ATTITUDE AND BEHAVIOR OF ENTREPRENEURS ON
ELECTRONIC COMMERCE IN THAILAND

by

Mr. Gharj Leelawatana

A Final Report of the Six-Credit Course
CE 6998 - CE 6999 Project

Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Science
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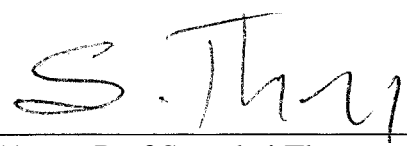|	
Project Title	Attitude and Behavior of Entrepreneurs on Electronic Commerce in Thailand
Name	Mr. Gharj Leelawatana
Project Advisor	Dr. Thanatphong Pratheepthaweephon
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The Graduate School of Assumption University has approved this final report of the six-credit course, CE 6998 — CE 6999 PROJECT, submitted in partial fulfillment of the requirements for the degree of Master of Science in Computer and Engineering Management.

Approval Committee:

_____
(Dr. Thanatphong Vratheeptha eephon)
Advisor

_____
(Prof.Dr. Srisakdi Charmonman)
Chairman

_____
(Dr. Chamnong un irapanich)
Dean and Co-advisor

_____
(Assoc.Prof Somchai Thayarn ong)
MUA Representative

November 2002

ABSTRACT

This project intends to study the type of e-commerce business and e-commerce in Thailand. We were to study the behaviors and attitude's level of entrepreneur that involves the e-commerce activities. Moreover, we were to understand the relationship between the entrepreneur's attitudes on e-commerce and personal factors of e-commerce business. The relationship between the behavior of selecting e-commerce service provider and the perceptions on price, service quality, quality of server, speed of links and reputation of service provider will help this project complete.

Regarding the gathering of information, the survey used secondary and primary data from the interview of 100 sampling population, entrepreneurs in Bangkok who ran business involved with the e-commerce activity with online payment. It was analyzed by descriptive method and quantitative method by using Chi-square statistic. The researcher uses the SPSS (the Statistical Package for Social Sciences) version 11.0 for Windows, to analyze and deliver the survey result. The survey results were presented in form of tables.

The result of this study indicated that the most of our sampling groups were limited companies. Majority of them were in computer and software businesses. Their purpose of doing e-commerce was to expand the channels of market. From the hypothesis test, it was found that the entrepreneur's attitude on e-commerce had no relationship with the pattern of business, but had relationship with ages and education levels. The behavior of selecting e-commerce service provider had relationship with the quality of servers and image of the provider.

ACKNOWLEDGEMENTS

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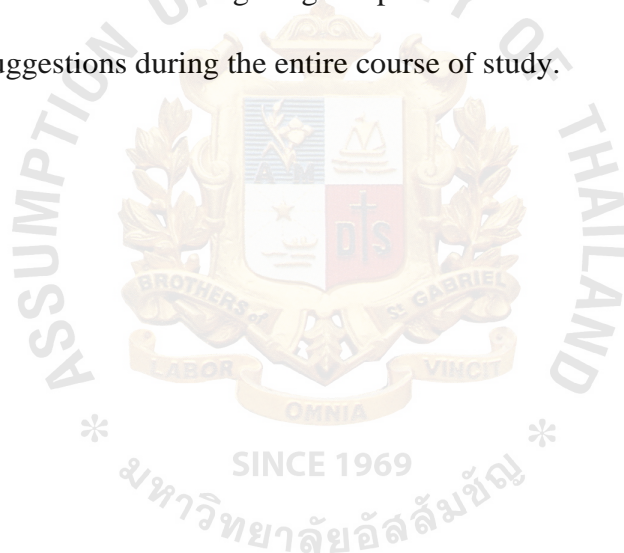
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I. INTRODUCTION

1.1 Importance of the Problem

Technology plays an increasingly vital role in E-business. E-commerce is a broad label for the wide range of business, technical, legal and social issues associated with all forms of Internet-based trading and business-to-business (B2B) transactions. The growth and potential electronic commerce (E-commerce) improves efficiency and allows business to provide both value and convenience to customers, journalists and government official.

Today, for a few thousand dollars, anyone can become a merchant and reach consumers throughout the world. As a result, electronic commerce has expanded from business-to-business transactions between known parties to a complex web of commercial activities, which can involve vast numbers of individuals, many of whom may never meet. By virtue of the Internet's architecture, electronic commerce was "born global" -- geographical and political boundaries mean little in this networked environment.

Because electronic commerce provides a fundamentally new way of conducting commercial transactions, it has potentially far-reaching economic and social implications for many facets of life, including, the nature of work, the role of governments, and even the environment. Looking more narrowly at the world of commercial transactions, it is clear that accepted ways of doing business will be profoundly modified: traditional intermediaries will be replaced, new products and markets will be created, new and more direct relationships will be forged between businesses and consumers. These changes require new procedures for conducting business and a questioning both of the effectiveness of government policies pertaining

to commerce and of traditional commercial practices and procedures, most of which were formed with a much different image of commerce in mind.

The potential of electronic commerce, The intense interest in electronic commerce's economic impact is linked to the fundamental fact that it shrinks the economic distance between producers and consumers. Consumers can go directly to producers without the need for traditional retailers, wholesalers and, in the case of intangibles, distributors. While new intermediaries are needed (e.g. network access providers, electronic payment systems, and services for authentication and certification of transactions), such services are far less labor-intensive than traditional intermediaries and do not require a specific geographic location. From table 1, Electronic commerce expands continuously especially in 1998 and 1999, which revenue increase from $ 9.76 million in 1998 to $ 32.35 million in 1999. Moreover, Internet users have increased 103.64 % for 2 years.

Table 1.1.   Profit from E-commerce and the Predict for Online Shopping.

	1997	1998	1999	2000	2001	2002	2003	2004
Internet Users	0.38	0.55	1.12	1.57	2.21	2.70	2.99	3.26
E-commerce Revenue	2.45	9.76	32.35	90.27	248.06	606.22	1,345.69	2,322.99

Remarks: Internet User Unit: Million persons / E-commerce Revenue Unit: Million US Dollar: Real data source from 1997-1999 and approximate in year 2000-2004

Source by: BCM, (2000: 27)

Although today's embryonic electronic commerce market is relatively small in comparison to other types of commerce, nearly all analysts predict growth by a factor of ten by the year 2000. While much media attention has focused on on-line merchants selling books, wine and computers to consumers, the available data suggest that the

biggest e-commerce market involves businesses supplying products to other businesses, where transactions of just a few firms exceed all estimates of the business-to-consumer market.

Consumer sales today are dominated by services and intangibles: travel and ticketing services, software, entertainment and financial services. This makes intuitive sense, given the convenience of electronic commerce for products that cannot be physically examined or those that consumers already purchase remotely. More generally, the digital nature of e-commerce effectively standardizes transactions, making the information contained in them a commodity in its own right and vastly increasing opportunities for storing, searching and manipulating it.

Electronic Commerce in Thailand, Thailand has an adequate Internet infrastructure in place to resoundingly sweep businesses into the era of e-commerce. Thailand has taken a different development e- commerce channel such as financial institutions, telecom companies and consumer product distributors.

In the past few years, there are several projects being undertaken or funded by the Thailand Government in order to support the uptake of electronic commerce within the state. Theses project include the founding of the Thailand Electronic Commerce Center, the Projects like these have been undertaken to help Thailand business realize the opportunities and advantages of electronic commerce and to help increase the understanding and use of the Internet for the economic benefit.

Up to this time, E-commerce businesses have slow development. People may still want to see and touch what they're buying. The retail consumer product of the e-commerce business has also been slowed by the reluctance of consumers to release credit-card information over the Internet.

Directly to this report, we concern to make the great development of e-commerce in Thailand. So, we will be studying the type of e-commerce business and the behaviors and attitude's level of entrepreneurs that would involve the e-commerce activities. All analysis in this report, shows the point of view to improve and study the right way for e-commerce.

1.2 Research Objectives

(1)   To study the type of business that participates in e-commerce activity.

(2)   To study the behavior and attitude of entrepreneur toward e-commerce activity.

(3)   To study influence of business type and personal factors; such as age, job, position, gender, business model and education level;

on attitude in conducting e-commerce.

(4)   To study the criteria for selecting e-commerce service provider of entrepreneur.

1.3 Assumption of Education

(1)   Business characters, Business field and business formation, have influences to attitudes of operators in doing Electronic Commerce.

(2)   Type of e-commerce business and personal factors, such as age, gender, job position, and education.

(3)   Behavior of selecting e-commerce service provider and the perception on price, service quality, quality of server, speed of links and reputation of service provider.

1.4 Expect Benefit of the Study

(1) Planning and improving e-commerce in Thailand both in private and public sector.

(2) Understand consumer attitude and behaviour toward e-commerce in order to

meet their satisfaction.

1.5 Scope of the Study

This study used secondary and primary data from the interview of 100

entrepreneurs in Bangkok who ran business involved with the e-commerce activity with

online payment.

IL LITERATURE REVIEW

2.1 Theoretical of Concept

The theory and framework of this project are use marketing mix or 4P 's and marketing for Business service provider, attitude and measurement method by Likerts's Method

2.1.1 Marketing Mix (Jobber 1995:15)

Marketing Mix is the set of marketing tools that the firm user to pursue its marketing objective in the target market.

(1) Product is anything that is capable of satisfying customer needs. In everyday speech we often distinguish between products and services, with products being tangible (e.g. a car) and services mainly intangible. However, when we look at what the customer is buying, it is essentially a service whether the means is tangible or intangible. Then, the element of product is products, services, idea, place, organization or people. Product should have benefit utility and value for customers. As a result, product can be sold. The product strategy is as follows:

(a)   Product differentiation or competitive differentiation

(b)   Product component such as basic benefit, quality, packaging, brand etc.

(c)   Product position is design of product for make different of target market.

(d)   Product development for create new product, improve.

(e)   Product line is group of brands that are closely related in terms of their functions and the benefits they provide.

(f) Product mix is the total set of brands marketed by a company.

(2) Price is a key element of the marketing mix because it represents on a unit basis what the company receives for the product or service that is being marketed. All of the other elements represent costs, for example, expenditure on product design (product), advertising and salespeople (promotion) and transportation and distribution (place). The price of a product is what the company gets back in return for all the effort that is put into manufacturing and marketing the product. The Pricing strategy should be kept in mind as the following;

    (a)   Perceived value

    (b)   Costs

    (c)   Competitive

(3) Promotion: Decisions have to be made with respect to the promotion mix: advertising, Personal selling, sales promotions, and public relations. That is four major components of the promotional mix:

    (a)   Advertising: any paid form of non-personal communication of ideas or products in the prime media, I.e. television, the press, posters, cinema and radio.

    (b)   Personal selling: oral communication with prospective purchasers with the intention of making a sales.

    (c)   Sales promotion: incentives to consumers or the trade that are designed to stimulate purchase

    (d)   Publicity: the communication of a product or business by placing information bout it in the media without paying for the time or space directly.

