist from Thailand to travel Upcountry.
- (b) Inbound guide: who respond the tourist from upcountry to travel in Thailand.
- (c) Domestic guide: who respond the local or Thais tourist to travel in any tourism destination in Thailand.
- (d) This group have the most experience and know how compared to other groups.

(5) General People.

This group consists of general people who are interested in tourism.

(6) Any Organization in Tourism Industry.

(Separate by type of expenditures)

This group consists of any organization in tourism industry that covers the following:

- (a) Shopping.
- (b) Accommodation.
- (c) Food & Beverage.

- (d) Entertainment.
- (e) Local transport.
- (f) Sight seeing.
- (g) Miscellaneous.

Competitive Analysis.

Table 6.1. Competitive Compare.

General Feature	www.tourizen.com	www.lonelyplanet.com	www.sabuy.com	www.expedia.com
Site Content	X	X	X	X
Navigation	X	X		X
Bookmark	X	X		
Layout	X	X		X
Look & Feel	X	X	X	X
Advertising	X	X	X	X
Information Feature	X	X	X	X
Accommodation	X	X	X	X
Restaurant	X		X	
Upcountry Destination	X	X		X
Thailand Destination	X		X	
Transportation	X	X	X	X
Flight	X	X		X
Train	X	X	X	X
Car	X	X	X	X
Cruise	X	X	X	X
Tools & Trips	X			X

Table 6.1. Competitive Compare (Continue)

General Feature	www.tourizen.com	www.lonelyplanet.com	www.sabuy.com	www.expedia.com
Airport Information	X			
Fare Tracker	X			
Currency Converter	X			X
Mileage Tracker	X	X		X
Weather	X	X	X	
Driving		X		
Tradition Tips	X			
Languages Tips	X			
Electric Tips	X			
Mobile Tips	X	X		
Embassies	X	X		X
Souvenir	X		X	
Handicraft	X		X	
Reservation	X			X
News	X		X	
Calendar	X			
Advisories	X			
Personalization	X	X		
Personal Pages	X			X
E-mail Newsletter	X			
Technology	X	X	X	X
Flash	X			
E-shopping	X			X

(1) Tourizen.com Feature.

(a) Site Design.

Website of netizen.com is designed especially for tourists with differentiate tastes. The site consists of many elements in order to attract visitors with the first impression. The use of elegant and attractive pictures can be representatives to visitors.

(b) Navigation.

The user can surf or explore this website very easily through the attractive topics. The links are grouped together so that the user will not get confused for website link.

(c) Bookmark URLs.

When the site is bookmark by the user, there is a short explanation of what is in the tourizen website.

(d) Layout.

The elements in tourizen.com are arranged in a way that the user can easily explore. The different designs and elegant pictures make the site very attractive.

(e) Look & Feel.

The tourizen.com's web site will make users feel relaxed and interested so that they will want to take a trip after visiting the site. The color of this website mostly is cream color in earth tone. This color was chosen because it is not colorful but relaxing, and it matches with the pictures. Normally, most of the pictures of tourism destination are blue color of the sea and river, or green color of the tree so we have chosen cream color as the main color.

- (f) Advertising Allowed.

Tourizen.com allows other advertising that involves tourism industry.

(2) Site Content.

For some businesses, content is all they really have to offer, so it must be the main focus of their marketing. For other businesses, content enhances the value and appeal of their other offerings. In both cases it becomes essential to figure out the best way to present content and turn it into revenue.

For tourizen.com, the main target is tourists so the content of this website should

- (a) Cover the information of tourism both of Thailand and other countries.
- (b) Cover the information of means of transportation.
- (c) Cover the information of accommodations.
- (d) Cover the information of restaurants.
- (e) Cover the advisory functions such as currency converter, weather, etc.
- (f) Provide news and knowledge about tourism industry.
- (g) Provide some tools and trip for tourist.
- (h) Provide booking and reservation services.
- (i) Provide e-shopping distribution.
- (j) Provide the alliance link.
- (k) Provide the contact and feed back function.

Tourizen.com Content.

Homepage

The first page presents many elegant pictures and metaphors. This page provides two choices for user: html page and flash page to link to other pages.

Take a Trip	This page provides worldwide tourism information of different continents and countries. In this page user can choose tourist destination that they are interested in and go through the point page.
Tour Thailand	This page provides tourism information of different provinces in Thailand. The page will link users to the province where they are interested such as Phuket, Chiangmai, etc.
Accommodations	This page provides the information regarding accommodation which covers hotels, resorts, B&B, etc. The function of accommodation is separated by places and also can link through.
Restaurants	This page provides the information of restaurant such as where is the restaurant and what kind of foods is available.
Transportations	This page provides the information of transportation separated by Flight, Train, Car, and Cruise. This information also includes time tables.
Tools & Tips	This page provides the information of tools and tips for tourists, for example Currency Converter, Driving Directions, etc.
News	This page provides tourism news from around the world.
Calendar	This page provides navigation for travel by date.

The user can see the date of festival in the calendar and set their trip later.

About us

This page provides the information about Tourizen.com and the contact channels.

(3) Organizational Metaphor.

Tourizen.com has created a website for the tourist target group which matches the concept of the comfort channel. The visual metaphor of tourizen.com is design in the concept that is creative and easy to understand. It should also be very easy to recognize and understand what the information behind the icon is. The visual metaphor has been applied to many parts of this website with various interesting icons.

(4) Define Navigation.

Tourizen.com provides many facilities for tourists. So this website contains many pictures for communicating with users. In the first page or homepage, there are icons with specific pictures for the users to choose. The picture point can link to the information destination. Tourizen.com contains a lot of navigation with creative style to link to other sites making the user comfortable. In addition, to prevent users from getting lost, the website provides clear navigators for users. It puts the same or related topics together. Users can also easily search for some information by using pull- down menu.

(5) Visual Design.

Tourizen.com provides every user to log on to the website. The color tone is based on cream color with a nice style. The cream color also matches with the pictures well.

Web graphic and design are created for the main target group who are tourists. The information is provided to the right target users for easy understanding.

Tourizen.com emphasizes both on data or information and pictures. Most of the pictures are concerned with tourism destination, culture, and festival that can communicate to the users.

This website has created a design different from other websites in tourism industry. To avoid time consuming process of loading, tourizen.com provides an html page for users who do not need to wait for flash version. On the other hand, sound effect and animation are added to attract the users.

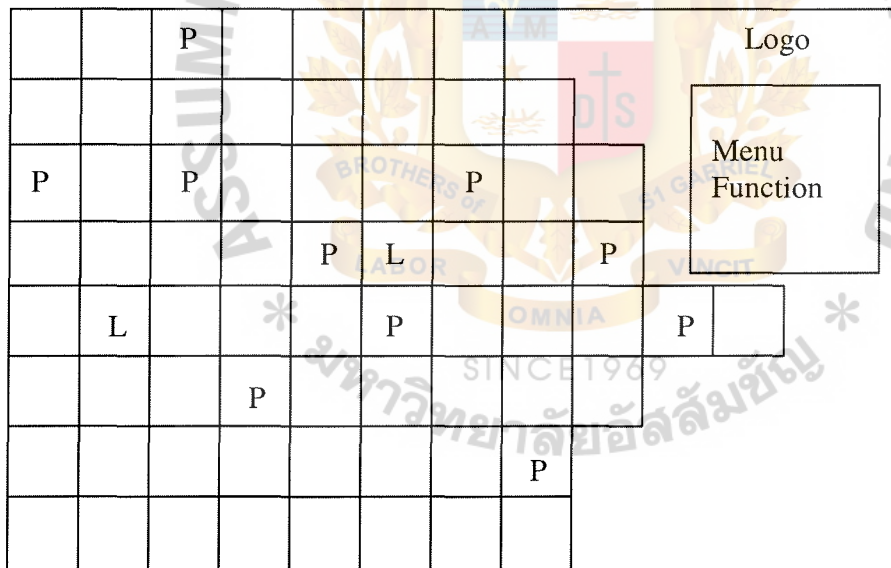


Figure 6.2. Visual Design Index Page.

Tourizen.com presents the first page of its home page in a style different from other tourism websites. In this page, we provide a lot of visual metaphor and pictures that can communicate with the users clearly. As shown in the above diagram, the logo appears on

the top right hand side and the menu link function underneath. The little boxes contain both the logo of alliances and pictures that can link to information inside.

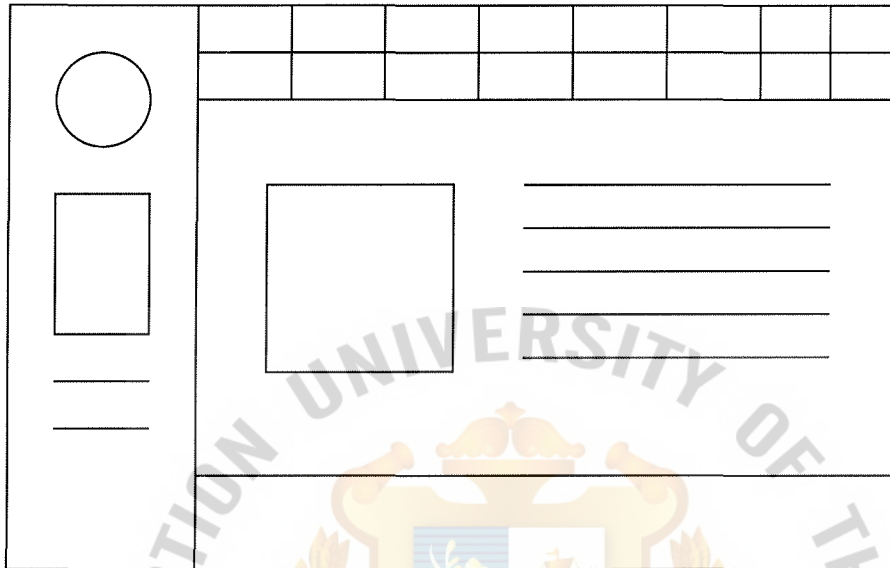


Figure 6.3. Visual Design Home Page.