(4) Place: distribution channels for services are usually more direct than for many physical goods. Because services are intangible, the services marketer is less concerned with storage, the production and consumption is often simultaneous, and the personal nature of services means that direct contact with the service provider (or at best its agent) is desirable. Agents are used when the individual service provider cannot provide a sufficiently wide selection for customers. Consequently agents are often used for the marketing of travel, insurance and entertainment.

The process of marketing mix can be shown as follows:
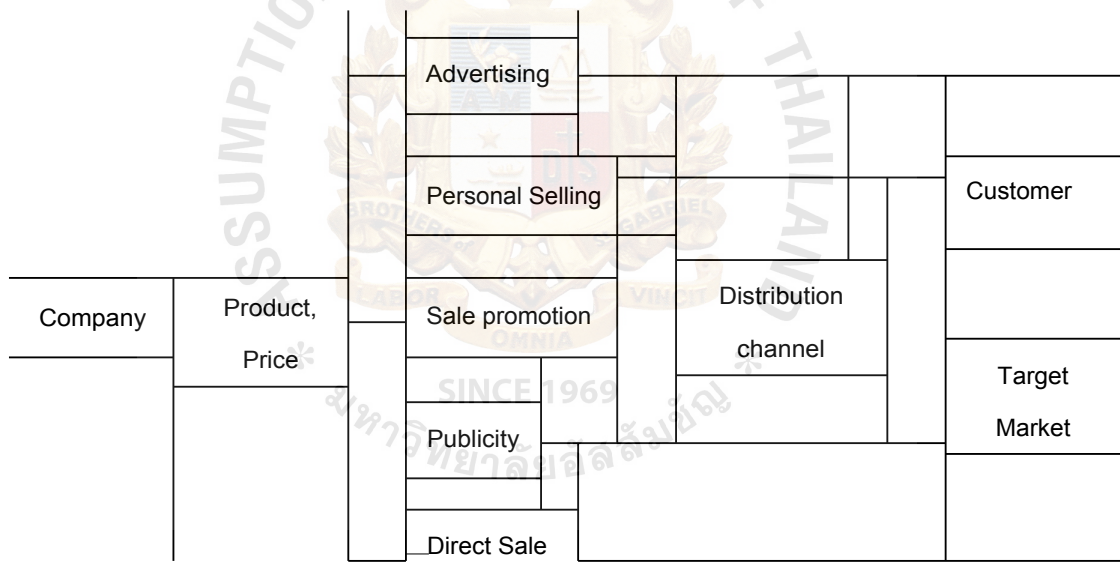
Figure 2.1. Relationship between Product, Price, Marketing Mix, Distribution Channel and Customer or Target Market (Siriwan 1998).

2.1.2 Marketing Mix for Business Service Provider

The business service provider choose marketing strategies in the same way of product that is following:

(1)   Products

(2)   Price

(3)   Place

(4)   Promotion

Moreover, The business service provider will use another tool that is:

(1)   People or employees because of the simultaneity of production and consumption in services, the firm's personnel occupy a key position in influencing customer perceptions of product quality. In fact service quality is inseparable from the quality of the service provider. An important marketing task, then, is to set standards to improve the quality of service provided by employees and monitor their performance. Without training and control, employees tend to be variable in their performance leading to variable service quality.

(2)   Physical evidence and presentation: this is the environment in which the service is delivered and any tangible goods that facilitate the performance and communication of the service. Customers look for clues to the likely quality of a service by inspecting the tangible evidence.

The layout of a service operation can be a compromise between operations' need for efficiency, and marketing's desire for effectively serving the customer. For example, the temptation to squeeze an extra table in a restaurant or seating in an aircraft may be at the expense of customer comfort.

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(^{3}) Process: that is procedures, mechanisms and flow of activities by which a

service is acquired. Process decisions radically affect how a service is

delivered to customers. For example, a self-service cafeteria is very

different from a restaurant. Marketing managers need to know if self-service

is acceptable. Queuing may provide an opportunity to create a differential

advantage by reduction/elimination, or making the time spent waiting more

enjoyable. Providing a more effective service may be at odds with

operations as the remedy may be to employ more staff.

2.1.3 The Measurement of Attitude

(Source by: http://www.westga.edu/—mktrea^1/$_3$808ch14.htm)

Attitude: An enduring disposition to consistently respond in a given manner

attitudes as Hypothetical Constructs The term hypothetical construct is used to describe

a variable that is not directly observable, but is measurable by an indirect means such as

verbal expression or overt behavior - attitudes are considered to be such variables.

Three Components of an Attitude

   (1)   Affective Response: The feelings or emotions toward an object

   (2)   Cognitive Response: Knowledge and beliefs

   (3)   Behavioral Concept: Predisposition to action, Intentions and behavioral

        expectations

Measuring Attitudes

   (1)   Ranking

   (2)   Rating

   (3)   Sorting

   (4)   Choice

The Attitude Measuring Process

Ranking -   Rank order preference

Rating   Estimates magnitude of a characteristic

Sorting   Arrange or classify concepts

Choice   Selection of preferred alternative

(1)   Ranking tasks require that the respondent rank order a small number of objects in overall performance on the basis of some characteristic or stimulus.

(2)   Rating asks the respondent to estimate the magnitude of a characteristic, or quality, that an object possesses. The respondent's position on a scale(s) is where he or she would rate an object.

(3)   Sorting might present the respondent with several concepts typed on cards and require that the respondent arrange the cards into a number of piles or otherwise classify the concepts.

(4)   Choice between two or more alternatives is another type of attitude measurement - it is assumed that the chosen object is preferred over the other.

(5)   Physiological measures of attitudes provide a means of measuring attitudes without verbally questioning the respondent. For example, galvanic skin responses, blood pressure measurement, etc.

Simple Attitude Scaling

(1) In its most basic form, attitude scaling requires that an individual agree with a statement or respond to a single question. This type of self-rating scale merely classifies respondents into one of two categories.

SIMPLIFIED SCALING EXAMPLE

THE PRESIDENT SHOULD RUN FOR RE-ELECTION

_____ AGREE   _____ DISAGREE

Category Scales

(1) A category scale is a more sensitive measure than a scale having only two

response categories - it provides more information.

Example of Category Scale:

How important were the following in your decision to visit San Diego? (check one for

each item)

	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT TOO IMPORTANT

CLIMATE _____

COST OF TRAVEL _____

FAMILY ORIENTED _____

EDUCATIONAL

/HISTORICAL ASPECTS _____

FAMILIARITY WITH AREA _____

2.1.4 Initial Measurement Method by Likerts's Method of Summated Ratings:

The Likert Scale

(1)   An extremely popular means for measuring attitudes. Respondents indicate

their own attitudes by checking how strongly they agree or disagree with

statements.

(2)   Response alternatives: "strongly agree", "agree", "uncertain", "disagree",

and "strongly disagree".

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LIKERT SCALE FOR MEASURING ATTITUDES TOWARD TENNIS

It is more fun to play a tough, competitive tennis match than to play an easy one.

___ Strongly Agree

___ Agree

___ Not Sure

___ Disagree

___ Strongly Disagree

LIKERT SCALE FOR MEASURING ATTITUDES TOWARD TENNIS CONT.

There is really no such thing as a tennis stroke that cannot be mastered.

___ Strongly Agree

___ Agree

___ Not Sure

___ Disagree

___ Strongly Disagree

LIKERT SCALE FOR MEASURING ATTITUDES TOWARD TENNIS CONT.

Playing tennis is a great way to exercise.

___ Strongly Agree

___ Agree

___ Not Sure

___ Disagree

___ Strongly Disagree

Semantic Differential

(1) A series of seven-point bipolar rating scales. Bipolar adjectives, such as

"good" and "bad", anchor both ends (or poles) of the scale.

(2) A weight is assigned to each position on the rating scale. Traditionally, scores are 7, 6, 5, 4, 3, 2, 1, or +3, +2, +1, 0, -1, -2, -3. SEMANTIC DIFFERENTIAL SCALES FOR MEASURING ATTITUDES TOWARD TENNIS Exciting _____ : Calm Interesting _____ ___ ___ ___ ___ ___ ___ Dull Simple ___ ___ ___ ___ ___ Complex Passive ___ ___ ___ ___ ___ ___ Active

Numerical Scales

(1) Numerical scales have numbers as response options, rather than "semantic space' or verbal descriptions, to identify categories (response positions).

Stapel Scales

(1) Modern versions of the Staple scale place a single adjective as a substitute for the semantic differential when it is difficult to create pairs of bipolar adjectives.

(2) The advantage and disadvantages of a Stapel scale, as well as the results, are very similar to those for a semantic differential. However, the stapel scale tends to be easier to conduct and administer.

(3) A Stapel Scale for Measuring a Store's Image

Department

Store Name

+3

+2

+1

Wide Selection

-1

-2

-3

Select a plus number for words that you think describe the store accurately. The more accurately you think the work describes the store, the larger the plus number you should choose. Select a minus number for words you think do not describe the store accurately. The less accurately you think the word describes the store, the large the minus number you should choose, therefore, you can select any number from +3 for words that you think are very accurate all the way to -3 for words that you think are very inaccurate.

Behavioral differential: the behavioral differential instrument has been developed for measuring the behavioral intentions of subjects towards any object or category of objects. A description of the object to be judged is placed on the top of a sheet, and the subjects indicate their behavioral intentions toward this object on a series of scales. For example:

A 25-year old woman sales representative

Would ___ ___ ___ ___ ___ ___ ___ : Would Not Ask this person for advice.

Paired Comparisons:

In paired comparisons the respondents are presented with two objects at a time and asked to pick the one they prefer. Ranking objects with respect to one attribute is not difficult if only a few products are compared, but as the number of items increases, the number of comparisons increases geometrically ($n*(n-1)/2$). If the number of comparisons is too great, respondents may fatigue and no longer carefully discriminate among them.

Rank Order Scales

Easy to understand and use, ordinal scales, comparative data, number and kinds of alternatives could be a problem and difficult to know how far apart.

Constant Sum Scale

(1) Divide 100 points among each of the following brands according to your preference for the brand:

Brand A _____

Brand B _____

Brand C _____

Magnitude of each alternative known Equal value can be indicated. Too many can confuse.

Graphic Rating Scales

A graphic rating scale presents respondents with a graphic continuum. Easy to construct and simple to use, can discern fine distinctions, but not very reliable, can be treated as interval data.

2.2 Electronic Commerce in Thailand

This chapter will describe the history of e-commerce and the roles of the government in promoting e-commerce, structures and elements of e-commerce, characteristics of e-commerce as well as the cost of conducting e-commerce in Thailand.

2.2.1 History of E-Commerce

In Thai context, the growth of e-commerce has run in line with the growth of Internet. This phenomenon has misled many people who understand that e-commerce only means ordering and paying goods and services over the Internet. Actually e-

commerce has a much larger scope than what people think. Many institutions have defined e-commerce as follows:

ECRC Thailand defines e-commerce as "the business operation conducted by the use of electronic medium." WTO defines e-commerce as "the production, distribution, marketing, selling, or transporting of goods and services by mean of electronic medium." OECD defines e-commerce as "every commerce related transaction in both organizational and personal level based on the processing and transmitting of digital data in the form of message, sound and graphic." European Union defines e-commerce as "doing business electronically which depends upon the processing and transmitting of message, sound and graphic information. The type of e-commerce also includes sales of goods and services by mean of electronic medium, delivering of goods and services in digital format via online system, electronic money transfer, electronic stock allocating, warrant, auction, design and engineering, purchasing, direct sales, after sale services of both tangible goods and services such as financial service and legal service.

ESCAP defines e-commerce as electronic procedures in conducting business in order to achieve the ultimate objective of the organization. E-commerce has utilized various kinds of technology and covered many aspects of finance such as electronic banking. In addition, it also includes electronic commerce, electronic data interchange (EDI), electronic mail, fax, electronic catalogue, teleconference, and other aspects of transmitting data between organizations.

There are a lot more institutions who are trying to define what e-commerce really is. However, this research project will focus on conducting e-commerce over the Internet. The study of historical facts in conducting e-commerce will allow us deep insight in the structure of e-commerce. Sitharot Thongbuasirilai (2541: 15), has

interestingly presented the history of e-commerce and the development of e-commerce in Thailand which will be mentioned below.

The origin of e-commerce can be traced back in 1970s and has first started in financial market. Electronic Funds Transfer (EFT) has profoundly increased the flow of financial system in that era. Such system has been further developed as various types of money transfer e.g. Debit card, Credit card. It was estimated in 1995 that daily electronic transactions were expanding to reach four billion dollars. The U.S. Treasury Department has estimated that 55% of the transaction are payment via EFT. Between the year 1970-1980, e-commerce became aware of many organizations in the form of data transfer called Electronic Data Interchange (EDI) and Electronic Mail which is more effective ways of doing business. Several years later, the scope of EDI has expanded to cover many economic activities including resale. This has accelerated the spread of e-commerce to consumers. In 1990, new technology called World Wide Web were invented and resulted in easier yet cheaper way of conducting e-commerce.

The fundamental development of e-commerce in Thailand has been initiated by Commerce Department by launching e-commerce pilot project. However, the construction of communication infrastructure has been carried out sometime before the launch of such program. The construction has begun with the development of communication network, development of standard telephone system, and the development of Internet connection. Major developments can be summarized as follows:

The Development of Communication Network

Since the 7th National Development Plan, the Telephone Organization of Thailand (TOT) has study and finally develop a new system call ISDN (Integrated Service Digital Network). ISDN is high performance digital communication that can be

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serviced in several ways e.g. telephone, fax, cable TV, Videotext. ISDN utilizes fiber optic technology in order to link telephone trunk with local service providers.

The Development of Standard Telephone System

TOT has planed the development of standard communication system to be in line with its usage growth. In 2543, cabling of under-water fiber optic was carried out with total distance of 1,300 kilometers. In addition two new services were commenced i.e. ISBN such as telephone & fax and teleconference over information superhighway. In 2536, ISDN and Videotext service were introduced.

The Development of Internet Connection

Internet technology was first used in Thailand in 2530. **The period of development in Internet connection was during 2530-2535.** In 2535, Chulalongkorn University started using leased line to connect to the Internet with UUNET network of UUNET Techology Co., Ltd in Virginia, United States under the name Thai-Sam. Then, Chula network has been further developed to connect with other local universities and organizations.

The Emergence of Internet Service Provider (ISP)

The capacity of Thai-Sarn network was extended in 2538 resulting in the establishment of special agent who was in charge of servicing the network for private organization. The name of this special agent was later changed to be Internet Thailand. There were also other 7 ISPs in service soon after.

The Introduction of E-commerce

E-commerce has been initiated by the Commerce Department since May 12, 2541 with the launch of e-commerce pilot program to promote export activities. The project was publicly promoted locally and internationally with the objective to promote export

transactions during economic crisis. This pilot program was closely monitor by NECTEC who was also responsible for outlining e-commerce laws and regulations.

2.2.2 The Roles of the Government toward E-commerce in Thailand

The government has favorably expressed its interest in the development of e-commerce because it can be seen as an important element capable of boosting the country economy, export and competitive advantage in the international market. In addition, e-commerce is a widely discuss topic on the world trade stage. The importance of e-commerce is so obvious that there have been a number of seminars held to discuss about ways to continually develop e-commerce.

One of the important international seminar is WTO meeting on May 2541. The majority of WTO members feel that e-commerce is rather new-age topic and has not formally started in-depth study. However, they all well realize about the importance and expansion of e-commerce.

Another important meeting is APEC which was held the first e-commerce meeting in November 2540 at Vancouver, Canada. The members agreed that e-commerce has strategic importance in international trade development. The result of this meeting is Regional Electronic Commerce Word Program aimed at 2 objectives; to improve knowledge and understanding of member countries in various issues that resulted from the expansion of e-commerce, and to promote international cooperation between country members and countries in other regions.

APEC's senior committee meeting in February 2541 at Penang, Malaysia has formed a special task force in e-commerce called APEC Electronic Commerce Task Force to be in charge of outlining APEC Blueprint for Action on Electronic Commerce.

The major activities included in the blueprint are as follows:

Establish the Foundation of E-commerce Law and Regulation

Further develop to paperless trading which is aimed to achieve in 2005 for developed countries and 2010 for developing countries.

Establish APEC Virtual Electronic Commerce Multimedia Resource Network which comprises of Electronic Commerce Training Center (located in Thailand) and Virtual Information Network (cooperation between Singapore and Canada)

Establish the Measurement of Electronic Commerce

Report the result of OECD Authentication Workshop, which is focused in authentication system

Prepare Readiness Indicator in E-commerce

In short, the main issues raised in APEC meeting are supporting measures and promotion plans in processing the workflow in e-commerce. APEC focuses on promoting cooperation in technical know-how, information sharing, human resource development, and implementation of paperless trading.

ASEAN is another world stage meeting in e-commerce. E-ASEAN Initiative was first formed in 2542, during the third ASEAN Meeting in Philippines. The initiative has focused in establishing free trade area and promoting investment in information technology and communication. A special agent was formed in order to oversee the policy and procedure of implementing e-ASEAN project. The e-ASEAN project has undergone five major plans as follows:

Establish IT infrastructure in ASEAN by installing fiber optic as ASEAN backbone. In addition, the project also supports the plan to establish information-trading center in ASEAN.

(1)　Promote the use of electronic media. In order to spread the use of electronic media, the government must provide support and convenience means such as enacting the law and establishing international standard security system.

(2)　Allow free trade, service and investment in electronic segment. Regarding the free trade, custom duties of all related products must be decreased to 0 percent. In addition, the project must focus on deregulation in communication service. Moreover, the project also stimulates the investment in electronic media among ASEAN countries.

(3)　Focus on establishing electronic society in order to raise the productivity and efficiency in using electronic media.

(4)　Establish e-government by supporting people to use electronic media to contact the government such as paying tax electronically, business entity registration, and custom process.

(5)　Apart from the above five plans, there will be several pilot projects, which will focus on supporting and spreading the use of electronic media. For instance, there will be a project, which focus on helping new entrepreneurs to understand and properly use electronic commerce. Furthermore, it is also feasible to implement online education in university level, which will raise education standard of all people in ASEAN.

Major Benefits of e-ASEAN project are as follows:

(1)　Prepare ASEAN for a new economy, which is laid on Information Technology. Furthermore, ASEAN can leverage on the expansion of trading and investment in information technology especially in e-commerce.

(2)　Develop ASEAN as knowledge and technology society

(3)　Human resource development and technology transfer

(4)   Equalize technology standard both domestically and internationally among member countries that will lead to social and economic development.

(5)   Improve the effectiveness of government services by using information technology to reduce cost and time.

Thai government has realized such benefits and directed the Ministry of Commerce to implement e-commerce pilot project. A special work force was formed to oversee the project and create confidence among buyers and sellers since 2541. The objective of such project is to increase business opportunity for Thai SMEs and to help them leveraging the benefit of e-commerce. In addition, the International Economic Policy Committee has formed a sub-committee consisting of several government and non-government bodies to set standard e-commerce policy.

Furthermore, Thai government has established Electronic Commerce Resource Center (ECRC) by the cooperation of Foreign Affair Department and NECTEC. ECRC is responsible for achieving public acceptance and stimulating e-commerce. In addition, the ECRC will be used as data center to satisfy customer needs and developing personnel by continuously conducting training in e-commerce to the public. Apart from that, NECTEC and the Justice Department enact 6 e-commerce acts in order to create supportive circumstance in developing e-commerce.

2.2.3 Structure and Components of e-Commerce

The major components of e-commerce are as follows: (Watcharapong 2543: 49):

Web page or online shops are trading space that enables us to sell products over the Internet. It could be as simple as advertising page hosted with other sites or could also be personal website. This advertising web page is normally known as "store front".

Shopping cart system enables customers to order products on the web page by filling the order form. Each click to order represents putting product to shopping

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basket. The products in shopping basket can be accumulated and waits until all items have been chosen. After that, the automatic cashier system will calculate the total amount.

Secure Payment System is a secure cash settlement system. The system usually accepts payment by credit card. The procedure of information transfer, which in this case is credit card information, must be encrypted. The most widely used security system is SSL. However, SSL is not totally secure because it cannot verify the real cardholder. SSL can only identify shop identity. Therefore, new system has been developing and known as Secure Electronic Transaction (SET). SET can verify both parties, namely card holder and online shop. The only obstacle in implementing SET is high initial investment required. Therefore, SET has not been widely used so far.