In this page, tourizen.com presents the main menu on top and sub menu on the left-hand side. In the middle is the image representing the underlying information. On the right hand side of the image, the relevant information is provided. Upper left side is the logo of alliance that can link to the other website.

(6) **Layout Grid.**

Layout Grid 1.

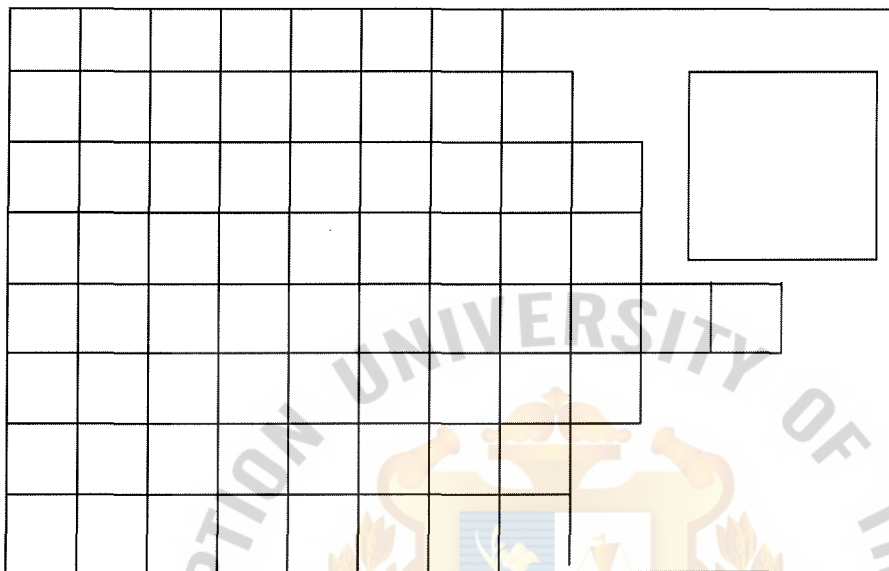


Figure 6.4. Layout Grid 1.

Layout Grid 2.

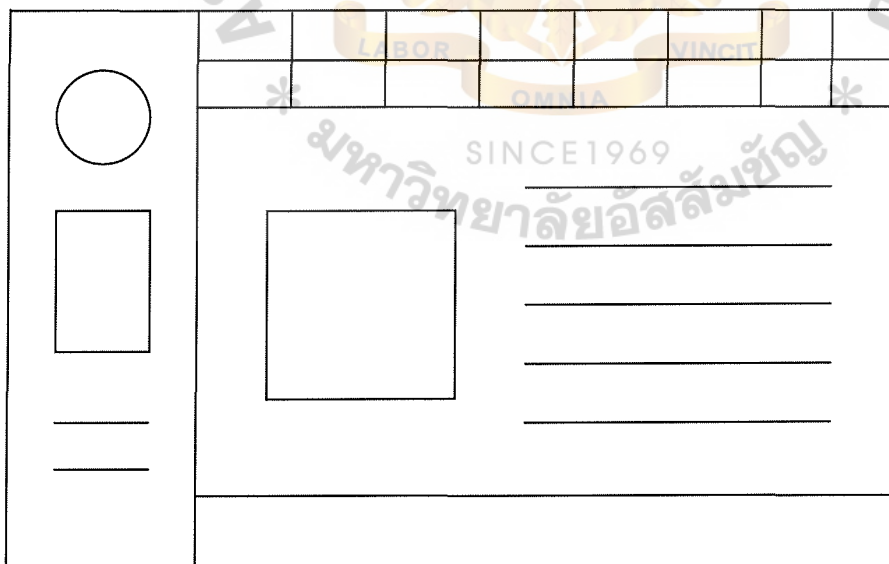


Figure 6.5. Layout Grid 2.

(7) Design Sketches.

“Tourizen” this word comes from

Tourist: A tourist is a person who visits places for pleasure and interest.

Citizen: A person who has a particular nationality.

Tourizen: A person who has a particular tourist nationality.

The first page of the home page is decorated with many pictures. By clicking on the pictures, users can learn more about the information inside. They can also visit alliance's web site by clicking on its logo.

The look and feel of tourizen.com make users feel relaxed and interested so that they want to take a trip somewhere after visiting the site. The color of this website mostly is cream color in earth tone. This color was chosen because it is not colorful but relaxed, and it matches with the pictures. Normally, most of the pictures of tourism destination are blue color of the sea and river, or green color of the tree, so we have chosen cream color as the main color.

Figure 6.6. Flash Introduction 1.

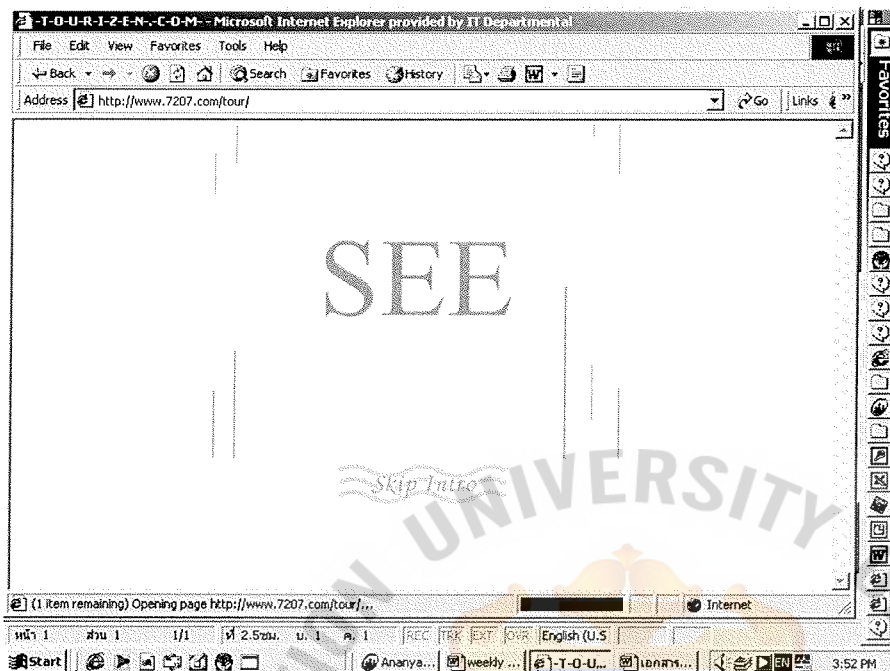


Figure 6.7. Flash Introduction 2.



Figure 6.8. Flash Introduction 3.

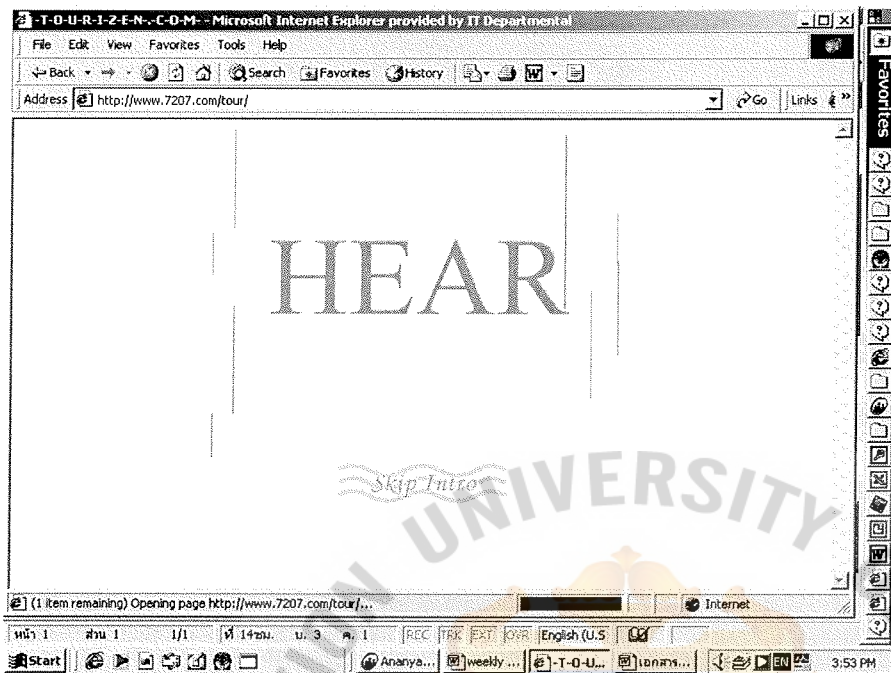


Figure 6.9. Flash Introduction 4.