The above descriptions are illustrated as e-commerce system in Figure 2.2, which consisting of several work systems as follows:

(1)   Online shop

(2)   Shopping cart system

(3)   Online payment and security system

(4)   Back office system
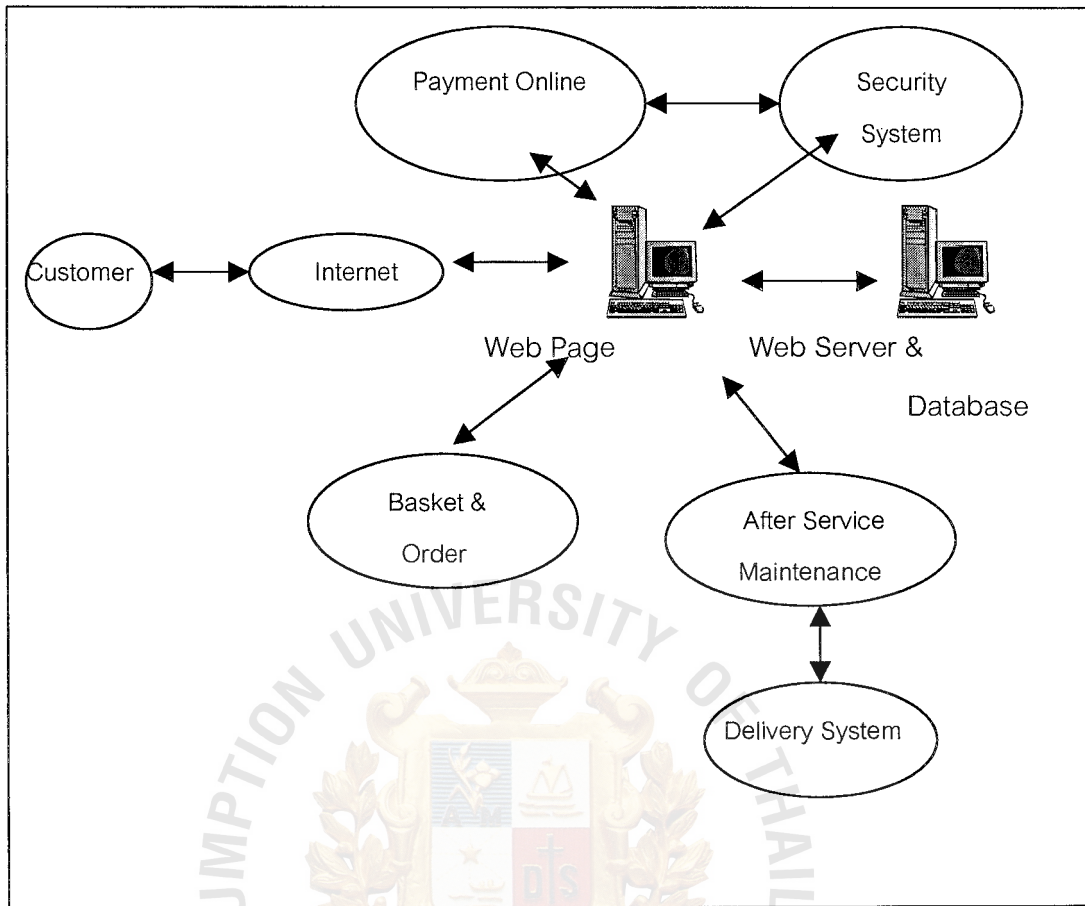
Figure 2.2. System of E-Commerce.

All work systems are connected with customers via the Internet. Therefore, no one can deny that the Internet has the major role in conducting e-commerce. E-Commerce was initiated from purchasing tangible products online and settles payment over the Internet. It has been later developed to support selling and buying of intangible products such as information between organizations. In addition, the Internet also empowers small organizations the capacity to take care their customers' as good as large enterprises and better control their business costs. Therefore, it is obvious that the Internet is the major factor in conducting e-commerce.

Since the Internet is the major factor in developing e-commerce, there is no doubt that Internet Service Provider (ISP) and Web hosting companies are inevitable factors in the development of e-commerce. All e-commerce systems are based on these service providers. Watcharapong (2543: 141) suggests several criteria to consider in choosing service providers as follows:

(1)   Hosting location should be located close to target customers. Apart from that, hosting technology should be also considered.

(2)   Connection speed of hosting computer

(3)   Appropriate web space

(4)   Availability and flexibility of supporting programs such as CGI (Common Gateway Interface) and ASP (Active Serve Page)

(5)   Supportive systems to e-commerce such as Online Catalog, shopping cart system, and secure payment system

(6)   The ability to provide service support, response to the problems and service maintenance

(7)   Number of e-mail addresses offered because e-mail is one of the most important factor in communicating over the Internet

(8)   Domain name registration service

(9)   Reliability and credit worthiness of ISP

(10)   The ability of ISP to write or modify computer program and system in order to implement optimal business solution.

(11)   The ability to provide business and marketing consultant such as how should we offer the product? What can be done to improve the product?

2.2.4 Type of e-Commerce

Characteristic of seller and target customers will be used to categorize the type of e-commerce (Watcharapong 2543: 48-49). Three major types of e-commerce are as follows:

Business-to-Business (B-to-B) is the trading model between organizations which is usually implemented on a large-scale basis. The most widely used transactions are exporting and importing a large numbers of products or a large scale industrial product which will be further used to produce other products. Since the transaction value is huge, payment is normally made via banking system such as L/C, TIT.

Business-to-Consumer (B-to-C) is the trading model that target at local or international customers. B-to-C is usually retail transaction and does not involve a large amount of money. The most widely used settlement systems are online payment via credit card. However, B-to-C can also cover small-scale wholesale business, which can be further developed to B-to-B.

Consumer-to-Consumer (C-to-C) is general transaction between people or Internet users such as used products and computer software trading.

2.2.5 Costs of Conducting e-Commerce

Costs of conducting online business are as follows:

(1) Website design and development costs

(2) Disk space rental cost to host website is consisted of the following items

    (a) Leased line is the method of putting web server at the company's premise and connect the link to ISP. In such case, cost depends on speed of the link.

    (b) Web hosting is the method of renting disk space on service provider's

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computer. This method is appropriate with small organizations or beginners.

    (1)   Domestic hosting is renting disk space with local ISP. Domestic hosting is appropriate for domestic-focus organization.

    (2)   International hosting has major benefit in that website can be accessed at faster speed worldwide except local market.

(c) Dedicate server is the method of locating the server at ISP's premise. This method requires some professional background and appropriate with medium-size organizations.

(3)   Delivery cost

(4)   Cost of using online payment system such as transaction fee paid to bank

(5)   Advertising cost is critical to promote and build awareness of the website.

(6)   Maintenance costs such as electric, air time of the Internet, computer programming and website development.

It is obvious that disk space rental is the heart of e-commerce because it involves almost 90% of e-commerce procedure. Therefore, reliability and security are very important factors that should be considered. In addition, disk space rental cost can be as high as 1/3 of total investment. Therefore, it is a critical decision in choosing the right service provider so that the company can provide the best service to its customers and maintain competitive advantage over its competitors.

III. RESEARCH METHODOLOGY

This study is carried out as survey research in order to study entrepreneurs' behavior and attitude toward e-commerce in Thailand. The researcher has planned study method as follows:

3.1 Population and Sample Size

This study will be carried out by utilizing questionnaire and interview method. Data gathering will be performed by collecting samples from Thai entrepreneurs who Lᵥ@ₚ‖ ᵥc,L?ₕ· laTiVillevew...Td?sq.flⁱ&F,knletsrTi 6,i147Z64pPes including small and medium size businesses that have utilized the benefits of using web site in doing electronic transactions such as online payment via credit card. This will be done by asking series of questions from persons who are in charge of conducting e-commerce transaction in the organization. In order to confine the scope of study to be in line with study objectives, sampling method will be based on accidental sampling, which is non-probability-sampling method.

Sampling Size:

This study specifies sample size by calculating the minimum sample size in order to yield the reliable group of samples which represent the total population according to the formula of Taro Yamane, (Statistics-An Introductory analysis, John Weatherhill, Inc., 1970) Since the exact number of population can be determined, the reliability of this sample group is 95%, which means there is 5% chance that error, will occur. Hence, the formula used in this study is as follows:

$$n = \frac{\quad\quad}{1 + N(e)^2} \tag{1}$$

n = sample size

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N = population size which represents total number of web sites conducting online

activities

According to Manager Newspaper (July 2001, 151), there are 133 web sites conducting

e-commerce by utilizing online payment via Thai credit card.

e = sampling error which is determined at 5%

The above terminologies can be substituted in the following formula:

$$n = \frac{133}{1 + 133(.05)^2}$$

$$n = 99.81$$

After calculating sample size by using Yamane formula, the sample size can be

determined at 100 samples.

3.2 Study Tools

Questionnaire is the main tool used to study behavior and attitude of entrepreneur

toward e-commerce in Thailand. The questionnaire consisted of 3 separated parts which

constitutes 24 questions as follows:

Part 1 consists of general questions toward sample group i.e. gender, age,

education level, job position, business model, business type and average income

resulting from e-commerce transactions.

Part 2 consists of questions toward behavior in using e-commerce i.e. timeframe

in using e-commerce, payment method, target customer, quality consideration in

choosing service provider, satisfaction toward service provider's market promotions,

space required in hosting website, reasons in choosing and using service provider,

objectives in doing e-commerce, market factors, influencing factors toward the decision

to conduct e-commerce.

Part 3 consisting of questions regarding problems, obstacles and attitudes toward e-commerce i.e. opinion regarding obstacles in conducting e-commerce, opinion toward government's role in promoting e-commerce, satisfaction in doing e-commerce, continuality in doing e-commerce, attitude after implementing e-commerce and so on.

3.3 Data Collection

Researcher has categorized type of data to be collected for the purpose of this study as follows:

(1)   Primary data will be gathered by utilizing questionnaire and interview. The interview method consisted of two methods i.e. appointed interview in person and phone interview & faxing questionnaire to the participants.

(2)   Secondary data will be based on former research in e-commerce conducted by Master Degree students of various universities including relevant articles and textbooks from libraries and online web sites.

IV. DATA ANALYSIS

Method of data analyses being used are both descriptive analysis and quantitative analysis which are categorized according to the following study objectives.

Objective 1: To study characteristics of businesses conducting e-commerce. To achieve this objective, descriptive statistics by frequency, percentage and mean will be used to explain the characteristics of businesses utilizing e-commerce.

Objective 2: To study behavior and attitude of entrepreneur toward e-commerce. To achieve this objective, evaluation form will be used as a supporting tool to analyze the data. The form will be separated into 5 levels i.e. worst, bad, neutral, good, excellent and weighted by scores as 1 2 3 4 5 accordingly. The attitude scores toward e-commerce are then interpreted according to the following meanings:

    1.00 — 1.80   can be interpreted as "very negative attitude"

    1.81 — 2.60   can be interpreted as "negative attitude"

    2.61 — 3.40   can be interpreted as "neutral attitude"

    3.41 — 4.20   can be interpreted as "positive attitude"

    4.21 — 5.00   can be interpreted as "very positive attitude"

The evaluation form is then used to evaluate the influencing factors toward the decision to conduct e-commerce. The evaluation is separated into 3 levels i.e. the most influence, somewhat influence, not influence and weighted by scores as 3 2 1 accordingly. The mean scores are then interpreted as follows:

    1.0 — 1.66   can be interpreted as "factor has less influence on decision to
                    conduct e-commerce"

    1.67 — 2.33   can be interpreted as "factor has influence on decision to
                    conduct e-commerce"

2.33 — 3.00   can be interpreted as "factor has the most influence on decision to

conduct e-commerce"

Descriptive statistics by using frequency, percentage and mean including the support from secondary data will be used to explain the attitude and behavior of entrepreneurs and Internet service providers toward e-commerce.