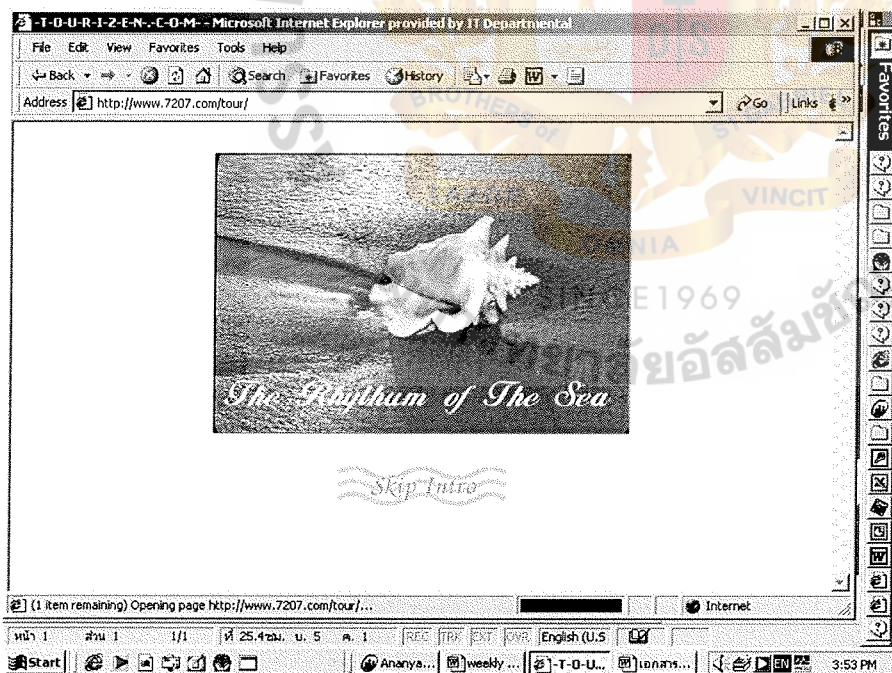


Figure 6.10. Flash Introduction 5.

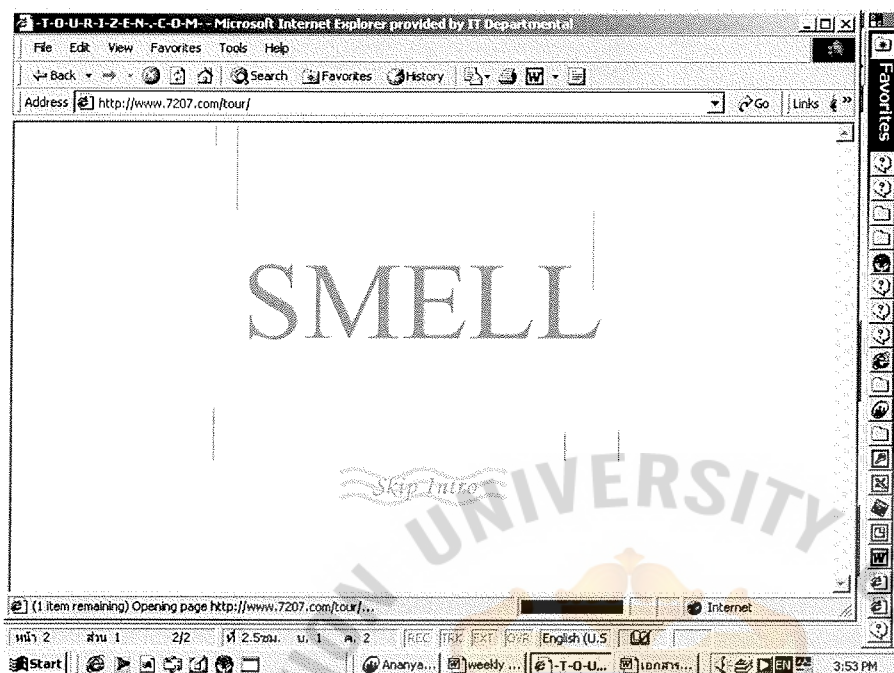


Figure 6.11. Flash Introduction 6.

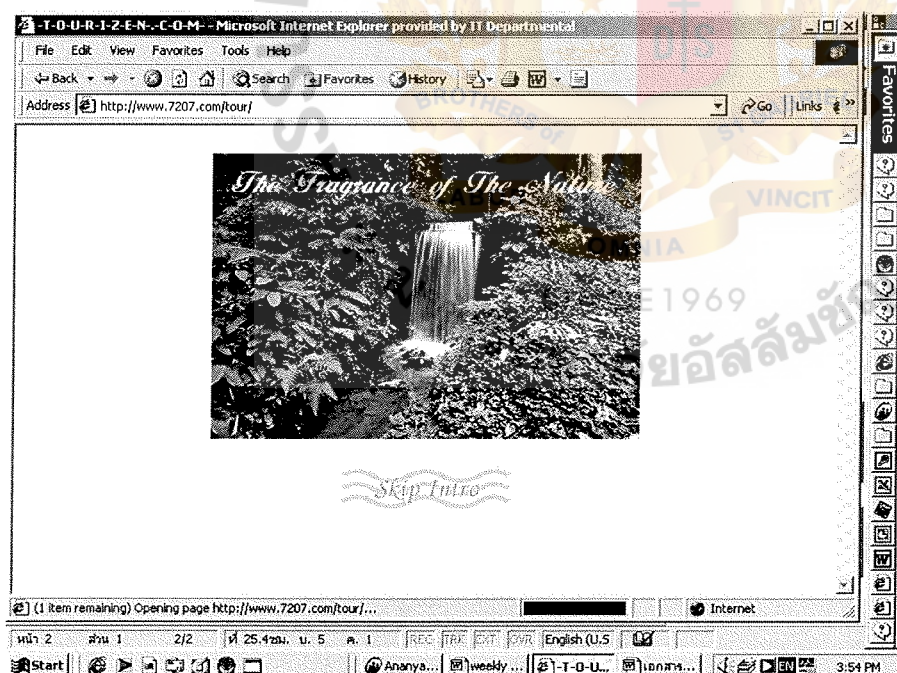


Figure 6.12. Flash Introduction 7.

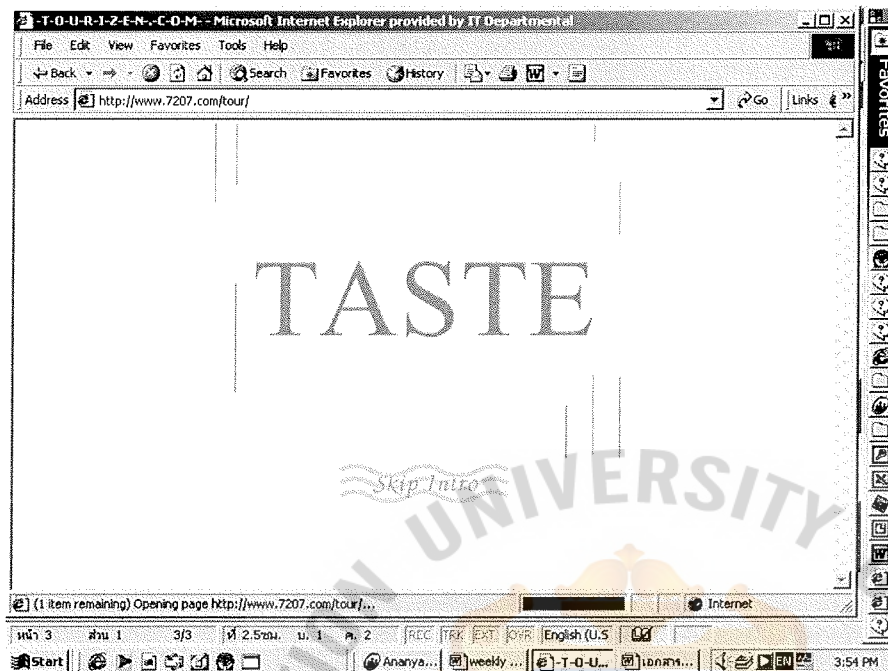


Figure 6.13. Flash Introduction 8.

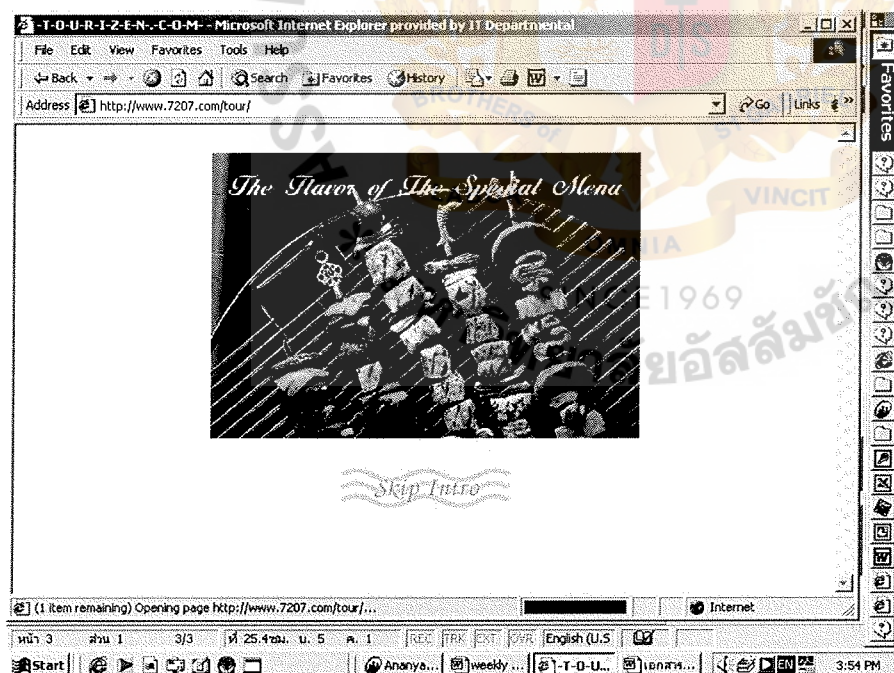


Figure 6.14. Flash Introduction 9.

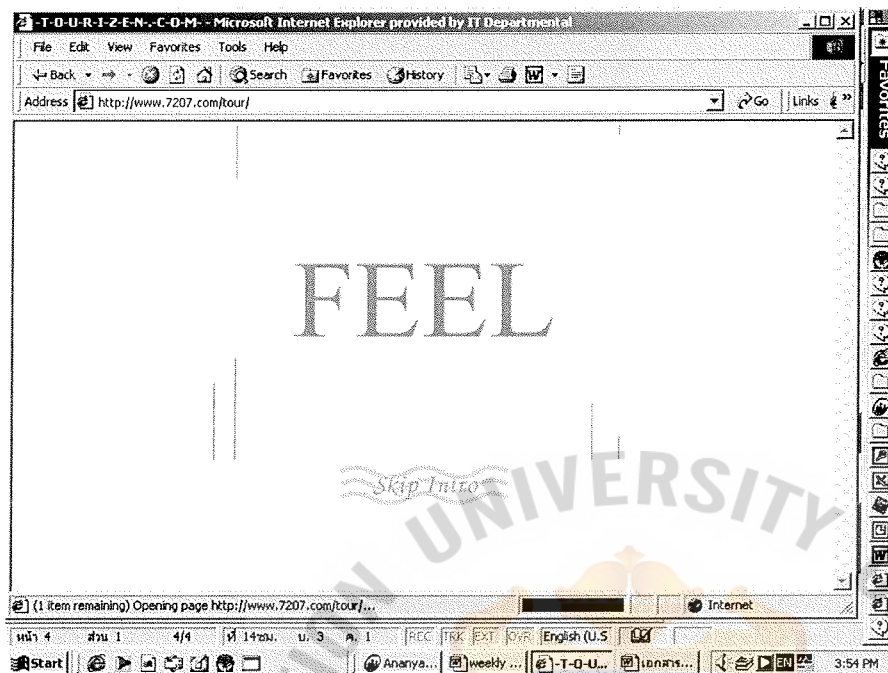


Figure 6.15. Flash Introduction 10.

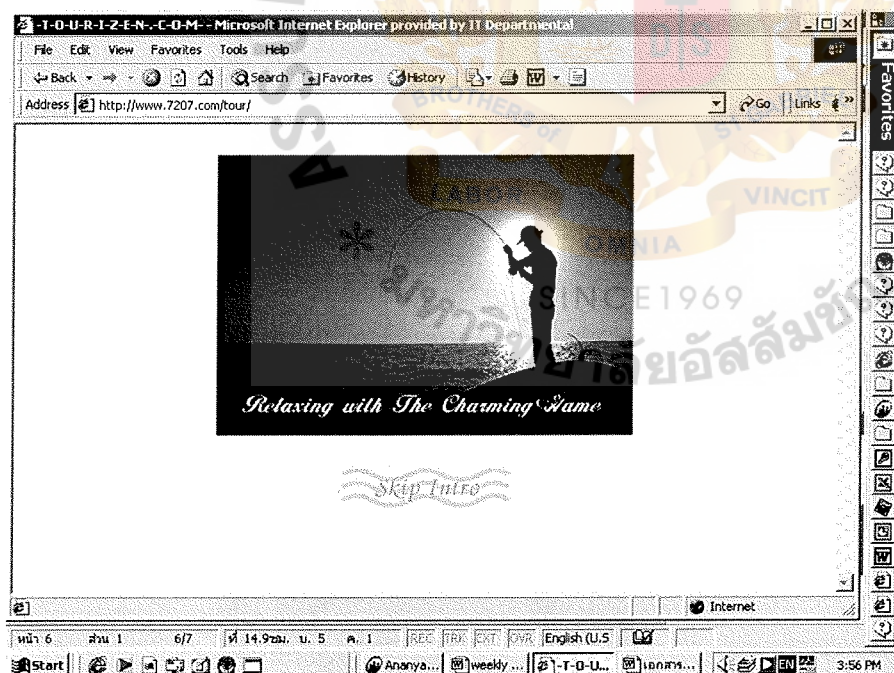


Figure 6.16. Flash Introduction 11.

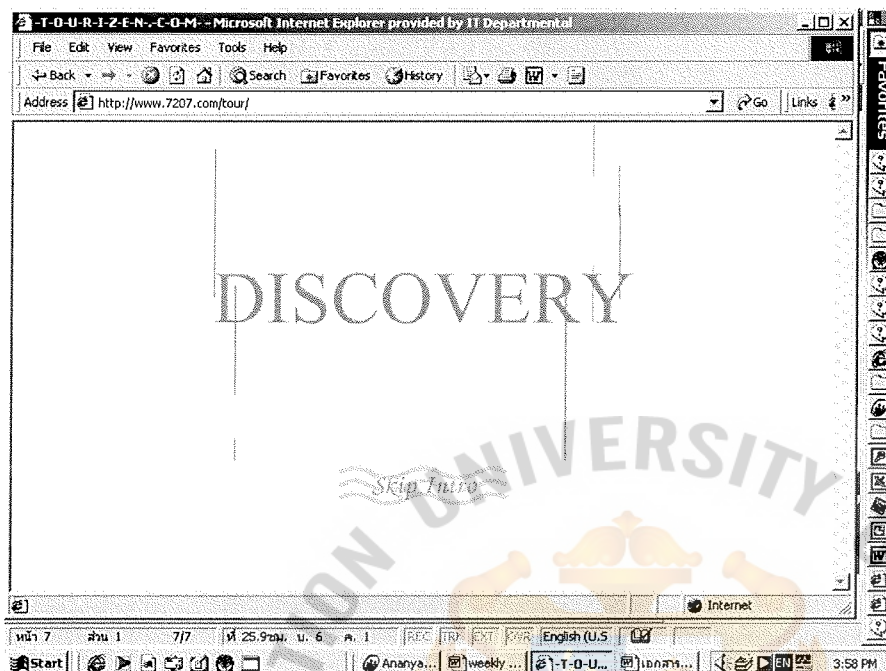


Figure 6.17. Flash Introduction 12.

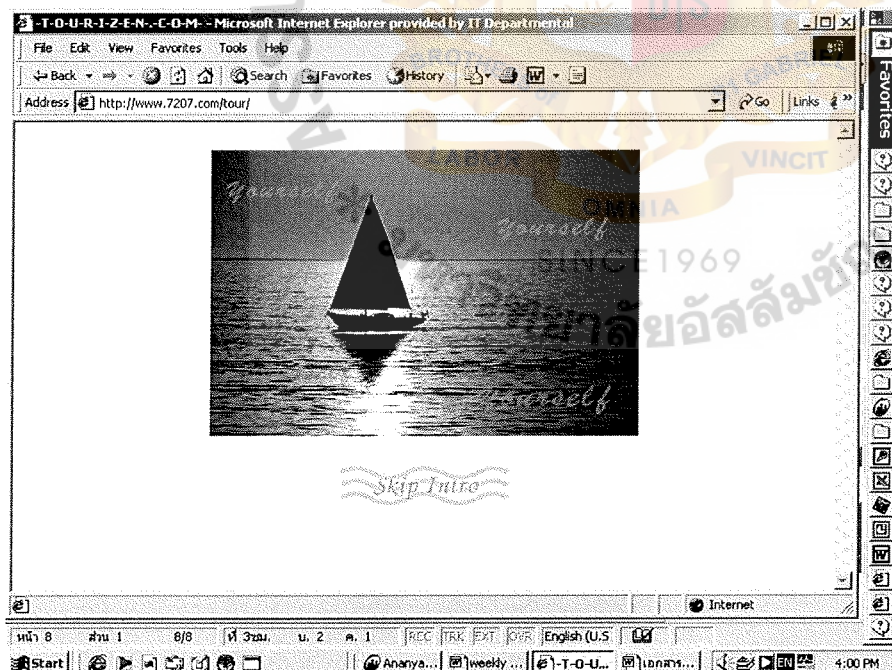


Figure 6.18. Flash Introduction 13.