<u>Objective 3:</u> To study the influences of business type and personal factors i.e. age, job position, gender, business model and education level toward attitude in conducting e-commerce. To achieve this objective, the quantitative analysis will be used to test assumptions. Chi-square technique will be conducted to test the independent of relationship between two variable factors. (Boonchom 2538: 90)

$$ \chi^2 = \sum_{i=1}^{r} \sum_{j=1}^{c} \frac{O_{ij} - E_{ij})^2}{E_{ij}} \tag{3} $$

O = observed value (frequency value observed in row i column j)

E,i = expected value (frequency value expected in row i column j)

E1 value is calculated from multiplying number of rows (r) and number of column (c) then divided by total number (n) as follows:

$$ = (r \times c) / n $$

Interpretation of Chi-square value must be done by the use of Chi-square table.

$$ \mathbf{W}^{W} = {}^{t4}(V — 7)\,(c — 7.) $$

r = number of row

c = number of column

In case that data is tabled in 2x2 format, frequency is then tabled in 2 rows and 2 columns called contingency table which has different formula in calculating chi-square value as follows: (Boonchom 2538:93)

$$x^{-2} = \frac{N \, (\, |AD-BC| - N/2 \,)^2}{(A+B)(C+D)(A+C)(B+D)} \tag{6}$$

Values are derived from the table below:

A	B	A+B
C	D	C+D
A+C	B+D	N

The calculation of chi-square values gathered from the questionnaires will be conducted from SPSS program. This chi-square analysis sets significant at 0.05.

Objective 4: To study relevant opinions having impact on service's pricing and quality factors, server quality, speed of connection, and reputation of service provider in e-commerce. To achieve this objective, quantitative analysis will be utilized in order to test the assumptions. Quantitative analysis will be carried out using chi-square method that will test the independent of relationship between two variable factors according to the formula stated above.

To present the results of this study case, Behavior and Attitude of Entrepreneur for Electronic Commerce in Thailand, the study results were provided into 4 parts as follows:

        Part 1   Characteristics of Electronic Commerce.

        Part 2   General information of samples

        Part 3   Behavior and Attitudes in Electronic Commerce.

        Part 4   Results from testing assumptions.

4.1 (Part 1) Characteristics of Electronic Commerce

The first part would describe what the characteristics of Electronic Commerce are. There are 3 points that we consider; Business Formation and Business Size, Business Criteria and average business value.

Business Formation and Business Size

From the Table 4.1, displays Business Formation and Business Size of the Samples.

Majority of the samples were organized in the form of Company Limited by 80%. The rests were Single ownership at 15%, Partnership Limited and Bank are at 4% and 1% respectively.

In addition, we considered the size of employment. It was seen that the small organizations (less than 20 employee) got the biggest percentages by 54. The percentages of organization with 21 — 25 employee was 18. It can be analysed financially in investment and marketing budget that e Business required low investment cost. It caused small enterprises, which wanted to expand their opportunity selling their products and services as well as meeting the new target groups. Moreover e Business is a new channel for small enterprises to promote themselves. It is not also good for small enterprises but it is also good for consumers to have more options than the big brand name products in the market. The big companies apparently had good channels to provide their products and services so that e Business is only considered to be a channel to inform the company excluding income from e Business was a small amount of the money they were obtaining.

Criteria for eBusiness

From Table 4.2, shows study results in kinds of Business fields.

The largest business field in e Business is "Computer and Software" by 19%. The next largest field is "Souvenir and Handicraft" by 13%. In contrast, the smallest fields of business using e Business are "Import and Export", "Web Design" and "Banking". It can be assumed why "Computer and Software" business favored to use e Business, it may cause target market of this business is Internet users whose demands are computer, accessories and equipments. So that basically all Internet users are targeting of "Computer and Software". "Souvenir and Handicraft", the second largest e Business field, use this channel to meet international market demand besides domestic demand. The third largest e Business field is "Books and publishing", books and education materials, because the products are not dependent to quality or needed human touch before deciding to buy. Moreover their price are not too high in each ones. Buying these products via Internet is convenient for consumers and providers.

Average Electronic Commerce Values

Table 4.3, shows the average values of Electronic Commerce transaction from the samples.

"Finance and Banking" has the biggest amount of transaction values per month. It may cause Banks and financial companies have customers all over Thailand. The most income came from service fees. The next 2 biggest values are "Hotel and Tourism" and "Jewelry" respectively. In contrast, the smallest amount of transaction value is "Heath and Hospitality".

Table 4.1. The Percentages of Electronic Commerce Enterprises' Characteristics.

Details	Percentages
1. No. of Employee	
Less than 20 person	54.00
21-50 person	18.00
51-100 person	13.00
More than 100 person	15.00
2. Business formation.	
Partnership	4.00
Ownership	15.00
Company Limited	80.00
Bank	1.00

Table 4.2. The Percentages of Electronic Commerce Fields.

Business Field	Percentages
Computer and Software	19.00
Souvenir and Handicraft	13.00
Books and Publishing	12.00
Flower shops	9.00
Clothes and Textile	8.00
Jewelry	7.00
Music and Entertainment	5.00
Hotel and Tourism	4.00
Industry	4.00
Convenient shop	4.00
Electronic device	4.00
Health and Hospitality	2.00
Leather product	2.00
Land Property	2.00
Toys	2.00
Finance and Banking	1.00
Web Design	1.00
Import and Export	1.00
Total	100.00

Table 4.3. Average Transaction Value through Electronic Commerce.

Business Field	Average transaction value through e-commerce (Baht) / 1 company / month
Finance and Banking	21,000,000
Hotel and Tourism	1,187,500
Jewelry	921,429
Web Design	600,000
Convenient store	524,125
Import and Export	500,000
Computer and Software	329,916
Industry	312,500
Electronic device	216,250
Books and Publishing	167,792
Toys	100,000
Souvenir and Handicraft	56,346
Flower shop	47,556
Cloth and Textile	44,375
Music and Entertainment	29,000
Land Property	17,500
Leather product	15,000
Health and Hospitality	12,500

4.2 (Part 2) General Information of Samples

This part describes general information of samples which are gender, age, education level and career level.

Personal Information of Samples

Table 4.4 shows personal information of samples.

Gender; male 61% and female 39%. Most of their age range is between 26-31 years old by 39% following the next range between 31-35 years old by 26%.

Education levels of samples; the majority of samples' education level is Bachelor's degree by 29%. The second biggest education level is higher than Bachelor's degree by 22%.

Career Position Level; 33% of samples are the owners of the business and 34% of the samples are working in the management level. E commerce officers and Sales-Marketing officers are 22% and 11% in samples respectively.

It can be seen that the majority of samples are not over 35 years old by 80% which is the good ages for learning and adapting the new technology such as e commerce to be their strength and their company. However it doesn't mean that the people of ages over 35 years old are not able to do well in e commerce but it shows to motivate this people. So they would see the opportunity and use e commerce as an alternative because they handle high purchasing power. According to the samples' education level, it can be said that people who can use e commerce as a tool suppose to have a good education because a half of doing e commerce needs business skill and the other needs technology skill.

Table 4.4. General Information of Samples.

Information	percentages
1. Gender	
Male	61.00
Female	39.00
2. age	
Lower than 26 y.o.	17.00
26-30 y.o.	39.00
31-35 y.o.	26.00
36-40 y.o.	7.00
41-45 y.o.	8.00
More than 46 y.o.	3.00
3. education level	
High school or lower	3.00
Diploma	6.00
Bachelor's degree	69.00
Higher than Bachelor's degree	22.00
4. Career Position	
Owner	33.00
Manager	34.00
E commerce officer	22.00
Sales-Marketing officer	11.00

4.3 (Part 3) Behavior and Attitudes in Electronic Commerce

Study on Behavior and Attitudes in e-commerce is divided in to 2 parts, Target customers' behavior doing Electronic Commerce and Providers' Behavior serving Electronic Commerce. Study on Samples' behavior doing Electronic Commerce is mainly what samples do and what factors relate as follows; periods of time that they have been using Electronic Commerce, Payment options, information of target customers and Marketing factors which effect customers' decision buying products and service through Electronic Commerce.

The other study is Providers' Behavior serving Electronic Commerce; Quality control of Service provider whose space the enterprises select for Electronic Commerce transaction and Samples' Attitudes in e commerce by measuring from factors in Electronic Commerce such as factors which effect decision and satisfaction by web site services provider's marketing promotion.

Customers' Behavior Doing Electronic Commerce

Period of Time

Table 4.5 Shows period of time, how long samples have been using Electronic Commerce.

Most samples are in early stage of doing Electronic Commerce according to the result that samples have experienced doing Electronic Commerce for less than 12 months or 1 year by 43%. The next biggest period of time is betweenl3 —24 months by 37%.

Payment Options

Table 4.6 shows what payment option, samples choose in doing their money transaction.

The most favorite option is paying by Credit card. It may cause that samples in this study must have credit cards. Moreover the next most favorite options are paying by transfer money in bank account by 64% from all samples, paying by cash 51% respectively.

Target Customer

Table 4.7 Shows samples' target market.

Samples' target markets are divided by regions; Domestic customers, International customers and both Domestic and international customers. The domestic and international target market is the biggest with percentages of 46. Then Domestic target market is the second by 30%. Samples who concentrate only International customers are the smallest by 24%. We can notice that there are samples by 30% who are not concentrating in international market or are not able to service international customers, it might be caused by delivery problems and insecurity of payment.

By considering Samples' target customers, it can be found that the main target is both business groups and consumers by 44%. Consumer group is by far targeted than Business groups by 43% and 13% respectively. According to samples, they consider that consumers are the target by 87% and business groups by 57%. It may cause most target customers are middle class consumers who afford to spend money reasonably. Business groups choose to receive payment by alternatives beyond by credit card.

Main Objective in Electronic Commerce

Table 4.8 Shows the main objective of samples doing in Electronic Commerce.

The most insignificant objective is adding sales channel by 54%. To expand market is the second most insignificant by 18%. To promote and Customer's convenience are 18% and 11% respectively.

Table 4.5. Samples' Period of Time, Experienced in Electronic Commerce.

Period of time	Percentages
Less than 12 months	43.00
12 — 24 months	37.00
24 — 36 months	13.00
More than 37 months	7.00
Total	100.00

Table 4.6. Payment Options Doing Electronic Commerce.

Option	Percentages
Cash	51.00
Credit card	100.00
Cash Ticket	20.00
Bank account	64.00
Pay at Post office	9.00
Cheques	3.00

PS: allow to fill more than 1 choice.

Table 4.7. Sample's Target Customers.

Target	Percentages
1. Region	
Domestic	30.00
International	24.00
Both	46.00
2. type	
Business group	13.00
Consumer	43.00
Both	44.00

Table 4.8. Samples' Objective Decide to Do Electronic Commerce.