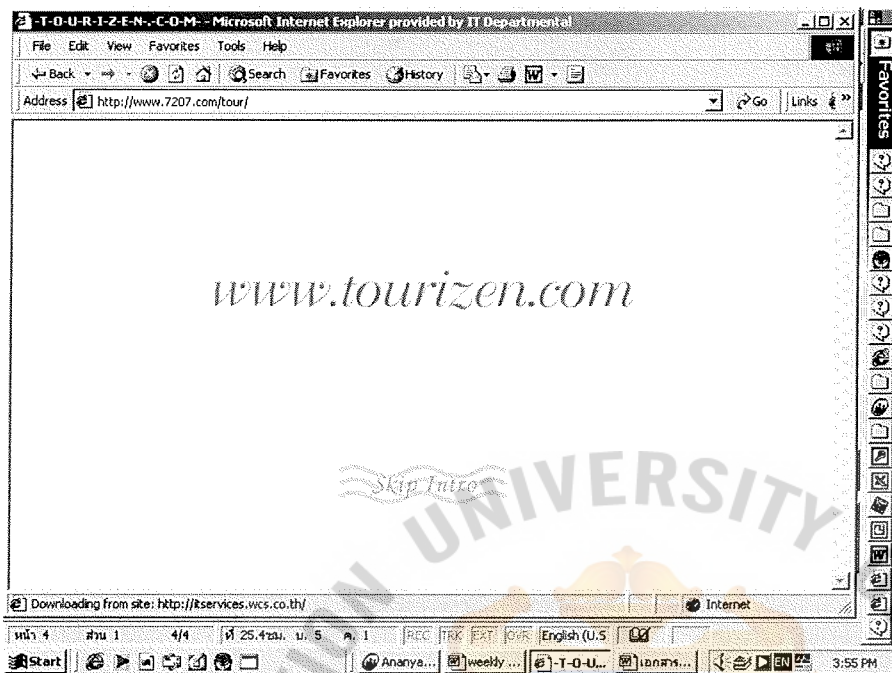


Figure 6.19. Index Page.

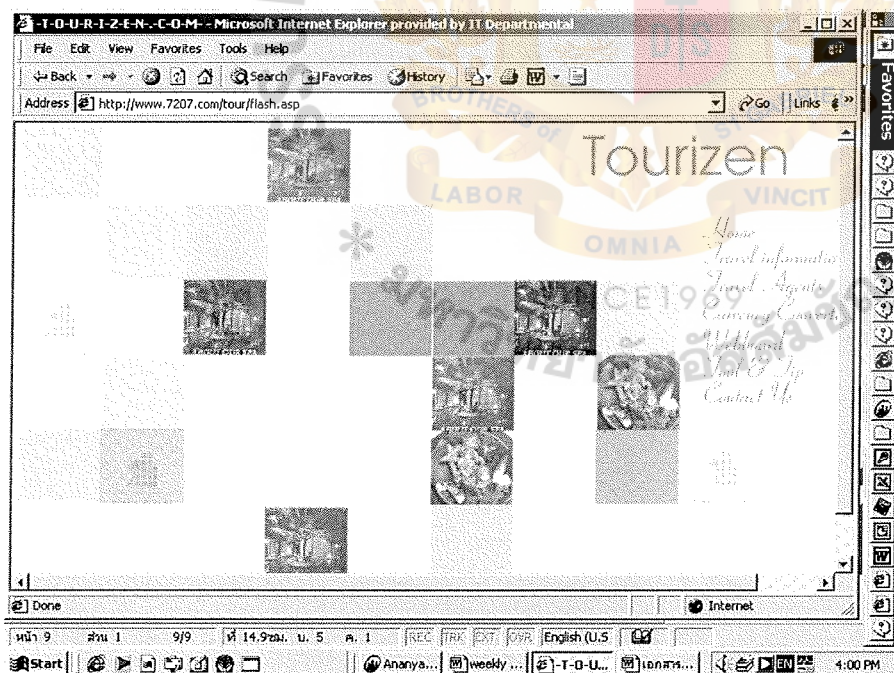


Figure 6.20. Home Page.



Figure 6.21. Travel Information Page.

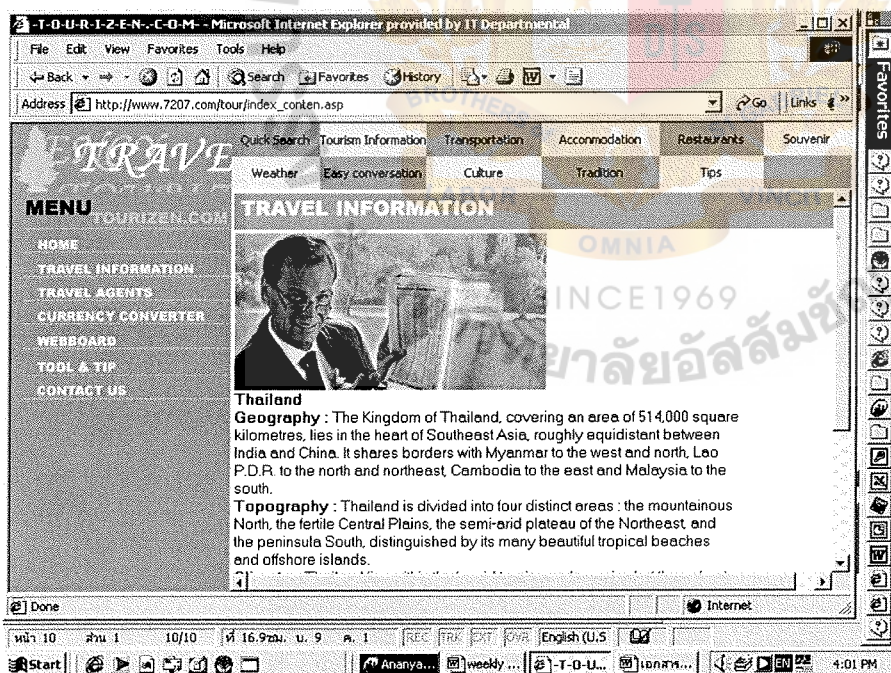


Figure 6.22. Currency Converter Page.

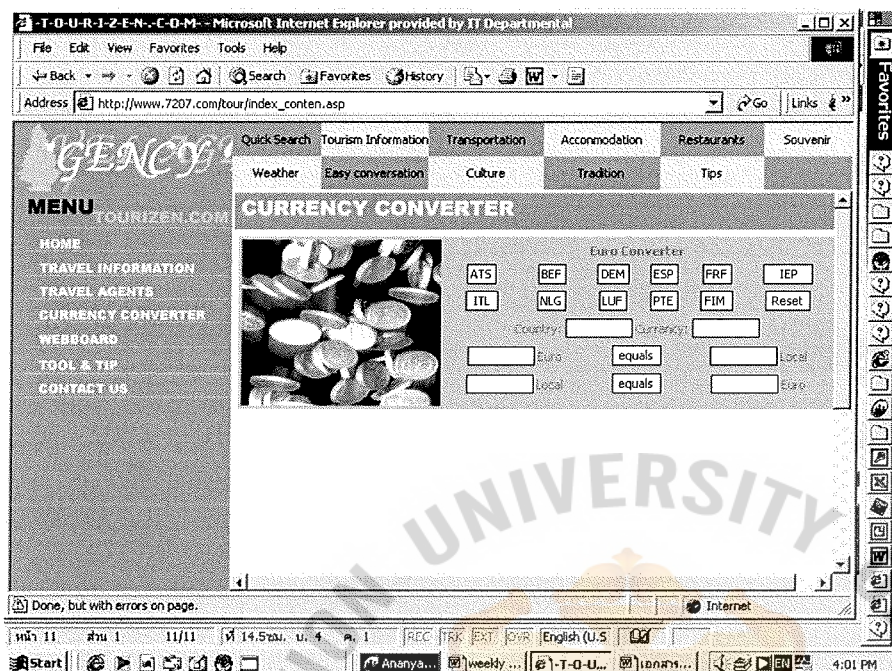


Figure 6.23. Webboard Page.

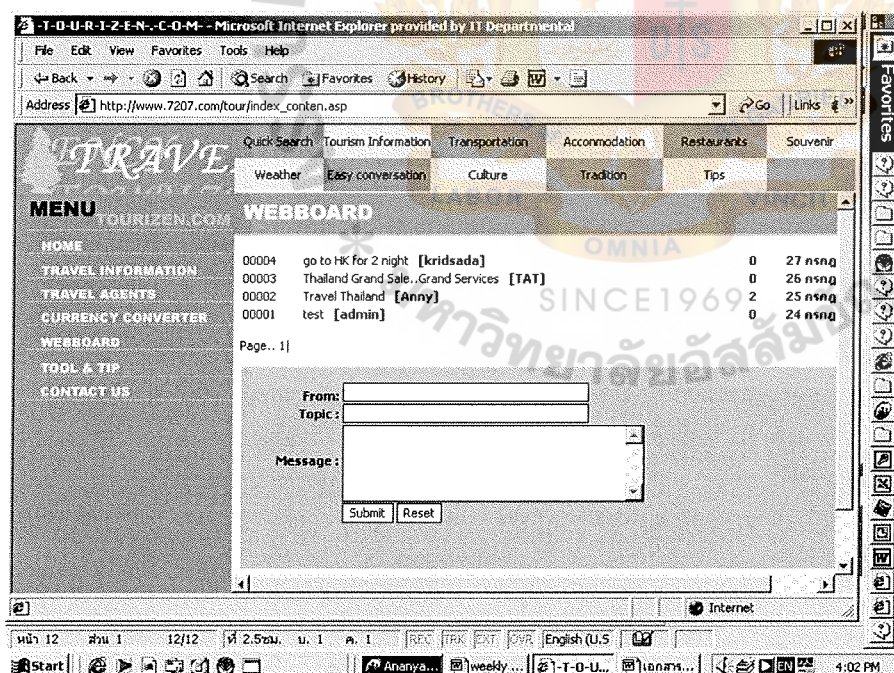


Figure 6.24. Posting Page.

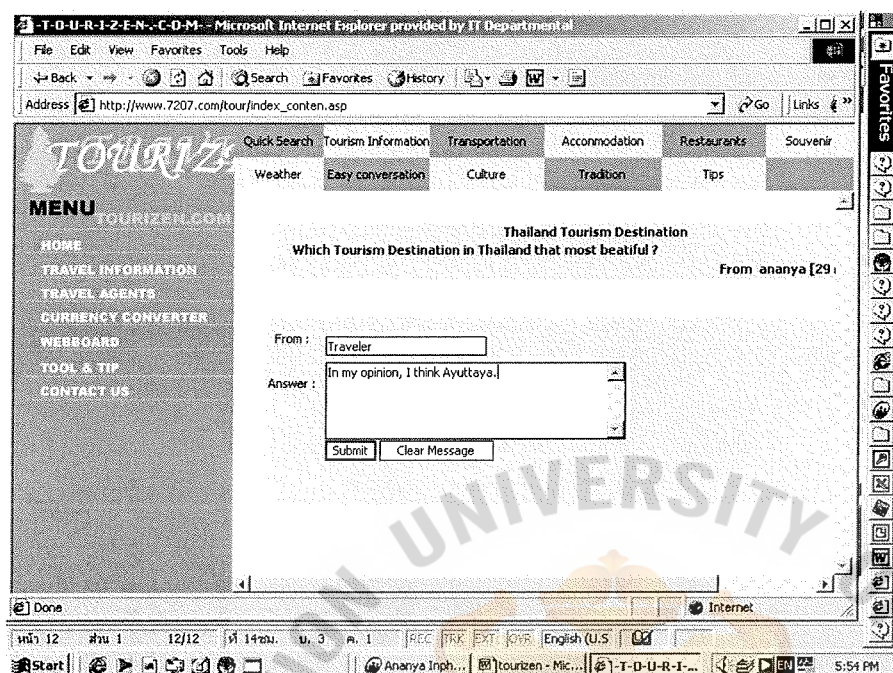


Figure 6.25. Tool & Tip Page.

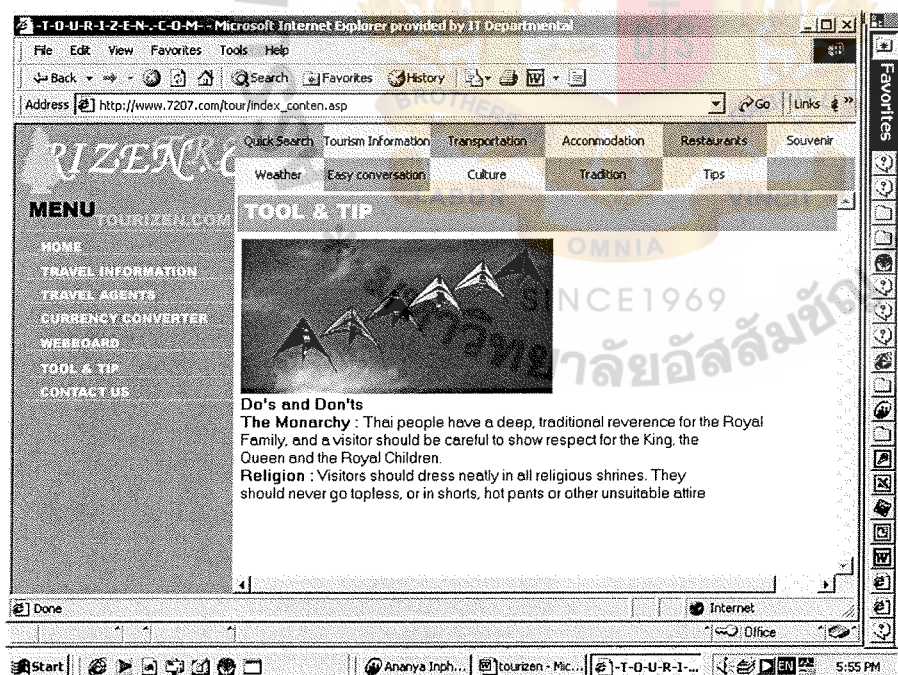
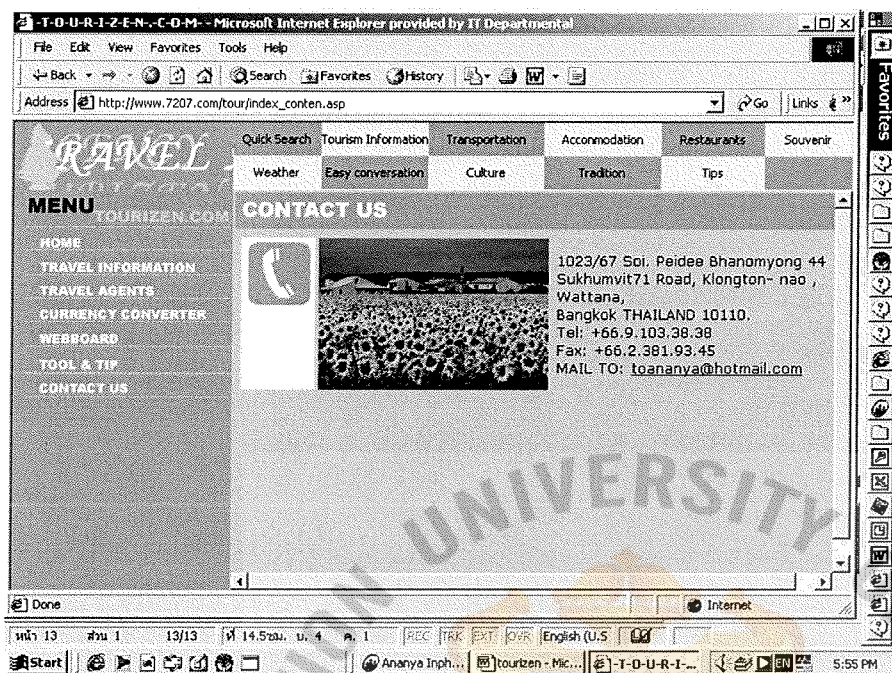


Figure 6.26. Contact Us Page.



VII. PAYMENT

7.1 Our Payment Method.

Refer to our business plan:

(a) Short Term Business Plan (1 - 2 years)

We prefer to use offline payment since Thai E-commerce laws are not well established. We ask our customers to use letter of credit or other funds transfer between banks to transfer payment to our account at the address following.

The Bangkok Bank Co.,Ltd.

Thonglor Road, Bangkok

Netizen Co.,Ltd.

A/C 002-9068388 SWIFT No. SICOBKTH

(b) Long Term Business Plan (3 years and after)

We plan to use online payment because by that time Thai E-commerce laws should be clearly stated and most customers will be familiar with the online payment method. Our payment gateway will use the Security of VeriSign to make the customers trust in our payment system.

Traditional payment methods have same limitations and problems. Because of that electronic payment methods such as non-credit or pre-paid systems are considered to be more suitable for e-commerce transactions. The following discussion will show how these methods suit the requirements and security of online shopping.

7.2 Non-credit or Pre-paid Systems.

Most of the non-credit systems operate using a pre-paid principle. In other words, before purchasing an item electronically, the purchaser must already have electronic funds available that can be immediately transferred to the merchant. These funds can exist in a variety of forms, known as electronic tokens. Electronic token are usually purchased form

various electronic tokens issuers using a traditional payment device such as a credit card or by a transfer of cash into a personal account.

Credit cards such as Visa or Master cards are the predominant means of making online payments, since they fulfill the requirements of a payment system well and they are already existing standards.

A customer usually makes a credit card payment directly to the merchant, by filling in the card number and address on an online form.

7.3 Problems with Traditional Payment Methods.

Traditional payment methods do not work online for the following reasons:

- (1) Lack of convenience.

Traditional payment methods generally require that the consumer leave the online platform and use the telephone or send a check in order to make payment.

- (2) Lack of security.

In order to make a traditional payment over the Internet, a consumer has to provide card/payment account details and other personal information online. Leaving the Internet and providing the card/payment account details over the telephone and/or by mail also entails security risks.

- (3) Lack of coverage.

Credit cards only work with signed-up merchants, and do not generally support individual-to-individual or direct business-to-business payment transactions.

- (4) Lack of eligibility.

Not all-potential buyers have suitable credit ratings to allow them

access to credit cards and/or checking accounts.

- (5) Lack of support for micro transactions.

Many payments made over the Internet are of sufficiently low value that the cost of a phone call or letter may be too high of an overhead. The cost of handling these payment methods is often too high for the seller to break even.