Objective	Percentages
Add channel	54.00
Company image	4.00
Advertising and Promoting	11.00
Customers' convenience	10.00
Cut marketing costs	1.00
Expand market	18.00
Support business in the future	1.00
Challenges in E-commerce	1.00
Total	100.00

Samples' Marketing Factor

Table 4.9 Shows marketing factors that samples select to promote themselves and attract customers.

The most important marketing factor that samples choose is Quality of product and service by 34%. Prices is the next factor by 17%. Package and Web are considered to be factors by 15% and 12% respectively. The security of payment is not so significant for samples' opinion because it's only considered by 5% as well as promotion, delivery quality and payment option are 4%, 3% and 2% respectively.

Table 4.9. The Most Important Marketing Factor to Motivate Buying Value.

Marketing Factor	Percentages
Quality of Product and Service	34.00
Prices	17.00
Shape, Brand and Package	15.00
Web site Looks	12.00
Service after buying	8.00
Internet Security	5.00
Marketing Promotion	4.00
Delivery Quality	3.00
Payment Options	2.00
Total	100.00

Providers' Behavior serving Electronic Commerce

Factors: Quality of Internet Service Provider

Table 4.10 shows factors that samples consider the quality of Internet Service Provider.

Samples consider the reliability of server as the most important factor by 32%. Then the speed of service is the second factor by 23% and Security of money transaction online in credit card system by 22%. The least considerable factor is Speed of connection and price by 1% and Marketing Promotion by 2%.

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According to the study results, it shows that samples weigh the reliability of server as the first important factor because server works as a place for website to be addressed. If server gets a problem (server down), it will be directly effected to accessing web site and process of e commerce. The web site's owner might loose opportunities and effect company images. The second factor that is considered is speed of service because time is a big factor for running business and competing with others. If something's wrong with the system, problems need to be solved as fast as possible. The third most important factor is Security in money transaction online in credit card system. It does not only effect the trust of customers but it's also effect to customers' decision to buy products.

According to research studied by Pranee Jariyapon, Opinions and Trust in Electronic Commerce sampled in Bangkok area, the samples felt insecure in payment system and were terrified by being stolen their credit card number. It's the second most important factor and effected directly to customer's decision to buy products through internet. (Supranee 1999: 67)

Table 4.10. The Most Important Factor for Considering Quality of ISP.

Factor	Percentages
Server Reliability	32.00
Speed of Services	23.00
Security of money transaction in credit card system	22.00
Customers' Convenience	7.00
24 hours Technical support	6.00
Excellent service after buying	6.00
Marketing and Promotion	2.00
Cost	1.00
Speed of connection	1.00
Total	100.00

Space Service Provider

Table 4.11 Displays space service provider that samples choose to use.

Most samples chose local space service provider by 74%. In contrast, samples chose space service provider in other countries only 17% and some chose to use free space in web sites by 9%. It can be seen that most of samples weigh the quality of services than cost.

Table **4.11.**   Space Service Provider That Sample Choose to Use.

Space service provider	Percentages
Thailand	74.00
Other countries	17.00
Free services	9.00
Total	100.00

Reasons to Use the Current ISP (Internet Service Provider)

Table 4.12 Displays why samples choose to use their current ISP.

Samples mostly choose to use their current ISP by considering the speed of connection as the best reason by 44% from all samples. The reliability of server is the second reason by 36% followed by reputation of service provider at the third reason by 34%.

Attitudes in (Internet Service Provider)

Factors Influence Making Decision to Do E-commerce

Table 4.13 Shows factors which influence samples' making decision to do Electronic Commerce.

Samples think these factors influence to make a decision to do Electronic Commerce in high level are Expectation in success of doing e commerce, cost of investment, security of interne system, the number of customers in the future, quantity

of Thailand internet access and ISP's facility supports. The rest of factors are considered by most of samples that they are in middle level of influence making decisions to do e commerce except a factor, bank supporting, which high level and middle level of influence are equal.

Moreover, we can range the most influence factor. The first factor is "the number of customers in the future." Cost of investment and Expectation in success of doing Electronic Commerce are the second factors. The third influence factor is ISP's facility supports. In contrast, the last influence factor for samples is "good supporting from government". We also can calculate for average points to range the importance as following ranges;

Average point between 1.00 - 1.66 refers to factor has low influence to make a decision to do e commerce.

Average point between 1.67 - 2.33 refers to factor has medium influence to make a decision to do e commerce.

Average point between 2.34 - 3.00 refers to factor has high influence to make a decision to do e commerce.

Factors which are considered to be high level of influence to do Electronic Commerce; the number of customers in the future, cost of investment, Expectation in success of doing Electronic Commerce, ISP's facility supports, good knowledge of running Electronic Commerce, quantity of Thailand internet access, security of internet system and internal technology supporting in organization. The rest factors are considered to be middle level of influence to do Electronic Commerce.

Table 4.12. Reasons to Use the Current ISP.

Reasons	Percentages
Low cost (or Free)	33.00
High quality of services	36.00
High quality of server	40.00
Speed of connection	44.00
Full package of services as One Stop Service	23.00
Varieties of services and meet customer's needs	18.00
High level of System Security	26.00
Promotion for customers	7.00
Reputation of ISP	34.00
Special deals with ISP	2.00

: allow to fill more than 1 choice.

Table 4.13. Factors Influence to Samples' Decision to Do Electronic Commerce.

Factor	Level of influence			
	High	middle	low	total
1. Expectation in success of doing e-commerce	58	38	4	100
2.Knowledge of e commerce	46	51	3	100
3.Good Human Resources	35	49	17	100
4. Internal Technology supporting	43	53	4	100
5.Operation Cost	59	36	5	100
6.Bank supports	39	39	22	100
7.Risks and Benefits	41	45	14	100
8.Law supported	34	39	27	100
9. efficient delivery system	38	50	12	100
10.Government supported	24	44	32	100
11.Internet Security	49	43	8	100
12.NationalTechnology Development	34	48	18	100
13. number of customers in the future	76	22	2	100
14.Thailand internet access	56	30	14	100
15. 1SP's facility supports	56	38	6	100

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Table 4.14. Point and Rank of Factor Influence to Making Decisions to Do Electronic Commerce.

Factor	Point		Rank
	Total	Average	
1. Expectation in success of doing Electronic Commerce	254	2.54	2
2. Knowledge of Electronic Commerce	243	2.43	4
3.Good Human Resources	217	2.17	10
4. Internal Technology supporting	239	2.39	7
5.Operation Cost	254	2.54	2
6.Bank supports	217	2.17	10
7.Risks and Benefits	227	2.27	8
8.Law supported	207	2.07	12
9. efficient delivery system	226	2.26	9
10.Government supported	192	1.92	13
11.1nternet Security	241	2.41	6
12.National Technology Development	216	2.16	11
13. number of customers in the future	274	2.74	1
14.Thailand internet access	242	2.42	5
15. ISP's facility supports	250	2.5	3

Samples' Satisfaction in ISP's Marketing Promotion

Table 4.15 Displays samples' satisfaction of marketing promotion by their ISP.

Samples mostly weigh the cost as the most favorite promotion which means that samples like discounting promotion most by 37%. Extending rental time is the next good promotion by 24%. Special options such as Internet time access or free web design and free services are 22% and 17% respectively. Discounting promotion is the most favorite promotion, it may cause that web hosting fee is still high.

Table 4.15. Samples' Satisfaction in ISP's Marketing Promotion.

1SP' s marketing promotion	Percentages
Discounting	37.00
Expanding rental time (such as adding months)	24.00
Special options such as internet time access or free web design	22.00
free services (such as email address or domain name)	17.00
Total	100.00

Opinions to Government Roles in Developing E-commerce

Table 4.16 Shows samples' opinions about government roles to develop e commerce.

Most samples think that important government role to develop Electronic Commerce is enacting laws for developing Electronic Commerce. Rank no. 2 is contributing facilities to support Internet transaction and Rank no. 3 is Technology development campaign.

Table 4.16. Point and Rank from Questionnaire in Government Roles to Develop Electronic Commerce.

Government role to develop Electronic Commerce	Point	Rank
Technology development campaign	295	3
Contnbutmg facilities to support internet transaction	297	2
Enacting laws	300	1
Structuring organization to support Electronic Commerce	195	5
Discounting basement technology cost	248	4
Supporting financial investment	165	6

Problems and Difficulties of E-commerce in Thailand

Table 4.17 displays results of samples' opinions about problems and difficulties of e commerce in Thailand.

The biggest problem of e commerce in Thailand which made e commerce didn't grow as much as it should be is people's lack of e-commerce knowledge by 72%. The next problem are low popularity of internet in Thailand and internet surfers are not the target group by 58% and having no supports from government by 43%.

Table 4.17. Problems and Difficulties of Electronic Commerce in Thailand.

Problems and Difficulties of Electronic Commerce	Percentages
Lack of e commerce knowledge	72.00
High cost of processing Electronic Commerce	41.00
low popularity of internet in Thailand and internet surfers are not the target group	58.00
Facilities or Technology development	25.00
No support from government	43.00
Bank's conditions are too strict	28.00
Domestic and Oversea Delivery	23.00
Insecure internet system	31.00
Lack of Business support in e commerce	14.00
Consumer's Behavior (human touching before buying)	5.00
Low advertising media and Incomplete media	1.00

S: allow to choose more than 1 choice.

Overall Satisfaction in E-commerce

Table 4.18 shows samples' overall satisfaction in Electronic Commerce.

Most of samples have medium level of satisfaction in Electronic Commerce by 48%. The next level of satisfaction is low by 24% The small groups' level of satisfaction are "unsatisfied" 4% and "most satisfied" 3% respectively.

Table 4.18. Overall Satisfaction in Electronic Commerce.

Overall satisfaction in Electronic Commerce	Percentages
Most satisfied	3.00
High satisfied	21.00
Medium satisfied	48.00
Low satisfied	24.00
Unsatisfied	4.00
Total	100.00

Continuity of Doing Electronic Commerce

Table 4.19 shows samples' Electronic Commerce using in the future.

Samples who continue to use Electronic Commerce by 92% are by far than not continuing and others by 4% and 4% respectively.

Table 4.19. Samples' Electronic Commerce Using in the Future.

Samples' e-commerce using in the future	Percentages
Continue	92.00
Not continue	4.00
Others	4.00
Total	100.00

Samples' Attitudes of Doing Electronic Commerce

Table 4.20 shows samples' attitudes of doing Electronic Commerce.

Attitude results are considered personally. There are 5 levels of attitudes from very negative attitude to very positive attitude by weigh each level by different points from 1 to 5 points in each level.

1.00 - 1.80 refer to very negative attitude

1.81 - 2.60 refer to negative attitude

2.61 - 3.40 refer to neutral attitude

3.41 - 4.20 refer to positive attitude

4.21 - 5.00 refer to very positive attitude

The points from Table 4.20 can be ranked as shown in Table 4.21 and can be concluded as follows: Most of samples have a positive attitude to do Electronic Commerce by 52%. The next level of attitude is Neutral level by 34%. In contrast, there is only 1% that have very negative attitude to do Electronic Commerce. Overall attitude is in positive attitude level.