7.4 Limitations of Traditional Payment.

In their present form, traditional payment methods such as checks are not adequate for real-time payment interaction. "Real-time" means that these transactions are triggered and completed when the consumer hits the "pay" button on the Web browser. With real-time payments, a consumer's Web browser delivers payment instructions to a merchant, who forwards those instructions to a network bank. The bank then authenticates the individual and disburses funds to the merchant. The merchant delivers the purchased product upon customer verification.

Off-line payment methods make two fundamental assumptions:

The transacting parties, buyer and seller, will at some time be in each other's physical presence.

There will be a sufficient delay in the payment process for detection of fraud, overdraft, and other problems to be identified and corrected.

These assumptions are not valid for electronic commerce, and thus many of these payment mechanisms are being modified and adapted for the efficient conduct of business over computer networks.

7.5 How Electronic Payments Fit into the Shopping.

To understand how electronic payments fit into the shopping experience consider the following process:

The consumer browses for items. Using a Web browser, consumers view an online catalog on the merchant's World Wide Web page, or a catalog supplied by the merchant on a CD-ROM, or by looking at a paper catalog.

The consumer selects items to be purchased. He does this by comparing prices and gauging the best value based on brand name, prices, quality and other variables.

The merchant presents the consumer with an order form containing a list of items, their prices, and total prices, which include shipping, handling, and taxes. This order form may be delivered from the merchant server to the consumer's PC. Some online merchants may provide consumer with the ability to negotiate pricing (such as by presenting frequent shopper identification or information about a competitor pricing).

- (1) The consumer selects the means of payment. The different means of payment include digital cash, electronic checks, or credit cards.
- (2) The consumer sends the merchant a completed order and a means of payment.
- (3) The merchant requests payment authorization from the consumer bank.
- (4) The merchant sends the customer a confirmation of the order, shipper and payment.
- (5) The merchant ships the goods or performs the requested services according to the order.
- (6) The merchant requests payment from the consumer's financial institution.
- (7) The ensuing sections focus on the steps where the consumer chooses an electronic payment mechanism as a means of carrying out the transaction.

7.6 Security for Online Ordering.

Taking the order online is easy. Ensuring the confidentiality of the data might not be at least not yet. Customers can easily order products in several ways. They can pick up the phone and call the order center, send an e-mail note, complete an online order form, or print

out the order form and send it via fax or phone.

Questions of security arise for both consumer and merchant. The consumer wonders if her credit card information is secure on a network. Can hackers steal credit card numbers? The merchant wonders if he can be protected against fraud. Is the person ordering the legal owner of the card or a thief?

The specter of fraud exists for the merchant as well. He might receive calls from thieves who are placing orders with stolen credit cards. Good business practice calls for merchants to call the credit card authorization center to make sure the card is valid. However, fast thieves can place many orders online before the card's original owner realizes the card is missing and calls in to report the disappearance. By that time, many merchants could be liable for a lot of money.

Just as in any credit card transaction, there are certain risks. Proponents of online shopping say security of credit card numbers is just as reliable-or unreliable-as in any other transaction. After all, thieves can steal credit card numbers from carbons tossed into the garbage in a restaurant or store. Unscrupulous employees can steal credit card numbers given to them over the phone or sent via mail order. All businesses have risks. The online commercial services assert that they have secure systems that cannot be violated by hackers trying to steal credit card information. The Internet does not make such claims.

Companies are developing data encryption software that will make all information, including credit cards information more secure. The threat of stolen credit card numbers might be a thing of the past very rapidly as companies create encryption programs. Microsoft and VISA announced that they have developed a secure system, as did Netscape Communications Corp., of San Jose, California, a leading publisher of Internet software, which formed an alliance with First Data, a credit card processor, based in Hackensack, New Jersey. Other players in the market include Cyber Cash of Vienna, Virginia, and Open

Market, Inc., Of Cambridge, Massachusetts.

Because of these potential risks, banks also are wary about online transactions and have established stiffer than usual requirements for new merchants who sell products online. They are taking a hard-nosed approach to granting credit card processing terminals to companies that do business online.

"Banks are afraid of mail order and online businesses. They don't want to take the risk of being vulnerable," says Bob Schechner of Northwest Bank Services of Phoenix, which arranges for online businesses to obtain credit card processing services, a process that takes about two weeks. He urges companies to take the following steps to protect themselves from fraud and returns:

- (1) Send the product by a carrier that provides a signed record of delivery so that customers cannot claim they never receive the product. If they honestly do not receive the product, the shipper's records can be traced.
- (2) Call the credit card authorization center to verify the credit card number before shipping the product.
- (3) Ship the product quickly. People change their minds and then claim they never ordered the product.
- (4) Ask for the customer's address for verification purposes. This is especially important for online orders of information products or other products that are transmitted to the customer over the online system like a newsletter, software, research or consulting service. In those cases, the merchant or consultant probably would not have thought to make a record of the address because he is not mailing or shipping anything over a normal shipping route to the customer.

7.7 Secure Electronic Transaction (SET)

Secure Electronic Transaction is a collection of encryption and security specification used as an industry-wise, open standard for ensuring secure payment over the Internet.

Visa and MasterCard developed SET officially with the participation from leading technology companies, including Microsoft, IBM, Netscape, SAIC, Gm, RSA, Terisa Sysemts, and Verisign.

SET establishes a single technical standard for protecting payment of card purchases on any type of online network, including the Internet and other open network.

SET uses cryptography techniques to provide confidentiality and security, ensure payment integrity, and authenticate both the merchant and the cardholder. This means that merchants are protected from merchant imposters or theft of their card number. SET is based on public-key encryption and authentication technology from RSA DATA Security.

The significance of SET, over existing Internet security protocols, is found in the use of digital certificates. Digital certificates will be used to authenticate all the parties involved in transaction. SET will provide those in the virtual world with the same level of trust and confidence when making a purchase online.

The primary goals of SET are to protect the credit card system, establish confidence in the Internet as a marketplace, and build transaction volume over the Internet. SET focuses on maintaining confidentiality of payment data, providing authentication of cardholders, merchants, and acquirers, and ensuring message integrity. Furthermore, SET establishes a method for interoperability of secure transaction software over the multiple, popular hardware platforms and operating system.

The specifications of SET mentioned above provide a level of security to the card payment acceptance that will encourage consumer and business to make wider use of payment cards in this new commerce channel.

Why Do We Need SET?

One of the benefits of the Internet is that users can tap the information anytime, and anywhere in the world. However, it does pose some practical drawbacks.

The potential for fraud and deception is far greater online. When the customer purchases service or goods over the Internet, it is difficult for the merchant to determine whether or not they hold a valid account. And it is not easy for the merchant to feel comfortable accepting a credit card account number without some form of identification. In order to combat fraud there has been increasing focus on authentication on the web.

At the same time, customers who purchase online need some protocol to make sure that confidential information of their credit card is received only by the right person.

In short, there are seven major business requirements addressed by SET:

- (a) Provide confidentiality of payment information and enable confidentiality of order information that is transmitted along with the payment information.
- (b) Ensure integrity for all transmitted data.
- (c) Provide authentication that a cardholder is a legitimate user of a branded payment card account.
- (d) Provide authentication that a merchant can accept branded payment card transactions through its relationship with an acquiring financial institution.
- (e) Ensure the use of the best security practices and system design techniques to protect all legitimate parties of an electronic commerce transaction.
- (f) Ensure the creation of a protocol that is neither dependent on transport security mechanisms nor prevent their use.
- (g) Facilitate and encourage interoperability across software and network providers.

The Participants.

This part will focus on the parties involved that play an important role in a SET transaction.

- (1) Cardholder: The cardholder is analogous to the average person who uses a payment card to purchase goods or services.
- (2) Merchant: This is the business or organization who sells goods or services to the cardholder. In the case of a SET transaction, business with the merchant is performed electronically over the Internet.
- (3) Issuer: The issuer is a financial institution that provides the cardholder with a payment card. The issuer's responsibility is to guarantee payment on behalf of its cardholder. The issuer's processing is out-of band from the perspective of SET, although it is still part of the transaction as a whole.
- (4) Acquirer: The acquirer is the financial institution that processes payment card authorizations and payments for the merchant. The acquirer's responsibility is to obtain payment authorization from the cardholder's issuer.
- (5) Payment Gateway: A payment gateway, or gateway, is an institution that works on the behalf of the acquirer to process the merchant's payment messages, including payment instructions from the cardholders. The gateway bridges communication between SET and the existing credit card network.
- (6) Certificate Authority: Certification provides a means of assuring that the parties involved in a transaction are who they claim to be.

Features of SET.

The business requirements mentioned above are addressed by the following features:

- (1) Confidentiality of information.
- (2) Integrity of data.

- (3) Cardholder account authentication.
- (4) Merchant authentication.
- (5) Interoperability.

SET outline a series of messages, as well as their contents and format, that are sent among the participants of an Internet transaction.

Confidentiality of Information.

In today's online transaction, payment instructions containing account information are often transmitted from cardholders to merchants over open network with little or no security precaution. This can discourage customer using payment cards over the Internet.

To facilitate and encourage electronic commerce using payment cards, it will be necessary to assure cardholders that their payment information is safe and accessible only by intended recipient. Therefore, unauthorized individuals must secure credit card account and payment information as it transmits across the network, preventing interception of account numbers, and expiration dates. SET provides confidentiality by using message encryption.

Integrity of Information.

SET provides means to ensure that message content is not altered during the transmission between originator and recipient. This means that the message received should match the message sent.

Payment information sent from consumers to merchants includes credit card account, order information, personal data and payment instructions. If any information is modified, the transaction may no longer be processed accurately. In order to eliminate the source of fraud and error, SET with digital signature is used to ensure information integrity.

Consumer Account Authentication.

Merchants need a way to verify that a consumer is a legitimate user of a valid account

number. Digital signature and digital certificate ensure consumer account authentication by providing a mechanism that links a consumer to a specific account number. A way to secure this link is by the use of a trusted third party who could validate the public key and account of a customer. SET designates a third party called a certificate. Authority is to authenticate the sender and receiver.

Merchant Authentication.

The SET specifications provide means for consumer to confirm that a merchant has a relationship with a financial institution that allows the merchant to accept bank card payments by using digital signature and merchant certificates.

Interoperability.

Any consumer with compliant software must be able to communicate with any merchant software that also meets the defined standard.

The SET specifications must be applicable on a variety of hardware and software platforms, and must not prefer one to another. Interoperability is ensured by the use of standard protocols and message formats.

As mentioned above, the specification of SET meets the business requirements. The use of technical underpinnings of SET standard will be launched in phase 2.

VIII. CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions.

Tourizen.com – the first electronic tourism market place in Thailand - will provide tourism information and pricing that Internet users can use to search package for tour and compare prices from many travel agencies. Travel agencies and Internet users can negotiate, submit bids, and agree on an order and finish the execution on line or off line in Tourizen.com. At the same time, Tourizen.com will support travel agencies with the consulting service in providing e-travel solutions.

In addition, travel agencies will be able to update package tour and information by themselves. Internet users can book and use electronic payment channel in Tourizen.com as one stop service. Moreover, Tourizen.com will be a comprehensive tourism web that contains many services regarding travel and tourism such as Travel Insurance, Climbing Mountain Accessories, etc.

The purposes of Tourizen.com are to revolutionize the entire tourism industry, generate new business models, change the structure of tourism distribution channels and re-engineer all processes.

Finally, Tourizen.com will bring together some of the most rapidly developing components of tourism industry including information communication technology, e-commerce, tourism/ travel/ hospitality and strategic management/ marketing/ planning.

8.2 Recommendations.

Our online business is an evolutionary process and should grow as our business grows. If we ignore our site and its possibilities, we will miss out on a major opportunity to grow our business in the future. So managing for the future is very important as stated below:

- (a) Review and improve our web site at least once a year to make it more attractive and to use the pull technology that will make visitors come to see our web site again and again.
- (b) Set up sale promotions on special occasions such as on Christmas day or New Year day by offering special package sets at special prices.
- (c) Serve customers better and set up call center.
- (d) Catch up the IT technology to improve our online business.
- (e) Collect customers' information and e-mail address, and send some useful information or send beautiful greeting cards with our products inside on some special occasions such as birthday, Christmas, New Year, etc. The name and pictures of our shop will remind them to visit our web site, creating better customer relationship.
- (f) Display top ten best selling items for new customer's buying decision.
- (g) Increase production lines and product categories with more attractive designs.
- (h) Use e-mail and the web effectively to keep customers informed of their orders' status.
- (i) More display of our banners on other sites.



APPENDIX A
DELIVERY MANAGEMENT

QUESTIONNAIRE

Tourists' Behavior toward Internet and e-Commerce

Instructions:

- (1) This questionnaire is part of a research of a master degree program in Internet and Electronic Commerce, Assumption University, Bangkok, Thailand.
- (2) The objective of this questionnaire is to study tourists' behavior in searching tourism information and making purchase decision via Internet.
- (3) This questionnaire is divided into 2 parts. Please answer every question.
- (4) There are no right or wrong answers because this questionnaire is subjective and involves personal attitudes and opinions. Please choose the answer that best matches your opinion.
- (5) Your responses to this questionnaire will be kept strictly confidential.
- (6) Your cooperation is highly appreciated.

Part 1: Respondent's Information.

- (1) Are you:
 - ☐ Male
 - ☐ Female
- (2) What is your age?
 - ☐ Under 20
 - ☐ 21 – 35
 - ☐ 36 – 55
 - ☐ Over 55
- (3) What is your marital status?
 - ☐ Single (never married)
 - ☐ Married

- ☐ Divorced/Separated/Widowed

(4) What is your highest level of education? (Please check one)

- ☐ Below High School
- ☐ High School
- ☐ Vocational Degree
- ☐ Bachelor's Degree
- ☐ Master's Degree
- ☐ Doctoral Degree
- ☐ Postdoctoral Degree
- ☐ Others. Please specify _____

(5) Occupation:

- ☐ Government Official
- ☐ Private Company Employee
- ☐ Self-employed/Entrepreneur
- ☐ Student
- ☐ Unemployed
- ☐ Others. Please specify _____

(6) Income Level before Taxes: (Per Month in baht Equivalent)

- ☐ Below 5,000
- ☐ 5,000 – 10,000
- ☐ 10,001 – 25,000
- ☐ 25,001 – 50,000
- ☐ 50,001 – 75,000
- ☐ 75,001 – 100,000
- ☐ Over 100,000

Part 2: Tourists' Behavior toward Internet and e-Commerce

(7) Preferred type of traveling:

- ☐ Self arranged
- ☐ With a Group Tour
- ☐ Others. Please specify _____

(8) Purpose of Traveling:

- ☐ Leisure
- ☐ Business
- ☐ Others. Please specify _____

(9) Which of the following channel will you choose for searching tourism information?

(You may check more than one choice, according to)

- ☐ Tourism Books
- ☐ Newspaper Advertising
- ☐ Tourism Periodical/Fortnightly/Monthly Magazine
- ☐ Tourism Authority of Thailand – Walk in
- ☐ Tourism Authority of Thailand – Telephone Service
- ☐ Tourism Authority of Thailand - Fax Service 1672
- ☐ Bug Information Service 1113
- ☐ Internet
- ☐ Television Commercial
- ☐ Radio Commercial
- ☐ Travel Agency
- ☐ Asking Friends/Relatives
- ☐ Others. Please specify _____

(10) Please indicate the hardship in searching for tourism information.

- ☐ Difficult
- ☐ Simple

(11) How often do you use Internet?

- ☐ Everyday
- ☐ 3 – 5 times per week
- ☐ 1 – 2 times per week
- ☐ Never

(12) Where do you use Internet?

(You may check more than one choice, according to)

- ☐ Office
- ☐ Home
- ☐ School/College/University
- ☐ Internet Café
- ☐ Others. Please specify _____

(13) What time do you usually use Internet?

- ☐ 06.00 – 12.00
- ☐ 12.00 – 18.00
- ☐ 18.00 – 24.00
- ☐ 00.00 – 06.00

(14) How much time do you spend on Internet? (Per time)

- ☐ Below 30 minutes
- ☐ 30 minutes – 1 hour
- ☐ 1 hour – 3 hours
- ☐ Over 3 hours

(15) Have you ever used Internet for searching tourism information?

- ☐ Yes. Please give the name of website _____
- ☐ No.

(16) What are the most important factors in your decision to use Internet for searching in this website? (You may check more than one choice, priority 1- 5)

- ☐ Convenience
- ☐ Low Cost
- ☐ Safety
- ☐ Service
- ☐ Others. Please specify _____

(17) Have you ever used Internet for comparing or buying tourism products and services?

(Such as; package tour, tickets, souvenirs and travel insurance)

- ☐ Yes. Please give the name of the website _____
- ☐ No.

(18) What are the most important factors in your decision to use Internet for booking and buying tourism products and service?

(You may check more than one choice, priority 1-5)

- ☐ Convenience
- ☐ Low Cost
- ☐ Safety
- ☐ Service
- ☐ Others. Please specify _____

(19) You think the most important thing that tourism market place website should provide:

(You may check more than one choice, priority 1- 7)

- ☐ Tourism information

- ☐ Booking/reservation
- ☐ Comparison of price
- ☐ Flight schedule
- ☐ Currency Exchange Information
- ☐ Travel Insurance
- ☐ Others. Please specify _____

(20) Which channel do you use when you buy some products or service via Internet?

(You may check more than one choice, priority 1- 9)

- ☐ Never
- ☐ Credit Card
- ☐ Direct Debit Transfer From Bank Account
- ☐ Money Order via Post Office
- ☐ ATM
- ☐ Telephone Banking
- ☐ Mobile Banking
- ☐ Pay Point
- ☐ Bank Website
- ☐ Seller Website

(21) If you have a new channel for searching, comparing and buying tourism products and services at the same time via Internet, you will:

- ☐ Try to use. (Go to 22)
- ☐ Not try to use because _____ (Go to 23)

(22) What are the most important factors in your decision to use electronic payment via Internet? (You may check more than one choice, priority 1- 5)

- ☐ Convenience

- ☐ Low Cost
- ☐ Safety
- ☐ Service
- ☐ Others. Please specify _____

(23) What are the most important factors for not using electronic payment via Internet?

(You may check more than one choice, priority 1- 5)

- ☐ Convenience
- ☐ Low Cost
- ☐ Safety
- ☐ Service
- ☐ Others. Please specify _____



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