Table 4.20. Attitudes after Doing Electronic Commerce.

Factor	Level of attitude				
	Very good	good	Simple	Bad	Very bad
1.Adding sales channel	23	48	23	5	1
2.Promoting and Advertising	32	43	20	4	1
3.Business image	27	50	17	5	1
4.Cutting costs	12	35	37	12	4
5.Meeting target group	16	36	37	9	2
6.Increasing income / value	8	28	37	22	5
7.Better management	4	18	65	11	2
8.Services after buying	9	27	47	16	1
9.Expanding market	16	52	23	8	1
10.Competition ability	6	40	40	12	2
11.Promoting main product	11	35	46	6	2
12.Increasing minor incomes (such as web ads, Data Base etc.	4	22	36	30	8

Table 4.21. Numbers and Percentages of Samples Divided by Attitudes for Doing Electronic Commerce.

Level of Attitude	No.	Percentages
Very good	8	8.00
Good	52	52.00
Simple	34	34.00
Bad	5	5.00
Very bad	1	1.00
Total	100	100.00
Total Average		3.475 (point)

4.4 (Part 4) Results from Testing Assumptions

To analyze the relations between variable factors and study factors by Statistic, it can be concluded as follows:

Assumption 1: Business characters, Business field and business formation, have influences to attitudes of operators in doing Electronic Commerce

Business Field

From Table 4.22, it shows that Significance value is 0.999 more than 0.05. It means Business field and attitude of doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that Attitude of doing Electronic Commerce doesn't relate to Business field.

Business Formation

From Table 4.23, it shows that Significance value is 0.999 more than 0.05. It means Business formation and attitude of doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that Attitude of doing Electronic Commerce doesn't relate to Business formation.

Assumption 2: Personal factors; age, career position, gender and education level of operator in doing Electronic Commerce

Age Factor

From Table 4.23, it shows that Significance value is 0.001 less than 0.05. It means age and attitude of doing Electronic Commerce are not significantly free from each other at the statistic level of 0.05 or it might be said that Attitude of doing Electronic Commerce relates to age of operator.

Career Position Factor

From Table 4.23, it shows that Significance value is 0.868 more than 0.05. It means career position and attitude of doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that Attitude of doing e-commerce doesn't relate to age of operator.

Gender Factor

From Table 4.23, it shows that Significance value is 0.277 more than 0.05. It means gender and attitude of doing Electronic Commerce are significantly free from

each other at the statistic level of 0.05 or it might be said that Attitude of doing e-commerce doesn't relate to gender of operator.

Education Level Factor

From Table 4.23, it shows that Significance value is 0.038 less than 0.05. It means education level and attitude of doing Electronic Commerce are not significantly free from each other at the statistic level of 0.05 or it might be said that Attitude of doing Electronic Commerce relates to education level.

Assumption 3: Marketing factors, Opinions to prices factor, Quality of services, Quality of Server, Speed of Connection and Reputation of ISP, influence to Behavior of selecting ISP doing e commerce.

Opinions to Prices

From Table 4.24, it shows that Significance value is 0.821 more than 0.05. It means opinions to prices and behavior of selecting ISP doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that behavior of selecting ISP doing e commerce doesn't relate to opinions to prices.

Opinions to Quality of Service

From Table 4.24, it shows that Significance value is 0.279 more than 0.05. It means opinions to Quality of service and behavior of selecting ISP doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that behavior of selecting ISP doing Electronic Commerce doesn't relate to opinions to Quality of service.

Opinions to Quality of Server

From Table 4.24, it shows that Significance value is 0.018 less than 0.05. It means opinions to quality of server and behavior of selecting ISP doing Electronic Commerce are not significantly free from each other at the statistic level of 0.05 or it might be said

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that behavior of selecting ISP doing Electronic Commerce relates to opinions to quality of server.

Opinions to Speed of Connection

From Table 4.24, it shows that Significance value is 0.385 more than 0.05, It means opinions to Speed of Connection (link) with main network (backbone) and behavior of selecting ISP doing Electronic Commerce are significantly free from each other at the statistic level of 0.05 or it might be said that behavior of selecting ISP doing Electronic Commerce doesn't relate to opinions to speed of connection.

Opinions to Reputation of ISP

From Table 4.24, it shows that Significance value is 0.026 less than 0.05. It means opinions to reputation of ISP and behavior of selecting ISP doing e commerce are not significantly free from each other at the statistic level of 0.05 or it might be said that behavior of selecting ISP doing e-commerce relates to opinions to reputation of ISP,

Table 4.22. Testing Assumption about Business Field Relates to Attitudes of Doing Electronic Commerce.

Factor	Attitude of doing Electronic Commerce		Total	χ^2	Df.	Sig.
	Very good-good	Medium-Very bad				
1.Shop - Convenience - Souvenir and handicraft - Jewelry - Flowers	20	13	33	0.105	4	0.999
2. Electronic devices and Computer - Electronic devices - Computer—Software - Web design	14	10	24			
3.Finanance and Land Property - Finance—Banking - Land Property	2	1	3			
4.Industry - Industry - Cloths and Textile - Leather - Toys - Import and Export	10	7	17			
5.Entertaiment and Tourism - Books—Publishing - Music and Entertainment - Health and Hospitality - Hotel and Tourism	14	9	23			

Table 4.23. Testing Assumptions: Personal Factor Relates to Opinions of Doing Electronic Commerce.

Factor	Attitude of doing Electronic Commerce		Total	x^2	Df,	Sig.
	Very good-good	Medium — Very bad				
1. Business formation				0.531	1	0.466
- Partnership and ownership	10	9	19			
- Company limited and Public limited	50	31	81			
2.Age				15.66	3	0.001
- Lower than 26 y.o.	7	10	17			
- 26 — 30 y.o.	28	11	39			
- 31-35 y.o.	20	6	26			
- More than 35 y.o.	5	13	18			
3. Career position				0.282	2	0.868
- Owner	21	12	33			
- Manager	20	14	34			
- E-commerce officer [1]	19	14	33			
4. Gender				1.184	1	0.277
- Male	34	27	61			
- Female	26	13	39			
5. Education level				4.283	1	0.038
- Lower than Bachelor's degree	51	27	78			
- Higher than Bachelor's degree	9	13	22			

[1] Officer who take care Ecommerce website such as webmaster and sale, marketing

Table 4.24. Testing Assumptions: Marketing Factor Relates to Behavior of Operators to Choose ISP for doing Electronic Commerce.

Factor	Behavior to choose ISP						
Opinions to factors	Thailand	International	Free website	Total	x^2	Df.	Sig.
1. Cheaper					0.051	1	0.821
- Sig.	50	11		61			
- Not	24	6		30			
2. Quality of Service					2.554	2	0.279
- Sig.	50	8	6	64			
- Not	24	9	3	36			
3.Quality of Server					7.986	2	0.018
- Sig.	49	5	6	60			
- No	25	12	3	40			
4.Speed of Connection					1.911	2	0.385
- Sig.	40	9	7	56			
- No	34	8	2	44			
5.Reputation of ISP					7.315	2	0.026
- Sig.	45	16	5	66			
- No	29	1	4	34			

V. CONCLUSIONS AND RECOMMENDATIONS

5.1 Research Summary

Study on Behavior and Attitudes of Electronic Commerce company is necessary for developing the services of e Business transaction because transaction in Electronic Commerce around the world has recently increased. It's very important for e Business service providers to learn and adapt this study results, so that they can provide better services and take better positioning in the market.

According to the high competition of the Internet access business, Internet access cost has been decreased. In addition world globalization will become true in the near future, the Internet service providers have to find the ways to increase their strength by making other business as minor business. In conclusion, one of minor business is Electronic Commerce service.

Moreover, opinions of enterprises on problems and position of government could be brought to analyze and find the best solutions for developing Electronic Commerce in the country later.

From results from the sample groups, Thailand Electronic Commerce enterprises using Internet transaction through Credit card, shows behavior and attitudes of enterprises in Electronic Commerce as follows:

Criteria for E-commerce Company

The largest Electronic Commerce organization is small enterprise, less than 20 employee, and formed the "company". The favorite business field is "Computer and Software". In the other hand, the biggest amount of money transacted through the Internet is in "Finance and Banking".

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General Information of Samples

The sample contains 61% male and 39% female and the biggest proportion of sample ages are 26-30 years old. The majority of samples' education is Bachelor's degree and the majority of career level is management level.

Behavior and Attitudes in Electronic Commerce

Behavior of Targeted Customer

Most of sample has not used Electronic Commerce for a long time, less than 12 months or 1 year.

In the terms of payment, the most favorite payment choice is using credit card followed by payment through bank account.

The domestic and international target market is the biggest with percentages of 46. Then Domestic target market is the second by 30%. Samples who concentrate only International customers are the smallest by 24%.

The main objective of samples' doing e commerce is to add more sales channels.

The most important marketing factor to promote and attract customers' e-commerce transaction is Quality of Products.

Behavior of Doing Electronic Commerce by Space Service Provider

Considering from factors in quality of ISP to serve space for Electronic Commerce, samples consider the reliability of server as the most important factor by 32%.

Most samples choose to use space service from provider in Thailand by 74%.

Samples give the reason to use current ISP because they consider the speed of connection as the best reason by 44% from all samples.

Attitudes in Electronic Commerce

Samples think the factor influences to make a decision to do Electronic Commerce in high level is Expectation in success of doing Electronic Commerce.

Samples weigh the cost as the most favorite promotion which means that samples like discounting promotion most by 37%.

Most samples think that important government role to develop Electronic Commerce is enacting laws for developing Electronic Commerce.

Moreover samples think that the biggest problem of Electronic Commerce in Thailand which made Electronic Commerce didn't grow as much as it should be is people's lack of Electronic Commerce knowledge by 72%.

Samples have medium level of overall satisfaction of doing Electronic Commerce. Samples who continue to use Electronic Commerce by 92% because they believe that Electronic Commerce will grow in the near future and first move to this business would help them to take advantages in competition and in some organization Electronic Commerce became their company's policy.

Analyzing attitudes by measuring from the feeling to Electronic Commerce which effects to Electronic Commerce factors, most of samples have a good attitude to do Electronic Commerce.

Results from Testing Assumptions

To analyze what factor affect attitudes for doing Electronic Commerce, we got the results from testing assumptions as follows:

(1) Business field and Business formation don't relate to attitudes for doing Electronic Commerce.

(2)   Personal factor of samples; age and education level relate to attitudes for doing Electronic Commerce but career position and gender don't relate to attitudes for doing Electronic Commerce.

(3)   Marketing factors; Quality of server and Reputation of ISP relate to Behaviors' operator to choose ISP but Cost, Quality of Service and Speed of connection don't relate to Behaviors' operator to choose ISP.

From all results and all conclusions, researcher would like to give suggestions in the following part.

5.2 Recommendations

Suggestion from Case Study:

Suggestions to ISP's Marketing Management Which Service Electronic Commerce.

(1)   Service providers should concentrate in Technology development and quality control along with creating company images and reputation because results from study show that Quality of server and Reputation of service provider influence to samples' behavior to choose service provider.

(2)   Service providers can attract customers to choose their own service by making marketing promotion, discounting promotion because we can find that customers choose discounting promotion to be the most favorite promotion.

(3)   Seminars and training course are good ways to make customers understand and see how Electronic Commerce can be useful for them and their business. According to study, lack of e commerce knowledge is the biggest problem why Electronic Commerce in Thailand didn't grow as much as it should be.

(4) The largest business field in Electronic Commerce is computer and software because internet user require computer, equipment and software. Service provider should target this group more to expand their market and expand to business to other areas.

Suggestion to Government for Developing Electronic Commerce

(1) Base facilities should be developed to support Internet access such as electric power, telephone lines, cables and satellites. In addition Government should motivate internet access by decreasing the internet services because these factors will drive internet developing, then they will develop Electronic Commerce.

According to this study, Samples suggest that government should develop facilities to support e commerce as the second most important opinion and the biggest target group in Internet is the most important factor that samples decide to do Electronic Commerce.

(2) Government should promote and support people to obtain knowledge of e-commerce because Electronic Commerce users have to get basis of using computer and Internet along with management skills. According to this study, samples believe that lack of Electronic Commerce knowledge is the biggest reason why Electronic Commerce in Thailand didn't increase as much as it should do.

(3) Organizing efficient samples projects or Developing old projects, it's needed to get participate from government departments such as TOT (Telephone of Thailand), Nectec, etc. Many organizations and departments have worked in parts of Electronic Commerce but they don't work together so there are many controversies and inefficiencies. Researcher's suggestion

is collaboration between organizations and government's departments will develop Electronic Commerce faster and more efficient.

(4) Government should take more action on enacting laws or advising of Consumers rights because Electronic Commerce is not only transaction in Thailand but also in international market whose copy rights, consumer rights and laws are different. We need laws that can support e commerce in any ways. According to this study, samples think that government should enact laws to support e commerce and laws related to Electronic Commerce to develop Electronic Commerce in Thailand.

5.3 Future Research

According to this study and questionnaire, researcher found that there are many interesting information and topics which can be studied more for next studies. It is shown as follows:

(1) Study on B2B (Business 2 Business), there are a lot of opportunities to be grown and developed in near future. It's also a big amount of money flow in this business.

(2) Study effects of e-commerce to distribution channels such as direct sales on telephone, television, sales officer, agent or convenience stores. Electronic Commerce is one channel to distribute products to consumers and convenience to consumers in factors of time and place to buy products. It's also cheaper in some products. The effects of Electronic Commerce to distribution are quite an interesting topic to study.

APPENDIX A

QUESTIONNAIRE

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APPENDIX B

STATISTIC DATA OF STUDY

Table B.1. Group Type * Attitude for Chi 3 Crosstabulation.

*c325E group type attitude for chi 3 Crobbta utation

			attitude for chi 3		Total
			very good-good	medium - very bad	
group tYlie	Retail store and suvinior	Count	20	13	33
		Expected Count	19.8	13.2	33.0
	Heavy Industry	Count	10	7	17
		Expected Count	10.2	6.8	17,0
	Electric and Computer	Count	14	10	24
		Expected Count	14.4	9.6	24.0
	Finance and real estate	Count	2	I	3
		Expected Count	1.8	1.2	3.0
	Entertainment	Count	14	9	23
		Expected Count	13.8	9.2	23.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.105'	4	.999
Likelihood Ratio	,107	4	.999
Linear-by-Linear Association	.003	1	.958
N of Valid Cases	100		

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 1.20.

Table B.2. Format for Chi * Attitude for Chi 3 Crosstabulation.

format for chi attitude for chi 3 Crobbta ulation

			attitude for chi 3		Total
			very good-good	medium - very bad	
format for chi	Partnership	Count	10	9	19
		Expected Count	11.4	7.6	19.0
	Company	Count	50	31	81
		Expected Count	48.6	32.4	81.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Table B.2. Format for Chi * Attitude for Chi 3 Crosstabulation. (Continued)

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (I-sided)
Pearson Chi-Square	.531 [b]	1	.466		
Continuity Correction'	.219	1	.640		
Likelihood Ratio	.524	1	.469		
Fisher's Exact Test				.604	.317
Linear-by-Linear Association	.525	1	.469		
N of Valid Cases	100				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 7.60.

Table B.3. Age for Chi * Attitude for Chi 3 Crosstabulation.

age for chi attitude for chi 3 Crobbta ulation

			attitude for chi 3		Total
			very good-good	medium - very bad	
age for chi	Less than 26 years old	Count	7	I0	17
		Expected Count	10.2	6.8	17.0
	26-30 years old	Count	28	11	39
		Expected Count	23.4	15.6	39.0
	31-35 years old	Count	20	6	26
		Expected Count	15.6	10.4	26.0
	More than 30 years old	Count	5	13	18
		Expected Count	10.8	7.2	18.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	15.660'	3	.001
Likelihood Ratio	15.806	3	.001
Linear-by-Linear Association	.697	1	.404
N of Valid Cases	100		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.80.

Table B.4. Position for Chi * Attitude for Chi 3 Crosstabulation.

pobition for chi * attitude for chi 3 Crobbta ulation

			attitude for chi 3		Total
			very good-good	medium - very bad	
position for chi	Owner	Count	21	12	33
		Expected Count	19.8	13.2	33.0
	Manager	Count	20	14	34
		Expected Count	20.4	13.6	34.0
	Ecommerce officer	Count	19	14	33
		Expected Count	19.8	13.2	33.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.282[a]	2	.868
Likelihood Ratio	.284	2	.868
Linear-by-Linear Association	.250	I	.617
N of Valid Cases	100		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.20.

Table B.S. Sex * Attitude for Chi 3 Crosstabulation.

Sex * attitude for chi 3 Crobbta ulation

			attitude for chi 3		Total
			very good-good	medium - very bad	
Sex	Male	Count	34	27	61
		Expected Count	36.6	24.4	61.0
	Female	Count	26	13	39
		Expected Count	23.4	15.6	39.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Table B.5. Sex * Attitude for Chi 3 Crosstabulation. (Continued)

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (I-sided)
Pearson Chi-Square	1.184	I	.277		
Continuity Correction?	.772	I	.379		
Likelihood Ratio	1.195	1	.274		
Fisher's Exact Test				.303	.190
Linear-by-Linear Association	1.172	1	.279		
N of Valid Cases	100				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.60.

Table B.6. Edu for Chi * Attitude for Chi 3 Crosstabulation.

edu for chi attitude for chi 3 Crobbta ulation

			attitude for chi 3		Total
			very good-good	medium - very bad	
edu for chi	Under Graduation	Count	51	27	78
		Expected Count	46.8	31.2	78.0
	Graduation	Count	9	13	22
		Expected Count	13.2	8.8	22.0
Total		Count	60	40	100
		Expected Count	60.0	40.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.283**	I	.038		
Continuity Correction'	3.324	1	.068		
Likelihood Ratio	4.210	I	.040		
Fisher's Exact Test				.050	.035
Linear-by-Linear Association	4.240	I	.039		
N of Valid Cases	100				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.80.

Table B.7. Low Price * ISP Type Crosstabulation.

Low Price ISP Type Crobbta ulation

			ISP Type		Total
			ISP in Thailand	1SP in Foreign	
Low Price	No	Count	50	11	61
		Expected Count	49.6	11.4	61.0
	Yes	Count	24	6	30
		Expected Count	24.4	5.6	30.0
Total		Count	74	17	91
		Expected Count	74.0	17.0	91.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (I-sided)
Pearson Chi-Square	.051 [6]	1	.821		
Continuity Correctiorf	.000	1	1.000		
Likelihood Ratio	.051	1	.822		
Fisher's Exact Test				1.000	.515
Linear-by-Linear Association	.051	1	.822		
N of Valid Cases	91				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.60.

Table B.8. Testing Results of the Assumption about the Influential of the ISPs' E-Commerce Services' Qualities by Using SPSS Program to the Sampling Group.

Crobbta

			ISP Type			Total
			ISP in Thailand	ISP in Foreign	Free ISP	
Good Service	No	Count	50	8	6	64
		Expected Count	47.4	10.9	5.8	64.0
	Yes	Count	24	9	3	36
		Expected Count	26.6	6.1	3.2	36.0
Total		Count	74	17	9	100
		Expected Count	74.0	17.0	9.0	100.0

Pearson Chi-			
Likelihood	Vain 2.46	df 2	Asymp. Sig. (2- .29
Linear-by-Linear	.60	1	.43
N of Valid	10		
a.			

Table B.9. Testing Results of the Assumption about the Influential of the ISPs'
Servers' Qualities by Using SPSS Program to the Sampling Group.

Crobbta

			ISP Type			Total
			ISP in Thailand	1SP in Foreign	Free ISP	
Good Server	No	Count	49	5	6	60
		Expected Count	44.4	10.2	5.4	60.0
	Yes	Count	25	12	3	40
		Expected Count	29.6	6.8	3.6	40.0
Total		Count	74	17	9	100
		Expected Count	74.0	17.0	9.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.986'	2	.018
Likelihood Ratio	7.889	2	.019
Linear-by-Linear Association	1.620	I	.203
N of Valid Cases	100		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.60.

Table B.10. Testing Results of the Assumption about the Influential of the ISPs'
Speeds by Using SPSS Program to the Sampling Group.

Crobbta

			ISP Type			Total
			ISP in Thailand	ISP in Foreign	Free ISP	
Faster Lind	No	Count	40	9	7	56
		Expected Count	41.4	9.5	5.0	56.0
	Yes	Count	34	8	2	44
		Expected Count	32.6	7.5	4.0	44.0
Total		Count	74	17	9	100
		Expected Count	74.0	17.0	9.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.911*	2	.385
Likelihood Ratio	2.044	2	.360
Linear-by-Linear Association	1.140	I	.286
N of Valid Cases	100		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.96.

Table B.11. Testing Results of the Assumption about the Influential of the ISP's Brands by Using SPSS Program to the Sampling Group.

Crobbta

			ISP Type			Total
			ISP in Thailand	ISP in Foreign	Free ISP	
Famous ISP	No	Count	45	16	5	66
		Expected Count	48.8	11.2	5.9	66.0
	yes	Count	29	I	4	34
		Expected Count	25.2	5.8	3.1	34.0
Total		Count	74	17	9	100
		Expected Count	74.0	t7.0	9.0	100.0

Chi-Square Tebtb

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.315'	2	.026
Likelihood Ratio	9.137	2	.010
Linear-by-Linear Association	.911	1	.340
N of Valid Cases	100		

a. 1 cells (16.7%) have expected count less than 5. The minimum expected count is 3.06.

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